



# INDUSTRY COMMISSION

ANNUAL REPORT  
1990-91

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# INDUSTRY COMMISSION

25 September 1991

The Honourable John Kerin, MP  
Treasurer  
Parliament House  
CANBERRA ACT 2600

Dear Treasurer

In accordance with section 45 of the *Industry Commission Act 1989*, we submit to you the Commission's Annual Report for 1990-91.

Yours sincerely

S T Sedgwick  
Chairperson

R G Mauldon  
Commissioner

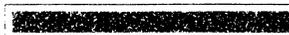
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## **Chapter 1**

### **Improving Australia's economic performance**

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The past year brought substantial progress in reforming Australia's economy. Two far-reaching initiatives — further tariff reductions and the States' acceptance in principle of mutual recognition of regulations — can significantly improve the international competitiveness of many Australian industries and raise standards of living. Governments have also signalled a willingness to work together to effect further change in the context of the special Premiers' Conferences.

At the same time, some opportunities for microeconomic reform have not been taken up, even though the need to press ahead remains as urgent as ever. Not to respond to the challenge would be to condemn Australians to a lower standard of living than we are capable of achieving.

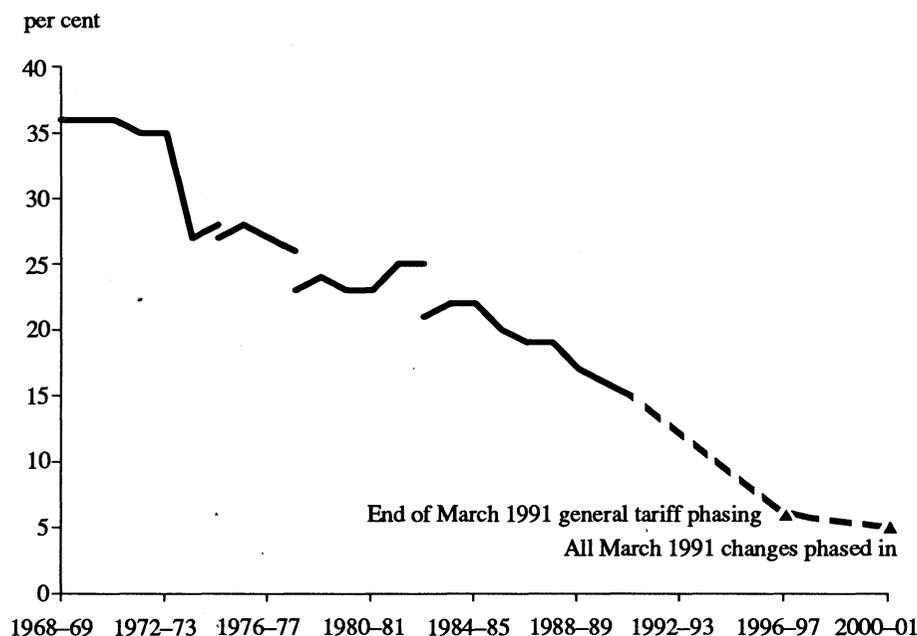
#### **End in sight for tariff protection**

The Commonwealth Government's March 1991 Statement has given renewed momentum to reducing tariff protection. Tariffs have been winding down — with some stops, starts and reversals — for the past quarter of a century. Previous notable reforms were the 25 per cent across-the-board reductions in 1973 and the phased reductions announced in May 1988. Now, the vast bulk of tariffs will be reduced to a maximum rate of 5 per cent by 1996. The Statement reaffirmed the benefits of a general across-the-board approach to reducing assistance. It encompassed large reductions in protection for the motor vehicle industry and the textile, clothing and footwear industries (the TCF industries were largely excluded from the 1988 round of tariff reductions). Nevertheless, at the completion of their phasing programs, these sectors will still receive significantly more protection than the rest of manufacturing (appendix 10).

When the March 1991 program is completed in the year 2000, the average effective rate of assistance to the manufacturing sector will have fallen to 5 per cent — one seventh of what it was in the late 1960s (figure 1). The average nominal rate of assistance to manufacturing will have fallen from about 24 per cent to 3 per cent over the same period.

The benefits will be felt well before the end of the program because all sectors of the economy will factor the more open trading environment into current plans. Input costs will be directly lowered and efficient industries will be placed in a better position to hold and attract resources. Those activities exposed to greater foreign competition will have to find ways to raise their productivity. If they do not, they will shrink and release resources for use in more productive activities.

**Figure 1**  
**Average effective rates of assistance for the manufacturing sector<sup>a</sup>:**  
**1968–69 to 2000–01**



a The discontinuities in the series reflect the periodic rebasing of the estimates to account for changes in the structure of the manufacturing sector.

Source: Industry Commission estimates.

While there will be losers as well as winners, the net result will be a more productive Australia. Simulations using the ORANI model of the Australian economy suggest that the March 1991 manufacturing assistance reforms alone will lead, in the long run, to a permanent increase in GDP of 0.4 per cent or some \$1.5 billion each year (in 1988–89 prices). Such estimates do not take account of dynamic benefits which would add to these gains.

The regressive tax burden that tariffs have imposed on consumers will also be lessened. When the program is completed, remaining assistance will add an average of about 1.9 per cent to consumer prices. This is about one-third of the burden which tariffs and other assistance imposed in 1988–89.

The decision on tariffs is valuable not only for the direct benefits it will bring. It will lead to more scrutiny of other impediments to efficiency, whether within government business enterprises, or caused by poor regulation or by the exercise of monopoly powers. As more and more sectors come under market disciplines, the pressures will mount for others to improve performance.

## **Governments working together — successes and missed opportunities**

The special Premiers' Conferences in October 1990 and July 1991 have seen the Commonwealth, States and Territories discussing a range of microeconomic reform issues in a way that is unprecedented. This in itself is a very positive development. The next conference in November 1991 will provide further opportunities to pursue reform vigorously.

A major success of the July Conference was the in-principle agreement for mutual recognition of regulations for both goods and occupations. Previous efforts to unify different areas of regulation Australia-wide have been laborious and achieved little, despite almost universal recognition of the costs of enforcing inconsistent regulation and the benefits of Australia becoming a truly single market.

The agreement for national performance monitoring of government business enterprises lays the foundation for a better understanding of their performance — how it is improving, where it is falling short.

The agreement to establish the National Rail Corporation (NRC) provides scope to overcome inefficiencies in carrying freight across five different States' rail systems. The success of the NRC depends on it achieving substantial productivity gains. It also depends on resolving uncertainties about, for example, conditions for NRC access to track and to terminals. The NRC must not merely transform several inefficient monopolies into a single monopoly, albeit more efficient.

A reform package has been designed for the heavy vehicle road transport sector, particularly to overcome burdensome variations in regulations across Australia, and to change current charging systems which bear little relation to the costs that road users cause. The new National Road Transport Commission and interim arrangements for user charging represent quite radical improvements. Nevertheless, the zonal system of charging means that heavy vehicles operating in some States will not be meeting the full costs of the road damage they cause. Moreover, charging is to be based on average distance travelled. An approach similar to that proposed by the Inter-State Commission, which recognises distance travelled and mass of the vehicle, would relate charges more closely to actual damage caused and would be more efficient.

Agreement has been reached to establish a National Grid Management Council to build on the existing management arrangements for the eastern Australian electricity grid. The Council is to encourage open access to the grid and free trade in bulk electricity for private generating companies, public utilities and private and public consumers. It will also draft a protocol covering the planning, operation, development, monitoring and extension of the grid. The promise of this reform, however, will only be achieved if there is genuinely open competition to supply power unfettered by home-state preference. It is hard to see how the potential gains from interstate connection can be fully realised if ownership remains in the hands of integrated State electricity bodies responsible for both generation and transmission. Such an ownership structure has in-built incentives to favour home-state generation over

potentially lower cost sources of supply. The creation of a separately owned national grid authority responsible only for transmission is essential.

The Australian Loan Council agreed at its May 1991 meeting to provide scope for those government business enterprises which operate in competition with private sector firms (or in contestable markets), and deal with parent governments on an arms-length basis, to be exempted from global borrowing limits. Some contention will remain, however, as to what constitutes a commercial government business enterprise and the characteristics of a contestable market. Agreement was also reached to introduce more flexibility to provide for temporary borrowing capacity to finance worthwhile microeconomic reform and infrastructure projects. This raises a larger question of how to allocate global funds so as to give priority to those infrastructure projects that offer the greatest economic returns.

### **Other reform efforts**

The Commonwealth Government has acted to improve economic performance across a wide spectrum of industry — including aviation, shipping, the waterfront, and telecommunications (appendix 1). The past year has seen, for example, the abolition of Telecom's monopoly on first phones and the announcement that a second carrier will have the right to compete with Telecom. Entry will still be restricted but the market is expected to be open to full competition at the end of 1997. Industry development arrangements — such as local sourcing rules — could reduce the benefits that competition will bring.

Crew reductions continued in the Australian coastal shipping fleet, although at the end of the program in July 1992, average crew sizes will remain above the OECD average. The higher crew-to-berth ratios in the Australian coastal fleet have yet to be addressed in the reform process. The past year has also seen deregulation of interstate aviation and a boost in air travel.

The States' dominance in infrastructure services — such as energy, railways, road construction and water — means they individually bear much responsibility for removing barriers to better performance. These services have been shown to be underperforming and reducing the competitiveness of other industries.

Some governments have been more active in reform than others. Appendix 2, which was compiled with the help of the States and Territories, lists reform initiatives. Examples are:

- the NSW Maritime Services Board has privatised coal handling operations and its work force was halved in the last two years;
- Victoria has encouraged private sector investment in port infrastructure and privatised tug services at the Port of Portland;
- Queensland has removed the Department of Administrative Services' monopoly over the supply of most government services;
- Western Australia has announced that its next major power station is to be privately built, owned and operated;

- as part of the corporatisation process of the Electricity Commission of NSW, the State's power stations are to be converted to three separate profit centres competing with each other to supply electricity into the grid;
- South Australia has reduced its shareholding in the SA Gas Company; and
- Tasmania has placed its Government printing office on a commercial basis.

## **No room for complacency**

### **Domestic pressures for further reform**

The floating of the Australian dollar, the removal of exchange controls and reductions in tariffs were necessary for increased efficiency and have created irresistible demands for best practice throughout the economy. An internationalised economy not only subjects domestic producers of traded goods and services to more competitive pressures from abroad, it also conditions the performance of goods and services sectors that are not directly traded.

If Australian or foreign investors cannot get world class rail services or competitively priced electricity or negotiate flexible labour contracts in Australia, or if our regulatory regime is oppressive or if our taxes are excessively out of proportion to services provided, there are plenty of places in the world where business can do better. The risk of losing investment offshore is a powerful incentive for further reform to get Australian institutional and regulatory institutions into shape.

Another pressure for reform is budgetary stress. It makes more obvious the advantages of efficiently running government administrations, business enterprises and welfare services. For example, a State which leads the way in improving the reliability of rail services, reducing running costs and eliminating excessive rail charges on business, will be more attractive to investors. It will benefit from employment opportunities and from lower State debt. Similarly, local councils which develop more efficient pricing arrangements and which contract out services where savings are possible will benefit local ratepayers directly, as well as the nation as a whole.

Labour market reform must also gather momentum in response to increased pressure on product markets. The belief that costs can be passed on with little regard for the competitiveness of others must be overcome or living standards will fall.

Although labour markets continue to be rigid, the scope for flexibility is being explored. Greater enterprise focus for negotiations is emerging. Legislation now operating in NSW allows scope for employees to negotiate agreements with their employers under certain conditions without union presence. The ACTU's dissatisfaction with the last national wage case has led it to seek negotiated agreements at the enterprise level.

Employees and employers need to have a clear focus on genuine workplace reform. Unit costs are the key. Maintaining high wages requires high productivity. Debates about institutional structures for wage fixing should not become an excuse for inaction on reform at the workplace level. A willingness to be flexible when jobs are on the

line was seen in the negotiated agreement between employees at the Leeton cannery and SPC management.

### International forces

Australia has taken some steps forward but other nations are surging ahead. Australia has very little choice but to push on with broadly-based reforms to improve efficiency if we are to maintain and improve our trade shares and enhance our standard of living. It is perhaps too little appreciated in Australia how fast the standard of living of our neighbours is rising, including in Japan, which in 1980 had a similar level of income to ours. Table 1 tells the story.

The dynamic Asian economies to our north continue with reforms. Indonesia, the Republic of Korea, Malaysia and Thailand are deregulating their financial systems, lowering import barriers and reducing the role of the public sector in their economic development. Hong Kong and Singapore not only preach, but also practise free trade. The economies in our region and others beyond will continue to set a competitive challenge for Australia.

Further afield, the European Community (EC) is striding towards a single market, free of the impediments that distort trade and commerce. Efforts to harmonise national regulations across the Community have proved a difficult and protracted process. But the EC Commission has recognised that the costs of enforcing inconsistent regulation must be reduced and to this end has already adopted a more productive approach of selective harmonisation combined with the mutual recognition of each member state's standards.

Reforms underway will sharpen the performance of economic infrastructure services within the Community. The EC Commission announced in March 1991 that open

**Table 1**  
**Gross national product per capita: Australia and selected regional economies**

	<i>GNP per capita (US dollars)</i>		<i>Average annual growth (per cent)</i>
	<i>1980</i>	<i>1989</i>	
Australia	9 820	14 360	4.3
Japan	9 890	23 810	10.3
Singapore	4 430	10 450	10.0
Hong Kong	4 240	10 350	10.4
Republic of Korea	1 520	4 400	12.6
Thailand	670	1 220	6.9

Source: World Bank (1991).

access would be introduced to both electricity grids and natural gas pipelines so that any EC energy supplier would be able to distribute energy through any transmission network throughout the Community. Commencing in 1993, there is to be a partial separation of national rail authorities in that separate accounts will be kept for rail infrastructure and train operations. Train operators are to have access to all tracks, thus opening the way for free competition between European railways. Access will be available to private companies provided they have a majority shareholding from within the EC.

Some still point to incentives that foreign governments provide to their industries and argue that Australia should do the same. Providing matching subsidies to Australian industries would help the selected industries to retain and win back market share — but only by penalising someone else in Australia. Rarely do would-be subsidisers identify socially acceptable offsetting spending cuts.

The fact that other countries do not always play fairly is no reason for us to follow suit. To compensate all Australian industries facing 'unfair' competition would be economically destructive, even if governments had the necessary resources. Shielding any one sector from the realities of the world marketplace would simply add to the adjustment burden borne by others — both directly via the costs of inefficient resource use and indirectly via higher taxes and charges.

## **The way ahead**

While reform of product markets remains imperative, the reform agenda has to be broader. Labour market flexibility is central to achieving a more dynamic economy and easing adjustment burdens associated with other reforms. Systems for delivering education and skills training are important determinants of work force flexibility. Current arrangements need continuous scrutiny to ensure they can respond to emerging needs.

Removing distortions that affect national saving and access to capital are vital to ensuring that investment is channelled into productive uses. The Commission's inquiry on the availability of capital provides an avenue for building on earlier financial market reforms.

We must minimise the disincentives of taxes on business and individuals. Inefficiencies from taxing intermediate inputs to business and the lack of uniformity in sales taxes are but two of the issues the Commission has confronted in various inquiries. Although the sales tax system has been the target of reform, rates across goods vary from zero to 30 per cent and anomalies remain. The taxation arrangements for private sector participation in infrastructure development and operation are being examined in the Commission's availability of capital inquiry and other forums.

Regulation needs to be streamlined. Even if administered cost effectively, it can impose unnecessary costs which reduce international competitiveness. In its recent mining inquiry the Commission found that the potential of Australia's mineral resource based industries has yet to be realised. Stripping away unnecessary

government regulations and removing impediments in other areas of the economy would enhance the cost competitiveness of our mining and mineral processing industries. Then we could sell more of their products, either as raw materials or in progressively more processed form.

A key point of the Commission's previous annual report was that microeconomic reforms which embrace competition provide the driving force for a more flexible economy and higher productivity. The next chapter draws on the Commission's recent inquiries — such as rail and energy — to show how more competition can be implemented in the provision of infrastructure services.

The Commission's 1990–91 inquiry program covered contentious environmental and land use issues. A challenge for government policy is to ensure that legitimate concerns to conserve environmental assets do not broaden into a restraining factor on the well-being of Australians in the way that tariff policy has acted in the past. Chapter 3 takes up the issue of better environmental management, including the appropriate role for and limits to market mechanisms.

Governments have undertaken significant reforms in the past year but it is necessary to build on these achievements quickly. Chapter 4 looks at issues for government in the reform process.

## **Chapter 2**

### **Infrastructure reform: a gateway to better economic performance**

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Getting better value from Australia's existing infrastructure and out of future infrastructure investment will raise our economic performance and living standards. The Commission's inquiries into energy and rail have confirmed not only that the absence of competition is a key source of inefficiency in government provided infrastructure, but also that the method of introducing more competition must be guided by the individual circumstances of industries.

#### **Infrastructure and performance**

##### **Why infrastructure is important**

Economic infrastructure — such as transport and communications systems, power and water facilities — provides needed inputs to a wide range of industries. For example, electricity represents about 30 per cent of the operating cost of the average aluminium smelter but is also a significant input to industries such as non-ferrous metal processing and chemicals as well as to many services industries such as hospitals and hotels.

Substantial capital and labour resources are tied up in Australia's infrastructure. For example, one estimate puts the replacement value of water, sewerage and drainage assets at some \$80 billion. The sector invests \$2 billion each year and employs 35 000 people. The stock of capital used by the railways has been valued by the Commission at around \$15 billion. The railways invest about \$1 billion each year and employ about 75 000 people. Improvements in the productivity of capital and labour in those sectors would mean that the same level of services could be provided with fewer calls on the nation's saving and labour resources. National output would be increased by the efficient redeployment of resources.

Australia's geographic isolation increases the importance of having well performing infrastructure services. We do not have the option of purchasing electricity or water at lower cost from other countries as we can with goods such as clothing or chemicals. Where Australia's infrastructure services are not provided and priced as efficiently as possible, user industries carry a penalty with them when they compete with foreign suppliers at home or abroad. The large distances between Australian cities, between resource deposits and processing sites and between many farms and ports or city markets, underscore Australia's need for cost effective and reliable rail, road and shipping facilities.

Postal services, railways, telecommunications, water and electricity are dominated by public ownership in Australia. While many other OECD countries have public ownership in these areas, the extent of ownership varies across countries. For example,

electricity supply is dominated by government in Australia although overseas more than 50 per cent of generation assets are in private hands.

The reality is that much public infrastructure has performed badly. Australia Post earned an average annual rate of return on investment of only 1 per cent between 1985–86 and 1987–88. Worse still, Australia's railways have lost \$4 billion or more each year. This has caused a substantial share of accumulated State Government debts and imposed a burden on taxpayers. Taxpayers have an obvious stake in ensuring that their investments in public infrastructure are earning an adequate return.

### **What has gone wrong?**

Much of the inefficiency in Australia's infrastructure can be traced to government ownership, and the regulation or prohibition of private competition. Government business enterprises have too often had to confront their tasks with unclear and at times conflicting directions and with limited operational flexibility.

Where competition has been suppressed, government business enterprises have not faced proper incentives and disciplines to reduce costs and set charges at efficient levels. Private firms and other government authorities have not had the opportunity to show they can perform better. Because the costs of achieving social objectives have been obscured, governments have not been provided with the information needed to determine which services should be preserved and which discontinued. Where social objectives have been met, this has often been at higher cost to the community than necessary.

Yet the subsidisation of services such as passenger rail transport is still considered a public right. In part this is because the large losses from such services are not understood and those supporting the service are not required to bear the full cost. Passengers travelling on Australia's urban rail systems receive a subsidy, on average, of \$2.50 for every trip which is in excess of the anticipated social or environmental benefits. The Commission will be further considering these issues in its forthcoming inquiry on urban public transport.

Inadequate attention has been given to the contribution which competition could make to the efficient provision of our 'social infrastructure' — hospitals, schools and tertiary education and welfare institutions. Given the large sums of public money invested and the substantial running costs, it is important to question whether social goals are being achieved at least cost.

The Commission's inquiries into the exports of health services and education services raise some fundamental issues concerning the performance of these industries not only as export earners, but in the way they deliver services to the community generally. The Commission's inquiry into aids and appliances for people with disabilities concluded that more competition is essential to get better services for people needing hearing aids and artificial limbs.

## **More spending or better use of infrastructure?**

A common argument about infrastructure is that too little is now being spent on infrastructure and economic growth is being impeded.

Reference to historic levels of public spending on infrastructure can be quite misleading. For example, much of the past increase was due to State spending on electricity generation. This led to generating capacity well in excess of demand. The Commission's recommendations in a number of recent reports have been to put government business enterprises on a commercial footing and to open them up to the rigours of competition. We need to avoid further wasteful infrastructure spending on projects such as the Ord River dam and more recently the Burdekin, which have so far failed to make an adequate return to the nation.

Australia can make better use of current infrastructure and can improve the way it considers future infrastructure spending. For example, the role of efficient pricing as a guide to investment needs wider recognition. Too often prices have been disregarded as a means of determining what user industries and consumers want and are willing to pay for.

To undertake additional expenditure when substantial efficiency improvements remain to be made in the use of existing infrastructure would be to waste resources. New infrastructure investment may boost national productivity but markets have to be allowed to operate to signal when and where that investment should occur.

## **Improving the performance of infrastructure services**

Governments have been concentrating on reform mainly through the commercialisation if not corporatisation of their business enterprises. Reform has proceeded in different ways across Australia, but it is allowing government business enterprises to perform better. Reduced staffing levels in a number of electricity and rail authorities attest to that. For example, railway staff numbers have been reduced by over 30 per cent since 1981. And the efficient use of electricity authority capital appears to have increased significantly in recent years, as reserve plant margins slowly approach international best practice. Commercialisation and corporatisation are not without practical difficulties, but the reasons why some governments are not going whole-heartedly down the corporatisation path are essentially political rather than implementational.

### **Corporatisation model**

The benefits of corporatisation come from establishing an arm's length relationship between governments and their business enterprises and from dismantling barriers to entry. The Commission has set out the major components of a model of corporatisation as a guide to government in this important process. While there may be sound reasons to tailor the model to individual circumstances, corporatised government business enterprises would have better incentives to operate efficiently if owner governments:

- provide clear and non-conflicting objectives that relate to commercial performance only;
- identify, cost and directly fund any community services from the budget so as to make subsidies transparent;
- vest management in a commercial board accountable to Parliament through a minister;
- introduce performance monitoring based on financial and non-financial targets and establish a system of rewards and penalties for managers related to performance;
- separate out regulatory functions — an enterprise should not be both umpire and player;
- make authorities liable for all taxes and government charges;
- require dividends at levels equivalent to similar private companies;
- remove constraints such as government employment policies and advantages such as those associated with government borrowing guarantees;
- require adoption of uniform and commercial accounting practices;
- make corporatised authorities subject to the Corporations law;
- introduce effective natural monopoly regulation and remove advantages such as exemptions from the Trade Practices Act that do not apply to private companies; and
- remove regulatory and legislative barriers to entry.

The Commission considers this last point to be pivotal. It would mean, for example, the removal of restrictions which some States place on the transport of bulk commodities such as coal which favour the State owned railways. These regulations limit choice of transport mode and reduce the incentives for rail authorities to contain costs and improve efficiency.

### **Structural change for effective competition**

In the areas of infrastructure it has so far investigated, the Commission has found that there is a need to go further than corporatisation for effective competition to improve efficiency. This view is supported by many State and Territory Governments. All the evidence indicates that, despite some improvements, government business enterprises are not performing to their full potential. Railway employment is estimated to be still about 50 per cent higher than best practice would allow. Despite concerns about the general level of unemployment, the electricity sector overcharges manufacturing industries by up to 34 per cent.

Injecting effective competition into infrastructure industries can require change in their structure, regulation and ownership. Where the market is of a size where services will tend naturally to be supplied at lowest cost by a single producer (natural monopoly), case-by-case assessment is required to determine whether or not these natural monopoly services should be separated from associated activities which have potential for competition. This requires a weighing of the benefits of separation against increased costs that may arise, for example, through having to coordinate production, marketing and investment decisions.

For the electricity sector, the Commission found that there would be substantial net benefits from separating the natural monopoly transmission function from the potentially competitive generation and distribution functions. That step was seen as fundamental to competition in the generation and distribution sectors (where there could be many players or potential players). Where ownership of generation and transmission is in the same hands there is an incentive for the transmitter to favour its own generators over lower cost options.

In cases where full separation might not be efficient, consideration should be given to injecting competition through 'open access' requirements, as was recommended in the Commission's rail inquiry. Open access would, for example, allow operators other than owners of the railway track to run their own trains on that track. While the Commission anticipated that there would be few independent train operators on the permanent way, the threat of competition would be an important discipline to government operated trains. There are many international precedents: the Canadian long-distance passenger service VIA owns no track and pays owners for access to their tracks. Ensuring open access is the way to avoid what could otherwise be a wasteful duplication of facilities.

### **Regulation**

Even where the energy and railway industries are reformed along the lines recommended by the Commission, natural monopolies over transmission assets and the railway track will remain. This will provide scope for abuse of monopoly power. There will thus be a need for a regulatory framework which can be activated where monopoly power is abused.

The regulatory response to specific natural monopolies should depend on the level of competition from substitutes. Gas transmission is a natural monopoly, for example, but it faces competition from electricity in practically all its uses. Electricity, though, has no direct competition from any other energy source in uses such as street lighting and for many home appliances. In energy and rail, the Commission has favoured regulation of natural monopolies to be undertaken by a suitably revamped Trade Practices Commission rather than industry-specific regulatory bodies.

The special case for regulation of natural monopolies does not imply that natural monopoly elements of industries should be shielded from market forces. Allowing free entry ensures that industry structure is subject to continuous testing in the marketplace. What is a natural monopoly today may not be tomorrow. Rapid technological developments in satellite communication and optical cables have, for example, reduced the natural monopoly status that was once accorded the telecommunications network. Leaving legal barriers to entry in place allows industries that may now be open to competition — perhaps due to recent technological change — to continue to pass themselves off as natural monopolies.

There is little justification for continuing to exempt any corporatised authority from the provisions of the Trade Practices Act. At the July 1991 special Premiers' Conference it was agreed that a national approach to competition policy be considered with a view to ensuring that consumers and users of goods and services benefit from

structural adjustments now underway. A working group of officials will review the appropriateness of current competition policy, including the application of the Trade Practices Act to government business enterprises.

### **Performance monitoring**

Governments should not be involved in the operational decisions of corporatised enterprises — this is the responsibility of the utilities themselves. However, monitoring of performance is essential for improving the efficiency of corporatised enterprises whether they operate in competitive markets or are natural monopolies. Performance monitoring should involve a range of financial and non-financial targets against which actual outcomes can be compared and explained in the light of circumstances individual enterprises faced.

The major financial target, at least for corporatised bodies operating in competitive markets, should be a rate of return. However, a rate of return requirement can raise a range of issues, such as: what rate should be applied; on what basis it should be calculated; how to account for community services; whether all new infrastructure projects should have to earn a uniform rate or whether it should vary across industries and projects to take account of risk factors.

All government business enterprises should be looking to earn at least a 'hurdle' rate of return on new investment comparable to that in the private sector. Setting the rate of return target artificially low would mean that resources would be inappropriately directed into public utilities. Rate of return targeting is aimed at avoiding the mistakes of the past with uneconomic projects. It is also aimed at ensuring that project evaluation will not be biased in favour of capital intensive projects such as coal-fired generating plant rather than less costly gas-fuelled power stations.

Monitoring rates of return achieved on historical costs can reveal something about how successful past investment decisions have been. When rates of return are low, this is a sign that the nation's scarce saving has been wasted. In some circumstances, rates of return are low because capacity has been installed in excess of demand. A competitive market would revalue assets so as to allow rates of return to be meaningful indicators of performance.

Care needs to be exercised in applying rate of return targeting where natural monopoly elements are present — as in parts of rail and electricity infrastructure. Expected rates of return remain an important guide to project evaluation. However, the rate of return achieved may not be an appropriate guide to efficient pricing of services once an investment has been made. In the electricity sector, for example, where generation capacity is in excess of current demand, it makes sense to price in a manner to use this capacity. This may mean that prices should fall in the short term. Electricity utilities may not meet the rate of return target for the time being, but this should not of itself be interpreted as a sign of inefficiency. It would, however, raise questions as to the appropriateness of past investments.

Rate of return targeting is not without other difficulties where natural monopoly is present. For example, monopoly suppliers can cover inefficiencies in the way services

are supplied by downgrading the quality of service without fear of loss of market share that competition would bring. Thus we need to be cautious in interpreting rate of return achievements across authorities operating in different market environments.

Monitoring non-financial targets is one means of guarding against artificial behaviour of corporatised bodies such as reducing quality of service or running down or selling assets in order to meet rate of return targets. There could be many non-financial targets. One example is delivery time for mail. Quality indicators should be established in a way which makes allowance for legitimate regional differences such as where population dispersion affects mail delivery.

The July 1991 special Premiers' Conference agreed that a framework for national performance monitoring for government business enterprises be established. The system will initially concentrate on a core of larger and more significant enterprises in each Commonwealth and State jurisdiction, with the core group to be expanded progressively. Under the auspices of a Commonwealth-State steering committee, the Commission is to prepare a preliminary version of national performance indicators for 1990-91 concentrating on accounting and non-financial measures of performance. The steering committee will consider preparation and publication of performance indicators for 1991-92 and the appropriate agency to undertake the task on an ongoing basis.

Reporting of relative performance is important because it shows what can be achieved and creates interest in how to bring about reform on a national scale. It allows benchmark or inter-agency comparisons to be made that will highlight good performance and show ways for other authorities to improve their relative standing. It is a step in the direction of improved performance and a greater contribution from Australia's infrastructure to our economic prosperity.

### **Privatisation**

Even fully corporatised authorities subject to market competition would not face all of the incentives for efficiency faced by private firms. For example, they would remain immune from takeover and insolvency and the type of performance monitoring implicit in changing share prices. There always remains the possibility that governments will interfere in operating decisions and apply pressure for political ends that damages economic performance. Thus private ownership brings with it a dimension of competitive discipline which cannot be replicated in the public sector.

To capture these benefits the Commission has recommended the progressive sale of a range of government assets, including all electricity generation assets and at least some distribution assets. It has recommended that the Commonwealth Government cease production of artificial limbs and dispose of the assets of the Repatriation Artificial Limb and Appliances Centres. Options are seen for the private ownership of some railway tracks and other railways assets. The Commission has also proposed that governments review their procedures for allowing the privatisation of statutory agricultural marketing authorities and terminating their powers of compulsory acquisition.

The Commission has found that the advantages of private ownership are uncertain where natural monopoly elements are present in a government business enterprise. Public ownership may still involve higher production costs than private ownership. Public ownership is not a guarantee against abuses of monopoly power. Freight rates on coal charged by the State Rail Authority in New South Wales provide an example where monopoly power has been used to extract excessive profits. Nevertheless, where the possibility of actual competition is remote, there are difficulties in devising effective regulatory regimes to deal with concerns about the abuse of market power. There is a trade-off to be made between 'cost padding' and 'profit padding' with uncertain effects on the prices and quantities of services provided. Thus, case-by-case evaluation is required. The answer hinges on the cost effectiveness of regulating a public versus a private monopoly.

Gains to the community from public asset sales come primarily from efficiency improvements, not from maximising of the sale price. There is a potential for conflict here. This is because the revenue from the sale of a public enterprise is likely to be greater if the enterprise is transferred to the private sector with restrictions on competition still intact — such as Qantas enjoys — and/or with inadequate regulatory controls over the abuse of market power. The efficiency gains from such a transfer would be placed at risk in such cases. To avoid this, restrictions on competition should be removed before sale — as occurred with Australian Airlines.

The sale price of government assets disposed of in competitive markets should reflect the present value of expected future income from the privatised enterprise. Sale prices that reflect expectations of higher income flows under private ownership will give rise to an improvement in the net worth of the public sector.

### **Making the transition to efficient costs and prices**

Getting better value from infrastructure will require adjustments to be made by workers, management, user industries and other consumers. Given the history of past mistakes, and the size of the task ahead, the transition will take time.

Whether or not price increases are necessary will be influenced by prospective cost savings available from more efficient operation. In its rail report, for example, the Commission argued that to reduce severe dislocation, fare increases should be phased for urban rail transport in conjunction with cost reductions. It recommended that rail authorities be committed to a five year program of cost reductions while urban fares increase and while changes in fare structures are being phased in.

The regulation of natural monopoly may require some form of price control, but restricting price increases for enterprises currently in deficit would limit their ability to institute price realignments necessary to improve pricing efficiency and remove cross subsidies. Even with significant improvements in productivity, where authorities are earning very low or negative rates of return, putting authorities on a commercial footing may well require substantial price increases and the realignment of prices between classes of customers. When prices are held artificially low there is a signal for overconsumption and wasteful overinvestment. Moreover, while some users of

public infrastructure services may benefit, taxpayers should be concerned as they have to foot the bill when state enterprises run at a loss.

Apart from the concern to shield users from price rises, restrictions on the extent to which public enterprises can increase prices is seen by some as desirable to fight inflation. However, social objectives, controlling inflation, and concerns about groups adversely affected by change should be met by more direct means than price controls. In the long run this would mean fewer costs for Australia and improved industry competitiveness.

Prices should not, however, be raised merely for the purpose of raising revenue for State or Commonwealth Treasuries. Although much of the progress in reform, particularly at State level, has been stimulated by budgetary stress, the reform process would be counteracted if prices were raised merely for revenue reasons, and appropriated by State Treasuries through excessive dividend policies.



## **Chapter 3**

### **Better environmental policy formulation**

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A feature of a number of Commission inquiries has been the need to respond to the community's joint concerns about environmental issues and continued economic prosperity. Some general messages from the inquiries can be drawn together.

#### **Some essential ingredients**

##### **Good economic management is good for the environment**

Markets often fail to account for some of their environmental consequences. But some environmental damage also comes as a result of government interferences in market processes that encourage the wrong behaviour in consumers and producers. The preferred response in these circumstances is to allow markets to work better. This means removing the interferences.

The Commission's recycling inquiry highlighted this approach. The pricing of waste management often fails to cover costs, provide for site replacement and capture environmental costs. Removing these distortions was seen as good economic management that would encourage environmentally responsible behaviour.

Reforming pricing practices was also a key element of the recommendations in the energy generation and distribution inquiry. Pricing reform would provide users with better information about the true costs — including environmental costs — of energy use. It would require governments to do away with tax concessions, free loan guarantees, concessional finance and cross-subsidies. By rationalising energy use, these economic reforms would contribute to reduced pressures on the environment.

As the previous chapter indicates, the Commission identified the need for greater competition in energy generation and distribution. It recommended the separation of the potentially competitive generation and distribution segments from the natural monopoly transmission segment.

These changes would not only bring economic benefits, but could also help address concerns about greenhouse gas emissions. They would facilitate greater (in-house) co-generation of power, using energy which is otherwise wasted. This would reduce greenhouse emissions by displacing electricity purchased from utilities (which rely on coal-fired generators) and/or by the sale of surplus electricity to the grid. Provided raw material prices reflect their potential environmental costs, a more competitive generation sector would be likely to reduce the use of brown coal and encourage greater use of more environmentally friendly gas, black coal, hydro, and even solar and wind sources of power (Pitkethly 1991).

These examples illustrate that a useful starting point, before embarking on 'active' environmental measures, is to assess the environmental improvements that are possible and likely through general economic reforms.

### **A comprehensive view of environmental implications is needed**

Like any other policy arena, environmental protection has far-reaching implications. These should be explored and understood so that policy outcomes will be consistent with environmental objectives. For example, much of the interest in recycling stems from the perception that it conserves resources. But, while recycling often conserves resources, it also uses resources — in transport, sorting, cleaning and materials preparation. As a result, some recycling can increase overall resource demands. The Commission also found that mandatory container deposit schemes can impose high costs on producers and consumers and can hinder the development of integrated systems for collecting recyclable materials.

Similarly, some groups advocate the use of substitute materials, such as plastics and metals, in the place of wood and wood products (for example, in building construction) to reduce the demand for forest resources. However, the Resource Assessment Commission found that 'the environmental impacts associated with the production of these substitutes are equal to, and in most cases greater than, those associated with wood production' (RAC 1991*b*, pp. 8–9).

### **Ensure compatibility, where possible, between objectives**

In its energy generation and distribution report, the Commission observed that some governments require their energy utilities to actively promote energy conservation. These requirements can detract from their operational efficiency. Some conservation initiatives will be in the utilities' commercial interests (for example, energy advisory services). But governments have the main responsibility for influencing consumers' judgements about energy use by removing impediments to better pricing practices and by correcting information deficiencies where cost effective.

Regulations which prescribe the use of energy efficient appliances or which mandate the construction of solar efficient buildings can have net costs and reduce choice. For example, consumers in more temperate climates (for example, Sydney and Brisbane) may prefer less energy-efficient heaters that are infrequently used, when lower capital costs outweigh higher running costs.

In its draft report on greenhouse gases, the Commission found that unilateral action to reduce greenhouse gas emissions would involve economic costs with no significant environmental benefit. But, if an international approach is established, it would be in Australia's interest to influence the details of the policy. A target for emissions reduction that embraced all greenhouse gases, rather than just carbon dioxide, would still meet the environmental objective but reduce the impact on Australia's significant wealth and trade in energy resources that are relatively carbon dioxide intensive.

These examples illustrate two reasons why compatibility between environmental and economic objectives should be pursued. First, if greater attention is paid to efficiency, environmental objectives can still be met but with less economic fallout. Second, the costs and benefits of environmental measures, especially those involving mandatory regulations, need to be assessed closely to weed out those that involve a loss in community well-being.

Against this background, some recent policy initiatives are cause for concern. For example, the July 1991 special Premiers' Conference reaffirmed the objective of establishing consistent environmental standards across Australia. The establishment of an Environmental Protection Agency is seen as a possible means of ensuring coordination (DASETT, 1991*b*). If this coordination were to dispense with duplication and avoid transboundary problems, there would be gains to the community. But a move toward *uniformity* in standards across States is a different matter. Standards should vary across regions, reflecting their different attributes and capacities to absorb environmental pressures. A uniform or too high a standard would impose unnecessary costs.

### **Focus policy instruments on the problem**

To ensure consistency between policy outcomes and environmental objectives, policy responses need to be directed at the cause of problems rather than the symptoms.

Recycling provides an example. An often stated objective of encouraging the recycling of paper is to conserve native forests. But more paper recycling within Australia would not do much for our native forests. Most fibre for paper pulp used in Australia comes from pine plantations, by-products of sawlog operations, sawmill residues and imports. Conserving native forests is better achieved by focusing directly on the management of those resources, for example through pricing policies. Policies that artificially encourage recycling, for example through setting recycling targets and granting sales tax exemptions, can impose net economic costs on the community, with little environmental benefit. To view recycling as an end in itself can be economically and environmentally extravagant.

A discussion paper on a national waste minimisation and recycling strategy proposes some measures that could enhance the efficient delivery of environmental objectives (DASETT, 1991*a*). However, it also relies heavily on setting, and perhaps enforcing, waste disposal and recycling targets; banning certain products; and modifying product standards to specify allowable environmental impacts. The Commission's recycling report, and its response to the discussion paper, argue that such an approach is unlikely to meet environmental objectives in an efficient way (IC, 1991*h*). A more direct approach would be to ensure that waste disposal charges reflect the full social cost of disposal.

### **More efficient instruments**

Greater use of economic instruments, to protect the environment more cheaply than by direct regulation, is perhaps the best way of ensuring consistency between economic and environmental objectives. In its greenhouse gases inquiry, the Commission raised the advantages of using instruments such as carbon taxes and tradeable permits as more efficient means of meeting greenhouse targets than straight regulatory approaches.

In the mining and minerals processing inquiry, the Commission advocated greater use of market-based instruments such as fees and charges, tradeable permits and

rehabilitation and performance bonds to control potential and actual environmental damage. Again, the payoff would be effective environmental protection at lower cost.

In that inquiry, the Commission found that existing mechanisms for resolving land use conflicts had proved inadequate — as amply demonstrated by the Coronation Hill/Kakadu Conservation Zone experience. The Commission recommended that conferring full rights to minerals on Aboriginal lands in the Northern Territory to the traditional owners should be investigated. Although there are concerns about special treatment which the granting of property rights would confer on certain groups in the community, such an approach would provide a more ready mechanism for dealing with the interests of others — be they in mining or conservation — than would existing mechanisms.

The report also noted how the concept of property rights could be extended, for example, to enable conservation groups to acquire the legal responsibility for areas set aside for conservation purposes. The advantage would be that private individuals or groups would be likely to take proper care of the land and its resources (to maintain their value) and to take proper account of any costs their activities may impose on others (because they could be held legally responsible).

### **Information is crucial**

Community attitudes and preferences ultimately shape choices about environmental protection. It is vital that these choices be well informed — about both the environmental and economic consequences. The Commission found in its recycling inquiry, that community perceptions, based on very incomplete information, can encourage responses which impose net costs on society.

But complete information is rarely available. The build-up of greenhouse gases is a prime example of an issue that requires a decision in the midst of considerable uncertainty — about the links to future global warming, and the links between global warming and regional impacts. It will be many years before these links can be firmly established. But waiting for complete information to become available may not be the best course. It may be appropriate to consider some precautionary measures, combined with efforts to improve the information base.

Information gathering has its own cost. However, within bounds, more information will help the community to make environmental choices which will not waste resources. Sound environmental management calls for continued building of the information base — scientific, economic and environmental.

Better information from government agencies and some companies might well dispel some of the myths about pricing practices and contribute to more informed discussion of both recycling and conservation issues. One of the issues in recycling is whether native forest timbers are overexploited because they are commercially undervalued. In its recycling inquiry, the Commission encountered secrecy surrounding the commercial deals between State forest services and pulpwood purchasers.

Opportunities for public scrutiny of current processes of environmental policy formulation are variable. The operations of bodies such as the Resource Assessment

Commission and the Ecologically Sustainable Development working groups have increased public scrutiny of environmental policy. On the other hand, certain departmental initiatives are receiving less scrutiny. For example, a growing number of policies which would normally be considered by Federal Cabinet are first endorsed by the Australian and New Zealand Environment Council and then announced by the relevant Commonwealth Minister. This process increases the pressure for Federal Cabinet approval of the proposal. By effectively by-passing normal review procedures, it undermines the quality of environmental policy formulation.

### **Putting together a better management strategy**

Decision making processes about environmental issues in Australia are highly political. Powerful interest groups, which strongly advocate their own points of view, put considerable pressures on governments to take decisions that do not necessarily serve the long-term community interest. Similar pressures were evident in the crippling industry policy processes of past decades. As was shown in the industry policy case, publicly available information and scrutiny helps to inform and educate the community generally and that in turn helps governments to take policy decisions which are in the best interests of the public.

A starting point for policy formulation is to assess the environmental benefits that might flow from economic reforms. But where environmental policy action is warranted, greater reliance could be placed on economic instruments. Economic instruments have long been advocated and their use has grown in recent times. Pollution charges are used in a number of European countries, while various forms of tradeable emission permit schemes operate in the USA. The recent amendments to the US Clean Air Act which set up a tradeable permit regime for acid rain (sulphur dioxide) emissions represent a major breakthrough in efficient environmental control. Economic instruments are not applicable in all cases. But where they are practicable, they offer a number of advantages (appendix 3).

There are also some home-grown examples. Tradeable irrigation entitlements are being progressively introduced and tradeable quotas have been used to allocate a total allowable catch of southern bluefin tuna. Tradeable permits are facilitating better use of CFCs within emissions limits. Tradeable quota regimes in other policy areas, such as in passenger motor vehicles and in textiles, clothing and footwear have also provided experience about some of the problems likely to be encountered in implementing tradeable permits for environmental purposes.

The experience provides valuable lessons. First, the environmental gains are tangible. Cheaper protection measures make compliance easier and can even make more stringent targets feasible. This was evident in the US acid rain case. That example also shows that economic instruments can be more dependable. In the face of ineffective regulation to control acid rain, the aggregate cap on emissions that a marketable permit scheme provides has been a distinct advantage.

Second, the economic gains are tangible. The efficiency of economic instruments is typically estimated to be 2 to 6 times greater than regulatory alternatives (Tietenberg

1990). But the extent to which potential benefits are realised depends crucially on whether market-based systems are saddled with inappropriate and unnecessary regulatory restrictions and administrative requirements.

Third, economic instruments can reduce pressures on governments to promote sectional interests. For example, with a tradeable permit scheme, the basic steps are to decide on an aggregate level of activity or emissions, the rule for initial allocation of permits and the rules for trading. Political pressures inevitably are brought to bear on these decisions. But, once such a scheme is introduced, the need for governments and regulators to intrude on its operations is drastically reduced.

The Premier of NSW said recently of economic instruments:

In some circumstances, we are now discovering the market provides us with a mechanism for allocating scarce resources in a way which maximises community welfare, while avoiding the pressures from purely sectional and sometimes selfish demands. Markets are able to make decisions that politicians lack the will or the information base to make (Greiner, 1991).

Moving government to the background in cases where markets can work brings the prospect of greater stability and certainty. When governments are involved at every step, a chain of ad hoc decisions and broken promises can emerge.

Fourth, economic instruments can handle distribution, adjustment and equity issues that often bedevil efforts to improve efficiency. The initial allocation of marketable permits, which have a realisable value, can be used to address these issues without necessarily undermining the potential efficiency gains. For example, available supplies of irrigation water have been reallocated through the trading of entitlements to more productive uses, and those relinquishing water have been compensated through the sale of their entitlements. Governments have not been required to get involved in the reallocations. The reallocation of available water increased the value of NSW crops by \$17 million in 1987–88 (appendix 3).

Finally, care in the design of economic instruments is crucial to their success. The more restrictions placed on the instruments, the fewer efficiency gains they will generally deliver. The rights and responsibilities of those involved have to be clearly defined and be capable of enforcement. And although distribution issues can be addressed through, say, the initial allocation rule for permits, some attention may need to be given to potential problems like the concentration of market power.

In some cases impediments may have to be removed to allow markets to work better. In other cases, markets can be created or enhanced, by assigning property rights. This includes allowing greater scope for private initiatives to protect the environment. In these cases, governments need to support a framework for defining, enforcing and trading in property rights. But building greater flexibility into current regulatory approaches may be as far as it is possible to go in many instances. Where this is so, governments need to ensure that producers and consumers take full account of environmental costs and in the most efficient manner possible. There may also be cases where unnecessary environmental restrictions can be removed.

## Chapter 4

### Managing reform

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Judging our reform efforts by our past standards provides little room for self congratulation. Recent Australian productivity growth compares favourably with major OECD countries in areas such as electricity, gas and water and transport and communications. Such comparisons, however, conceal the fact that we remain far behind overseas counterparts (appendix 4).

#### Benchmarks

Monitoring developments in international best practice is a useful starting point. If Australia has world-class productivity then world-class wages can be paid. But if productivity is below par, excessive unit labour costs will reduce the international competitiveness of Australian industries.

For goods and services that are internationally traded, changes in market prices provide signals about the quality, service and other standards to which Australia's industries must strive to be competitive. Many goods and services are not, however, traded directly and for these there is no such ready market test. Trying to reach and pass international best practice in these areas is nonetheless important. Inefficiencies and inflexibilities in labour markets and in infrastructure services such as roads and ports are burdens that our trade exposed sectors carry with them on world markets. Therefore, it is no longer appropriate to think of indirectly traded services as being somehow immune from the economic reality of world markets.

Raising public awareness of the importance for our economic prosperity of efficiency in these services requires monitoring and publicising how the productivity of these sectors compares with counterparts in other countries. And there is every reason to extend such comparisons to areas of social infrastructure provided by governments.

Commission inquiries provide examples of how far Australian sectors lag behind their counterparts overseas in the productivity stakes.<sup>1</sup> Lower productivity in the Australian electricity industry has led to capital and labour costs in 1989–90 being 12 per cent and 33 per cent higher respectively than necessary. The Commission estimates that increasing labour and capital productivity to international best practice levels would reduce costs by \$1.2 billion and yield a \$1.8 billion increase in national output each year.

Productivity improvements to reach international best practice levels also offer substantial cost savings in the Australian rail industry. Lower productivity has meant total costs were between 45 per cent and 53 per cent higher in 1989–90 and labour

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1 The examples that follow are drawn from IC (1991*f,i,k*). For the detail and qualifications attaching to these benchmarks see those reports.

costs up to 66 per cent higher than need be. The Commission estimates that the adoption of international best practice would lead to initial cost savings to the rail industry of \$2.2 billion which would result in a \$3.8 billion expansion of national output each year.

In the area of health care, OECD data show Australia to have by far the highest ratio of hospital personnel per occupied bed. Gross savings of almost \$5 billion a year could be generated if Australian staffing levels were reduced to the average level in other OECD countries. Net savings would depend on the consequent expenditure required to upgrade hospitals and other health care facilities.

Exercises that compare and contrast domestic activities can identify reform opportunities and shake complacency about current Australian performance. For instance, the Commission estimates that Westrail's (WA) productivity in 1989–90 was around 50 per cent higher and Australian National's productivity around 25 per cent higher than railway operations in Queensland, NSW and Victoria. If each Australian railway was as efficient as Westrail, the total Australian railway deficit could be reduced by about \$2 billion.

There are also differences between the States' electricity and health industries. The Commission's inquiry into energy generation and distribution, for instance, found that an 11 per cent improvement in all States' productivity would be required to match those expected by Queensland by 1992–93. And if all States were as productive as Queensland in providing health care, annual savings would be around \$2 billion.

The performance monitoring agreed to at the July 1991 special Premiers' Conference should provide further pointers to improved performance.

## **Transparency**

Greater awareness of the net benefits from reform helps secure support for and adherence to a reform program and helps the community resist the pleadings of special interest groups.

Making subsidies more transparent can help. Many subsidies are hidden, especially within government business enterprises, through cross-subsidisation policies. These often include obligations imposed by governments to serve such objectives as welfare (for example, pensioner rebates) and regional development (for example, concessional charges to selected industrial users). Unless subsidies are made explicit, there is little basis on which to judge the appropriateness and efficiency costs of those community services.

The tariff reduction program announced in March 1991 goes a long way to removing a form of protection that has constrained the economic performance of the Australian economy since federation. However, other significant forms of industry preferment remain, many of them less transparent than tariff assistance. They potentially limit the benefits that import competition can provide (appendixes 5, 6 and 9).

For example, anti-dumping action is on the increase; recent changes to the system have increased its protective effect; and the system is being tested by sole or dominant local producers to erect barriers against alternative sources of supply. Anti-dumping action against imports of polyethylene used to coat milk and fruit juice cartons or for packaging film was in place from 1982 to 1988. ICI's recent complaint was laid against 80 suppliers in 16 countries. Preliminary action was taken against imports from all of them. Anti-dumping actions are also raising input costs for other Australian industries — for example, sodium cyanide costs for gold mining.

The anti-dumping system benefits those taking advantage of it. But the wider community can only be sure the system is working in its interests if economy-wide effects have been assessed. Australia's current anti-dumping system has been in place for three years and the Government foreshadowed a review of its operations after that time period. The recent inquiry of the Senate Standing Committee on Industry, Science and Technology (1991) had its focus on 'quicker, cheaper and easier' access to the system for domestic industries. The review of the wider economic effects of the anti-dumping system has yet to be undertaken.

Transparency is not a notable feature of many other industry programs. During the course of its inquiry on tariff concession systems, the Commission found that policy by-law guidelines were available only to the few 'in the know' (IC 1991c, pp. 169–71). The bounty for photographic film, and earlier this year, the bounty for citric acid production were established without the public scrutiny that has traditionally been brought to bear on bounty assistance. And the benefits and costs of the offsets program and its many derivatives continue to be elusive.

Transparency is no less a requirement for informed environmental decision making. The community needs to guard against mistakenly erecting barriers to efficiency while pursuing justifiable environmental objectives. For example, tyres pose a difficult problem in waste management. Curtailing used tyre imports, as suggested by some, would not address the waste disposal problem but would impose costs on firms and people using tyres. The best way of ensuring efficient and environmentally sound disposal of tyres, whether locally produced or imported used tyres, is to price appropriately waste disposal facilities. But it is not difficult to see why local tyre producers would support import restrictions — to appear 'green' and gain a commercial advantage.

The need, clearly, is to assess institutional, regulatory and assistance arrangements in the light of their potential economy-wide impact. Only then will the community be able to assess the implications for national economic performance.

## **Publicising success**

Monitoring and publicising developments during and after reform programs are also important for raising community understanding of and support for reform. It needs to be widely appreciated, for example, that prices fell by 16 per cent following the deregulation of the NSW egg industry in 1989. The Commission estimates that consumers gained \$27 million from the deregulation in 1989–90 and \$35 million in

1990–91 alone. Consumers also gain because producers now have incentives to supply the sizes and qualities of eggs that consumers favour (appendix 7).

The ending of the two airlines policy has seen a new entrant challenge the two incumbents. Early indications are that fare discounting has attracted more passengers and they are travelling further — in the year to September 1991 the kilometres travelled by paying passengers were 18 per cent above the record levels of 1988 and there has been a significant boost to business in major tourist destinations (appendix 1).

Follow up studies also provide an opportunity to examine whether the community gains all of the expected benefits of a reform. This can help to identify the further barriers which need to be removed. In domestic aviation, for example, access arrangements for terminal facilities may yet come to constrain the efficiency of domestic air services and the gains available to travellers.

### **The timing of reform**

Reform makes the community as a whole better off. Individual reforms, however, can have adverse effects that are often concentrated on readily identifiable groups. There is little doubt that adjustment pains are felt especially keenly in times of slow or negative growth. The difficulty is that there is always likely to be some short-term reason to defer reform. Rises in charges to reflect the real costs of supply may be resisted because of wage setting mechanisms and other linkages which produce an inflationary impact. There may be adverse effects on the balance of payments at a time when Australia's foreign debt is historically high. Governments' revenue needs may weigh in. Or there may be resistance to removing anti-competitive regulations before privatising government-owned enterprises whose value, in part, derives from that regulatory regime.

Delaying reform because of recession, or for other shorter term reasons, is to lose the gains available to the community. It also means passing up opportunities to create a more flexible economy which is better able to cope with future economic shocks.

Tying reforms to, say, the peaks of the business cycle would not necessarily help adjustment processes. For example, implementing tariff cuts only when demand and sales are booming would lead to little immediate pressure to adjust. It is unlikely that resources would be reorganised until the next downturn. The notion that reform can be finetuned to the business cycle assumes a degree of precision that governments typically find unattainable. In its March 1991 decisions, the Commonwealth Government recognised that the long-term national benefits to be had from continuing phased reductions of tariffs across the board were too valuable to delay until the economy recovered from recession.

The sequencing of reform is sometimes raised as an issue. With reform already underway, an undue focus on sequencing issues would risk stalling the process. Reform needs to be broadly based and opportunities seized wherever possible.

## **Addressing adjustment issues**

In any microeconomic reform there will be losers as well as winners. Phasing reforms may go some way towards easing adjustment pressures. The community often appears prepared to accept some delay in receiving the benefits of reform if it makes adjustment easier. Pursuit of broadly-based reform helps by increasing the scope for offsetting effects. For example, the Commission found that a broad reform package would cut by between 20 to 40 per cent the activity and employment losses resulting from reducing assistance to the automotive industry (IC 1990*d*, pp. 53–5).

Many of those displaced by microeconomic reforms will find new jobs. Finding employment quickly will be harder for others. In special cases, however, government sometimes feels compelled to provide better training and relocation assistance and redundancy packages than are made available generally. These additional measures place some individuals in favoured positions compared with those facing hardship from other causes and treat people differently across industries even when the cause of hardship is the same.

When governments propose immediate reform, adjustment assistance through compensation payments can become an issue. This is especially so where supplies of goods or services have been restricted through quotas or licences and the returns have long been capitalised into the value of the quota or licence (as in the value of a taxi plate, for example). When NSW deregulated its egg industry in 1989, compensation of \$61 million was paid to egg producers (appendix 7). The danger in that approach is the expectations created in other areas targeted for reform. Without careful handling, compensation pay-outs could become a hurdle rather than an aid to the restructuring of industries.

Compensation and special assistance packages raise equity and efficiency issues that are best dealt with case by case. However, there are some wider considerations for the successful prosecution of reform programs that need to be taken into account. Chief among these are that adjustment assistance measures should: allow reform to proceed as quickly as possible; be efficiently targeted to those directly affected; avoid creating additional incentives for the beneficiaries of inefficient industry arrangements to hold out against reforms that will bring net benefits to the wider community; and treat equally persons in equal need.

## **Microeconomic reform and social justice**

While not a primary motivation, microeconomic reform can promote social justice. Reforms create employment opportunities in the medium to longer term; they do not reduce them. Keeping people and other resources in low productivity areas of the economy perpetuates low returns, low wages and low standards of living.

In this sense, there is no social justice in economic inefficiency. Economic inefficiencies often undermine social welfare objectives. It is ironic that heavily subsidised urban passenger rail services are defended on social welfare grounds even though the major beneficiaries are in households with higher incomes. At the same

time, hefty tariffs on cars, clothing and footwear have imposed a regressive burden on lower income earners. Many of these live on the urban fringes without public transport and are necessarily car-dependent for getting across town to work.

When looking at government production and provision of hearing aids and artificial limbs, the Commission found inefficiencies, high costs and prices, lengthy waiting periods for appointments and poor product choice and service quality. It was not surprising to find that many of those people entitled to a free hearing aid and unable to afford a commercial one did without altogether. In the provision of aids as in other areas, restricting competition effectively diminishes the incentive of suppliers to respond to the needs of the people they are meant to serve.

Microeconomic reform is not an end in itself but a means to achieving a more productive economy. That means a greater capacity to do more about social justice, to alleviate poverty and disadvantage through income transfer payments and welfare services and to pursue other community objectives.

## **Chapter 5**

### **Operations of the Commission**

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The Commission's aim is to achieve improvements in the well-being of Australians by providing information to the community and independent, public advice to Australian governments on ways to improve overall economic performance. [Industry Commission mission statement]

#### **Inquiry program**

Reflecting the Government's concern with microeconomic reform, the inquiry workload of the Commission increased markedly in 1990–91 compared with 1989–90. The higher level is likely to continue into 1991–92.

The Commission received 10 references and completed 9 reports in 1990–91 and at 30 June 1991 had 11 references on hand. Since then it has reported on the export of education services and the railways, and has received references on water resources and intrastate aviation.

Inquiries completed in 1990–91 addressed a number of major issues in microeconomic reform and industry policy, including:

- land access, environmental concerns, regulation and royalty and taxation arrangements in relation to the mining and minerals processing sector;
- corporatisation and privatisation of government business enterprises, and efficiency gains from increasing cooperation between the States, in relation to the energy generation and distribution sector;
- social and consumer welfare issues in relation to aids for people with disabilities;
- efficiency and equity considerations in relation to product liability;
- economic and environmental costs and benefits in recycling; and
- labour market and local content issues in relation to construction of major projects.

Inquiries under way at 30 June 1991 were:

- exports of education services;
- rail transport;
- the Australian dairy industry;
- costs and benefits of greenhouse gas emissions;
- the availability of capital;
- cost recovery for managing fisheries;
- exports of health services;
- the Australian sugar industry;
- a review of overseas export enhancement measures;

- raw material pricing for domestic use; and
- commercial restrictions on exporting (including franchising).

The Treasurer announced the details of the forward work program for the Commission in 1992 and 1993 with the 1991–92 budget. Forthcoming and recently commenced inquiries are detailed in appendix 14. They will require the Commission to report on matters relating to land use planning, water and sewerage, mail services, urban public transport, public housing, workers' compensation, and regional issues, as well as a range of industry-specific matters.

While unexpected references will continue to be handled, the annual announcement of a forward work program brings benefits in organising the Commission's resources. There are also benefits to inquiry participants in being able to plan their own participation.

The perspective of the Commission is broadened by public inquiry processes, the appointment of part-time Associate Commissioners to sit on particular inquiries (see appendix 12) and the secondment of staff from expert agencies. Consultants are engaged where it is necessary to supplement the available expertise for inquiry work. The Commission has also held workshops — for example, on assistance measurement in relation to the dairy industry — so the Commission's analysis could benefit from industry input.

Reflecting the breadth of the inquiry program, State, Territory and Local Governments and their agencies have been increasingly involved. The Commission welcomes their growing participation in its inquiries. The Commonwealth Government has developed the practice of consulting State and Territory Governments on the draft terms of reference of relevant inquiries.

The Commonwealth Government released the Commission's reports in 1990–91 well within the statutory 25 day parliamentary tabling requirement. Details of government decisions relating to Commission reports are in appendix 14.

## **General reporting and research**

The annual report is the major vehicle through which the Commission reports on the performance of the Australian economy and the conclusions drawn from its research program. The Commission also publishes information and other papers (appendix 12). Papers and speeches are prepared for conferences, workshops and seminars.

The Commission has continued an active research program in support of particular inquiries and its general reporting function. For example, an information paper on productivity growth and rates of return in certain Commonwealth Government business enterprises was released and a workshop on measuring the efficiency of GBEs was held at which Commission and State Government representatives and academics presented papers.

The July 1991 special Premiers' Conference announced that the Industry Commission, under the auspices of a Commonwealth–State steering committee, is to prepare a preliminary version of national performance indicators for 1990–91.

### **Assistance measurement and evaluation**

Following the Government's March 1991 Statement, the Commission published an information paper which examined the impact of the changes to assistance arrangements for manufacturing industries and their economy-wide effects (IC 1991g). The most recent estimates of assistance to agriculture, mining and manufacturing are in appendix 10.

Estimates of assistance are supplemented by information on developments in industry-specific arrangements, alternative assistance measures, budgetary assistance, and anti-dumping activity (appendixes 5, 6, 8 and 9 respectively). A number of recent industry policy reviews and decisions relating to industry are detailed in appendix 11. Not all these bring an economy-wide perspective and public inquiry processes to bear.

### **Modelling**

An important element of the Commission's analytical capacity is the ORANI model of the Australian economy. This model is used to project the effects of proposed changes to government assistance to and regulation of industry, and the effects on the wider economy of, for example, productivity gains in one sector. As well as its own enhancement of the ORANI framework, the Commission continued to support the development of ORANI by the IMPACT Project Research Centre at the University of Melbourne. The assistance of the University of Melbourne with the IMPACT Project since 1979 is gratefully acknowledged.

Further funding of the IMPACT Project was approved in the 1991–92 budget. Under a new agreement the Project is to be relocated to Monash University. The Commission will also provide support for the development of a new model at the Centre of Policy Studies, Monash University. This model is designed to capture the evolution of the economy over time and the effect of economic decisions on the environment.

With the sponsorship of the Department of Foreign Affairs and Trade, the Commission continued the development of a model to analyse the economic effects of alternative trade liberalisation scenarios. The SALTER world trade model is an adaptation of OECD work, extended to reflect Australia's pattern of trade.

The Commission also developed a global model, WEDGE, to capture the effects of policy instruments on greenhouse gas emissions (IC 1991j).

## **Office of Regulation Review**

The Office of Regulation Review (ORR) is a unit within the Commission and is responsible for:

- examining and advising the Government on proposed changes to regulation;
- preparing public information papers and submissions on overall developments in regulation and on particular aspects of regulation; and
- the business regulation request and response procedure.

The Commonwealth Government's policy is that regulatory intervention in the economy will be supported only when it is justifiable on grounds of efficiency and/or equity. To meet this test, a well defined social and/or economic problem must exist, other solutions must have been already considered (for example, private or non-regulatory methods), and the expected benefits of regulation must outweigh its costs. Efficiency in this respect refers to the overall impact on the community, not simply the costs of government administration.

Procedures have been established to ensure that information on the expected costs and benefits of regulatory proposals is made available to the Cabinet. The Minister for Science and Technology and Minister Assisting the Treasurer has responsibility for matters relating to the ORR.

During 1990–91 the ORR advised the Structural Adjustment Committee of Cabinet on all important new regulatory proposals on its agenda. These included product liability arrangements, the regulation of telecommunications and environmental matters. It advised the Commonwealth–State working group on the development of national arrangements for mutual recognition of regulation. It assisted the Department of Industry, Technology and Commerce in implementing the Government's decisions on the House of Representatives' report on small business in Australia (Beddall Report).

The ORR cooperated with State deregulation units in analysis of State regulation and developed proposals to provide information on Commonwealth regulatory requirements to State one-stop business licensing centres in NSW, Victoria and Queensland. It assisted the Western Australian Premier's Department to revamp its regulation review function.

During the year the ORR published a public discussion paper entitled 'Pay TV – Why Regulate' and made a number of submissions to Commonwealth bodies reviewing regulation.

## **Relations with other agencies**

The Commission continued to have contact with government departments and other economic research agencies, especially the Australian Bureau of Agricultural and Resource Economics, the Bureau of Industry Economics and the Bureau of Transport and Communication Economics. In a number of cases these agencies, and departments and agencies in the States and Territories, made submissions and provided data and

research support for inquiries. In addition, there were opportunities to consult on the complementarity of research agendas with other Commonwealth bodies.

In dealing with the key issue of promoting efficiency through competition, the Commission has addressed the role of competition policy and the Trade Practices Commission in a number of its reports. The Commission's views on regulation of natural monopoly, for example in the railways and electricity sectors, have benefited from submissions from the TPC. The Government foreshadowed in March 1991 the desirability of closer cooperation between the Commission and the TPC, and discussions are underway, including on the relationship between forward work programs.

### **Administrative matters**

Major administrative changes made in the past year include:

- performance appraisal was introduced for all staff of the Commission;
- budgets for individual inquiries were established;
- equal employment opportunity and industrial democracy plans were prepared (details are at pages 294–7 of appendix 12); and
- salary and training expenditure was devolved.

Appendix 12 provides further information on the administration of the Commission:

- summary financial information (page 292);
- structure (page 279);
- staffing (pages 281–3); and
- Commission appointments (pages 277–80).

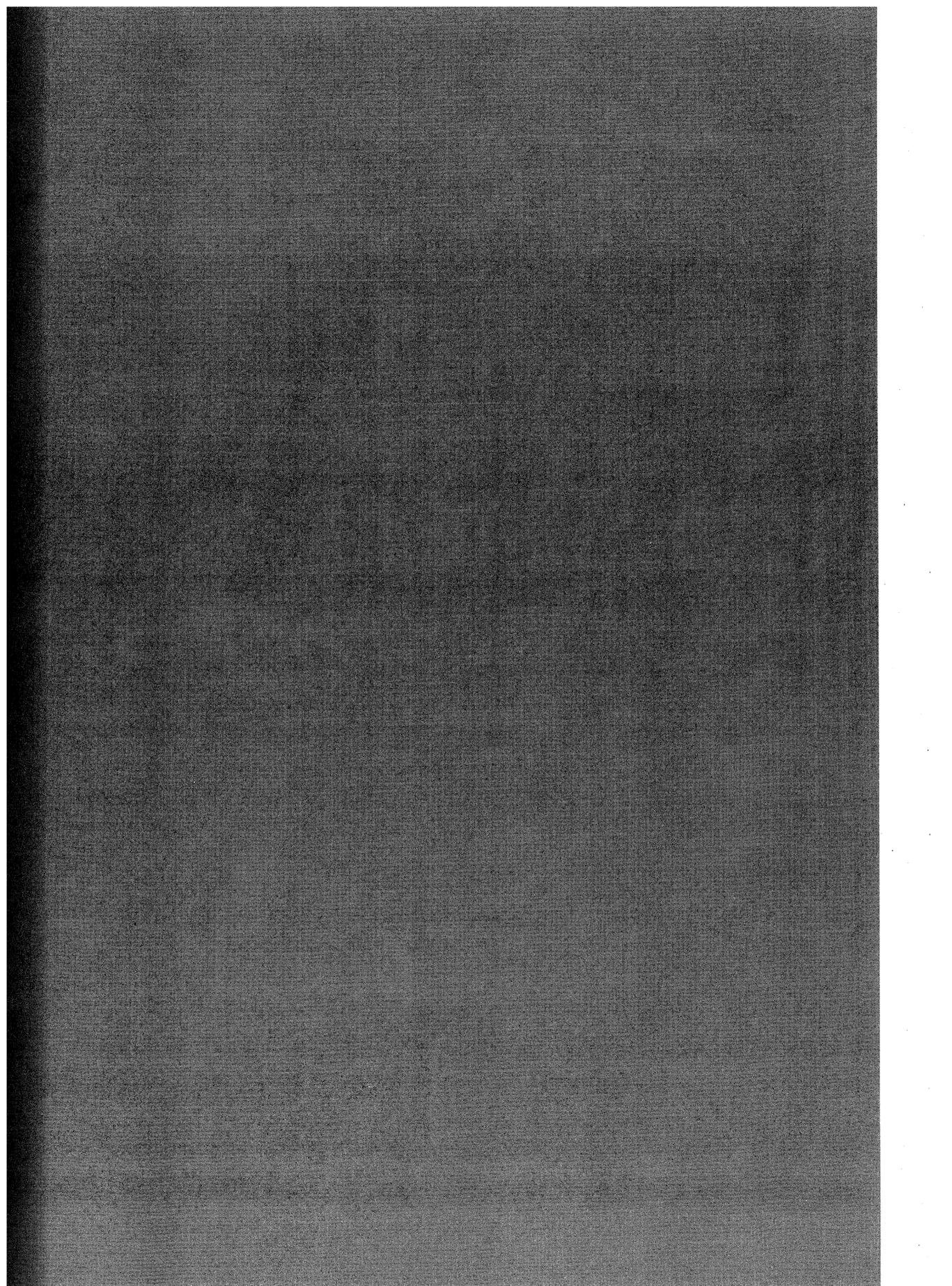
Appendix 14 provides information on the Commission's inquiry workload in 1990–91, its forward work program and the status of completed reports.

Mr D L McBride's term of appointment as a Commissioner expired on 30 June 1991. The Commission records its appreciation of the contribution he made during his 19 years with the Tariff Board, the Industries Assistance Commission and the Industry Commission.

The Commission also records its appreciation of the staff for their work during the year.



**Industry performance: review and issues**



## **Appendix 1**

### **Recent reforms in economic infrastructure**

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In Australia, economic infrastructure has been supplied almost totally by the public sector. The performance of government agencies supplying infrastructure services has come under greater scrutiny over the past decade. Dissatisfaction with performance has been brought into sharp focus by user industries requiring more efficient provision of infrastructure services in order to better compete on the world market, by households facing price increases and governments attempting to reduce budget expenditures. Increasing costs in supplying services, declining productivity and declining quality of service indicated the need for reform.

The degree of responsiveness of governments to the pressures for reform has been quite variable as have the nature of the reforms implemented to date. There have been a variety of reforms ranging from administrative changes, contracting out responsibility for supply of services to the private sector, reconstituting more such agencies as distinct government business enterprises and subjecting them to greater competition, and selling off enterprises.

This appendix details developments in the reform of infrastructure services during 1990–91 in the following areas:

- energy;
- rail;
- roads;
- aviation;
- the waterfront and coastal shipping; and
- telecommunications.

#### **Energy**

The electricity and gas supply industries are among Australia's largest. In 1986–87 their combined output of \$7 billion contributed around 2.5 per cent of GDP. Electricity and gas are vital inputs for many Australian industries, including key export industries. Both command significant resources and their efficient operation is vital to our standard of living and international competitiveness.

#### **Corporatisation**

Governments in a number of States have commenced implementation of programs intended to 'commercialise' or 'corporatise' publicly owned energy utilities. The programs are intended to improve operational efficiency and infrastructure investment decisions by providing improved incentives for efficient management and by creating a more neutral operating environment between public utilities and private enterprises.

In some States significant progress towards corporatisation has been achieved. However, not all programs encompass all of the measures needed to provide public energy utilities with an appropriate commercial focus, or the necessary independence to permit them to operate at arm's length from government. For example, none of the programs envisage the complete removal of all existing legislative barriers to entry. Some retain ministerial control over matters which would more appropriately be determined by utility management. New South Wales announced at the July 1991 special Premiers' Conference its intention to reform the management and operational structure of its electricity authority, the ECNSW, to allow for internal competition, national interconnection and ultimate privatisation.

### **Structural reform**

Although there is resistance by public energy utilities to structural reform, some changes have been foreshadowed. For example, New South Wales proposes to separate generating capacity into three geographically based centres and the Government announced that it intended creating a clear separation of generating and transmission functions within the State. In Victoria, separate business units have been established within the electricity authority covering production, the power grid and customer services.

### ***Private sector participation***

At present almost all electricity infrastructure associated with the supply of electricity for public sale is owned and operated by government bodies. The few exceptions — such as the Eraring power station in New South Wales and the transmission line from Darwin to Katherine — mainly reflect government decisions to exploit taxation and financial advantages available during the mid-1980s rather than any perceived efficiency benefits associated with private ownership. However, in recent times there has been greater recognition of the benefits of increasing private sector involvement in electricity supply, for example:

- In Western Australia, the Government has announced that the State's next major power station — a coal-fired plant at Collie — is to be privately built, owned and operated.
- In Victoria, the Government has decided to invite private participation in the partially completed Loy Yang B power station. While the Government sees the sale primarily as a means of dealing with current financial imperatives, the State Electricity Commission of Victoria considers that private ownership would bring with it lower operating costs and higher plant performance that would have flow-on potential for all of its plants.
- In New South Wales, negotiations are proceeding for the establishment of a small, privately owned generating plant at Gunnedah. Government owned coal mines supplying the State's power stations have been advertised for sale.

In most States, there is also growing recognition of the role that privately owned co-generation plant may be able to play in augmenting electricity authorities' supply and in permitting the deferral of investment in new infrastructure.

Private ownership of natural gas infrastructure is more prevalent. Major gas transmission in pipelines in Queensland and the Northern Territory, along with distribution utilities in New South Wales, Queensland and the ACT, are privately owned and operated. The South Australian Government recently reduced its holding in Sagasco Holdings Ltd (the parent company of the natural gas distribution utility in South Australia) from a little over 80 per cent to 58 per cent. On the other hand, the Commonwealth Government deferred its plans to sell the Moomba–Sydney gas pipeline following the refusal of the Senate to pass legislation to increase haulage tariffs.

### *Interstate trade*

Historically, States have largely chosen to ignore the possibility of acquiring electricity from lower cost sources in other States and have elected to own and operate the infrastructure required to enable them to be self-sufficient. The commissioning in 1990 of a new transmission line linking Victoria and South Australia now means that small capacity linkages exist between those two States and with New South Wales. Victoria recently announced a long-term contract to buy electricity from New South Wales.

A preliminary study of the feasibility of building an undersea cable linking Victoria and Tasmania suggests that it would yield net benefits. A similar study into the feasibility of interconnecting the Queensland and New South Wales system is also being undertaken.

Agreement was reached at the July 1991 special Premiers' Conference to establish a National Grid Management Council to:

- oversee the preparation of a draft protocol covering the planning, operation, development, monitoring and extension of the eastern and southern Australian grid;
- encourage open access to the grid for generators and consumers, public and private; and
- coordinate planning and encourage the competitive sourcing of generating capacity.

Queensland and Tasmania are yet to commit themselves to connect with the other States.

The development of infrastructure to facilitate interstate trade in natural gas has not proceeded to the same extent. Some government actions have prevented interstate transactions or made them uneconomic. For example:

- South Australian legislation limits any further supply of gas to New South Wales above existing contracts, unless specifically authorised by the Minister;
- the Victorian Government has a policy restricting the use of gas in electricity generation within the State to an additional 500 megawatts;
- sales of gas from Moomba to Sydney have been conditional on the ethane being removed before sale; and
- more recently, the Northern Territory Government has refused to permit South Australia to be supplied with gas from the Amadeus Basin in central Australia.

There is little doubt that such interventions have diminished the incentive for private involvement in the supply and operation of new natural gas infrastructure. Such controls appear to mirror the natural gas export control by the Commonwealth.

## **Rail**

Rail transport in Australia accounts for about 1 per cent of GDP and is responsible for around 1.5 per cent of annual capital investment. Rail transport services represent more than 10 per cent of costs in some industries. As well as playing a major role in the transport of bulk commodities — the mining sector being the major user of rail freight services — railways perform an important task in urban passenger transport, particularly to and from the metropolitan central business districts. Government rail authorities undertake around 30 per cent of total land transport (on a tonne-kilometre basis), while private railways perform a further 19 per cent.

Government involvement in the provision of rail services extends to fare setting, deficit funding, and regulations which restrain competition from road transport. The government owned rail systems continued to contract their non-core activity during 1990–91 with ongoing rationalisation of services, locomotive and rolling stock, land, workshops, terminals and stations. Total capital expenditure in nominal terms fell for the ninth consecutive year.

Major capital projects that continued in 1990–91 included:

- the State Rail Authority of New South Wales' \$2.6 billion program of infrastructure renewal, of which \$2 billion is for the Sydney suburban system;
- the completion of Queensland Railways' \$1.5 billion main line electrification project; and
- the capital investment on the Perth urban rail electrification project and new northern suburbs rail link.

## **Commercialisation**

Reforms are underway in NSW where management of the State Rail Authority (SRA) has been streamlined with the former fifteen level management and functional branch structure being replaced by six new business units with management responsible for fixed assets and rolling stock. Delineating managerial responsibility for commercial decisions from ministerial responsibility for social policy decisions has led to agreement between the SRA and the Government on the implementation of community service contracts. This agreement commenced in July 1991. Although at first community services will be defined only broadly, it is anticipated that with the development of the SRA's accounting systems, more information on costs by location and function would allow for more detailed contracts.

Possibilities for commercialisation of Queensland Government owned enterprises, including the Queensland Railways (QR), were canvassed in the Government's 1990 Green Paper. The paper proposed that community services be identified, negotiated, and explicitly funded and reported. In addition, a QR trust fund was established on

1 July 1990 to retain all receipts as a first step away from the traditional approach of using the consolidated revenue fund for operational expenses and the State Loan Fund for capital financing of the QR. An extensive organisational review of the QR was finalised in September 1990. In line with the recommendations of this review, the QR's organisational structure was altered with the formation of three core business units (coal and minerals, freight, and passengers) along with three head office service groups (financial services, corporate services, and human resources). Each is responsible and accountable for a specific business area. The Transport Infrastructure (Railways) Bill has been passed and is awaiting royal assent. This legislation will establish the Queensland Railways as a statutory authority under control of a commercial board.

The Victorian, Western Australian and Commonwealth Governments appear content with the arrangements which apply to their respective railways' corporate structures and no changes occurred in 1990–91. In Western Australia, rate of return reporting has been implemented for Westrail and annual performance agreements between Westrail, Transperth and the relevant ministers have been introduced. Thus far, community services have not been well defined with their cost being implicitly funded through consolidated revenue financing of the Westrail deficit.

### **Pricing reforms**

In addition to the effects of community services, substantial allocational distortions between all land transport sectors are likely to have occurred from government policies restricting carriage of some goods to particular transport modes, the subsidising and taxing of certain cargoes through rail freight rates and the absence of full cost recovery in road transport.

The July 1991 special Premiers' Conference established the mechanism to improve cost recovery for road transport.

### **Labour productivity**

Although total railway employment in Australia has declined from around 110 000 in 1980–81 to 75 000 in 1990–91, a drop of 32 per cent, further reductions in employment levels are anticipated with New South Wales, Queensland and Victoria all foreshadowing major cuts. The summation of rail authorities' various targets and other estimates suggests that current rail tasks could be performed with approximately 50 000 employees, about one third less than the current level.

The trend by all rail systems towards increased contracting out of traditional rail activities to private enterprise continued during 1990–91, although South Australia has a policy of not contracting out. These ranged from re-sleepering to the seeking of tenders for the construction and operation of the proposed city to Mascot Airport rail line in Sydney.

In-principle agreement for the recognition of skills and qualifications obtained interstate was attained at the July special Premiers' Conference.

## Structural reform

Railways have made considerable administrative reform in the freight business with promising developments in the interstate freight segment. Reforms in urban, country and interstate passenger services have been modest. In terms of financial performance, there has been little overall improvement in the past seven years, although reforms to date suggest some improvement in the years ahead. But the gains achieved seem too small in scope and too slow in coming relative to the substantial scope for gains from structural reform.

Potentially the most important reform in the (relatively small) intersystem arena is the establishment of the proposed National Rail Corporation. It is to incorporate all of the railways' interstate freight business, operate on a strictly commercial basis and aim to earn a rate of return sufficient to fund all investment from non-government sources. Performance will be enhanced by adoption of best international practice including a completely new labour award. The shareholders' agreement between the Commonwealth, NSW, Victoria and WA was signed at the July 1991 special Premiers' Conference and will come into effect during 1992.

## Report on rail transport

The Industry Commission recently completed an inquiry into rail transport and concluded that:

there is ample evidence that many railway services are inefficiently operated and inefficiently priced ... [These] inefficiencies give rise to substantial costs elsewhere in the economy, so that reform of the railways is an essential element of microeconomic reform (IC 1991*i*, p. xiii).

The Commission found that, although governments and railways are addressing many of their shortcomings — especially in work practices, overstaffing, obsolete capital equipment and inappropriate management structures — reforms were being pursued with varying commitment and, in the final analysis, may be insufficient in scope to address the magnitude of the problem. With this in mind, the Commission made recommendations designed to create an environment in which reform is encouraged and facilitated through adherence to principles including that:

- railways should be allowed to operate as commercial businesses with full control over their revenues and expenditures;
- railways should be free to concentrate on what they do best and to discontinue services which are not commercially viable;
- where governments wished to pursue social objectives through railways, these should be explicitly specified and funded under contract;
- competition between road and rail transport modes should be made fair and equitable; and
- there should be open access to the use of rail track and infrastructure for public or private operators on payment of an appropriate fee.

## **Roads**

Until recently, the road transport industry and road authorities have largely escaped the sweep of the microeconomic reform agenda. It has presented no obvious imperative by virtue of the fact that the industry receives no direct assistance and the costs of road provision are more than covered by the taxes and charges levied on most road users. In addition, the industry appears efficient in comparison to its main competitor, rail. But the efficiency of road transport is a major determinant in the competitiveness of other industries. Road is the predominant transport mode and accounts for nearly 2 per cent of production costs nationally.

Inefficiencies in road transport arise due to inconsistencies between State and Territory jurisdictions on operating standards and charges and through the absence of cost recovery for the heaviest vehicles. The former impose higher administrative and compliance costs on operators and results in lower productivity; the latter promotes inefficiencies in the allocation of transport services between different tasks and may distort locational decisions.

The July 1991 special Premiers' Conference sought to redress these sources of inefficiency through the adoption of a national scheme for heavy vehicle registration, regulation and charging.<sup>1</sup>

### **National Road Transport Commission**

The central feature of the scheme adopted by the special Premiers' Conference is the creation of a National Road Transport Commission (NRTC) responsible for the regulation of heavy vehicles under a uniform national regime and the development of a charging structure incorporating fully distributed costs. The NRTC will report to a Ministerial Council comprising relevant Federal, State and Territory Ministers with an observer representing local government.

The scheme initially applies to heavy vehicles (greater than 4.5 tonnes). Consideration as to the feasibility and desirability of including light vehicles in the system is programmed for the November 1991 special Premiers' Conference.

### ***Regulatory uniformity***

The first task for the NRTC is to coordinate the existing roles of the authorities in the eight participating jurisdictions with respect to ensuring uniformity in:

- heavy vehicle construction requirements (both new and in-service);
- heavy vehicle provisions of the traffic codes;
- roadworthiness and inspection standards;
- driver licensing standards and procedures;
- codes of practice covering heavy vehicles;

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<sup>1</sup> The Northern Territory, although agreeing with the scheme's aims and undertaking to mirror the non-charging elements of the scheme in its regulations, decided not to participate at this stage.

- enforcement levels and sanctions for breaches of regulations; and
- operator control regimes.

The new system is to allow for the operation of b-doubles and road trains, currently prohibited in some jurisdictions, under nationally uniform conditions but subject to certain limitations such as designated routes.

### ***Heavy vehicle charges***

The NRTC will also have the duty of implementing a charging structure for heavy vehicles, the role of which will be to recover fully distributed road costs in an efficient and equitable manner while adopting procedures which are as administratively simple as practicable. The charging system proposed to the July special Premiers' Conference comprised:

- a nominal administrative charge, set to cover the cost of administering the scheme;
- a road use charge, collected as a component of Commonwealth diesel excise; and
- a nominated mass charge applying to vehicles whose road costs are not adequately met through the road use charge.

Since the nominated mass charge entails the greatest administrative difficulties, it is to be applied in cases where its omission would result in an inequitable cost burden on other vehicles. A low incidence of nominated mass charging is to be achieved through strategic setting of the road use charge.

For the purpose of the nominated mass charge, there are to be two zones designated 'high cost' and 'low cost'. The former will comprise NSW, Victoria, Tasmania and the ACT and the latter Queensland, South Australia and Western Australia. Vehicles moving from the low to the high cost zone must pay any difference in the applicable nominated mass charge.

The nominated mass charge, while initially based on average distance for a vehicle class, will have provision for bona fide distance related rebates where appropriate. These rebates are distinct, however, from any concessions which are essentially payment for community services performed. Under the special Premiers' Conference guidelines these payments can, if required, be applied through transparent budgetary means.

### ***Timing of implementation***

The road use charge component in Commonwealth diesel excise is to be determined and recommended by the NRTC by March 1992 for implementation by 1 January 1993. The phasing in of full cost recovery is to take account of transitional costs to industry and regions and is to be completed by 1 July 1995 for all heavy vehicles except road trains. The magnitude of the increase in total charges for road trains has prompted their exclusion from up to 50 per cent of the nominated mass until 1 July 1995 moving towards complete cost recovery by 1 July 2000.

Initially, the NRTC will determine charges on the basis of the PAYGO methodology for determining road expenditure and apportion shares for cost recovery based on a procedure developed by the Inter-State Commission. Under the PAYGO method, the annual expenditure on roads is recovered from road users in any particular year. In practice, the NRTC is to use the indexed average of two years' actual expenditure and one year's budgeted expenditure, excluding self-financing roads, in calculating costs to be recovered.

Costs are distributed among road users by relating the physical characteristics of road use (for example distance travelled, total vehicle mass and axle loading) to the demand it creates for expenditure on roads — for the restoration of deterioration and the provision of additional capacity. Refinements to this methodology and the introduction of subsequently developed methodologies will be subject to future determination by the NRTC.

### ***Distribution of funding***

Although the PAYGO system ensures recovery of expenditure on the use of road infrastructure by the road transport industry, there remains the separate issue of the efficient distribution of the revenue raised between levels of government, commensurate with road usage patterns and expenditure responsibilities. Regard must be had in this respect to the goals of transparency and accountability in the system.

At the July special Premiers' Conference, it was agreed that the Commonwealth's responsibilities ought to be confined to 'national highways and other roads of national significance'. Precise delineation of the Commonwealth's responsibilities and the distribution of untied funds to the remaining tiers of government are to be settled at the November 1991 special Premiers' Conference. It was also recognised that improvements in the performance of road construction authorities is required for the efficient delivery of road infrastructure services.

## **Aviation**

In a large and isolated country like Australia, the efficient provision of air transport infrastructure attains great importance. The prevalence of economic regulation in the air industries over a long period, ostensibly to secure stability, has allowed the sector to stagnate, at considerable cost to the community.

### **Domestic aviation**

At the time of the 1987 decision to deregulate, the Government enunciated its objective as being to create an aviation environment which would foster:

- increased responsiveness by airlines to consumer needs;
- a wider range of fares and types of service to provide enhanced travel opportunities;

- increased competition and pricing flexibility leading to greater economic efficiency in the industry; and
- a continuation of Australia's world renowned aviation safety record (Haddad 1991).

On 1 November 1990, the Commonwealth Government ended its agreement with Ansett and Australian Airlines which effectively set fares, schedules and capacity and prohibited competitors in interstate aviation. A new entrant, Compass Airlines, began competing on trunk routes and has been able to capture a greater than 20 per cent market share on the routes which it services and 10 per cent overall.

Early indications are that deregulation is providing a dividend for the domestic traveller. The increased breadth and depth of discounting and the resultant decline in average fares has seen a significant rise in passenger numbers; revenue passenger kilometres are up some 18 per cent for 1991 (until September) on the same period in (the record year) 1988 (DTC 1991). Benefits for the business traveller — the traditional mainstay of airline profitability — have accrued in the form of greater choice and increased service.

Ansett and Australian Airlines have embarked on cost-cutting programs and have shed staff both in the lead-up to and since deregulation. This is in addition to the staff not replaced by the two airlines after the pilots' dispute of 1989.

### *The Civil Aviation Authority and the Federal Airports Corporation*

In May 1990, as part of aviation deregulatory measures, Parliament enacted legislation for the Civil Aviation Authority (CAA) and the Federal Airports Corporation (FAC) placing them:

on a more commercial footing, bringing them more into line with the disciplines traditionally associated with private sector enterprises (Brown 1990, p. 610).

Although already set up with a corporate structure and financial targets, the Acts remove from the bodies a range of detailed controls, previously exercised by government, over the terms and conditions of their borrowings, approval of individual contracts, the purchase of shares and the establishment of subsidiaries and partnerships. They also removed the bodies' pre-existing exemptions from income and sales taxes.

Both the CAA and the FAC are now required to recover, as far as possible, the costs of their operations from users of their services and are required to earn a set rate of return. Statutory charges levied by the bodies are subject to scrutiny by the Prices Surveillance Authority (PSA) and subsequent Ministerial veto 'to ensure that there is no perceived misuse [of the bodies'] monopoly position' (Brown 1990).

The CAA charges for services such as examination and licensing of personnel, machinery and facilities and, in addition, receives revenue from the Commonwealth for the fulfilment of community services in search and rescue and the development and monitoring of aviation safety standards. The FAC is responsible for 23 major

airports in Australia, derives its operating revenue from airport terminal and development services and undertakes no community services.

The CAA has embarked on a program of staff cuts — in the order of 50 per cent — to improve its operating efficiency.

### ***Anti-competitive behaviour***

Before deregulation, there was a general fear that in the new environment, the incumbent operators could use vestiges of their domination in the era of regulation to prevent the entry of new players and to compete unfairly. The Trade Practices Commission (TPC), which includes the air industry in its general oversight of the prevention of market dominance and anti-competitive practices, targets several areas for specific attention:

- access by new entrants to terminal space under the control of the pre-existing duopoly carriers;
- any traffic management arrangements at Kingsford Smith Airport with the potential to restrict competitive activity;
- the potential for anti-competitive use of computerised reservation systems (CRS);
- activities of the FAC concerning the granting of concessions at airports;
- the possibility of new entrants being absorbed by existing airlines; and
- the potential for predation by the existing airlines once new entrants are operating.

The TPC has signalled a proactive approach to problems in the industry in order to 'promote the emergence of a vigorous airline industry' (TPC 1990).

Terminal access disputes between either or both of the big two airlines and commuter airlines in Launceston and with Compass Airlines in Adelaide and Perth have been settled by the FAC without recourse to the sanctions of the Trade Practices Act although the TPC continues to monitor the situation. The FAC has shown a reluctance to invest in additional terminal capacity without proven demand, whereas new entrants are discouraged by inadequate facilities. The deregulation arrangements allow for new entrants to discuss with the FAC the provision of alternative facilities at its airports (DTC 1990).

The TPC is assessing the competitive situation of computerised reservation systems to ascertain whether the Act has been contravened. Ansett and Australian Airlines, joint owners of a system affiliated with the European 'Galileo' CRS, have withheld from their competitor, 'Fantasia' (operated by Qantas, and affiliated with the 'Sabre' CRS), real time information as to times and seat availability. A question is whether this biases travel agents towards the former system.

Despite issues of this kind, the Director of the Bureau of Transport and Communications Economics recently expressed the opinion that:

on the basis of what is publicly known ... none of these potential barriers have proved to be absolute barriers in practice, nor have they stifled competition or led to the demise of a market competitor (Haddad 1991, p. 25).

### ***Intrastate regulation***

All the States, except South Australia and Victoria, regulate aviation within their borders — although reduced regulation has recently been announced by NSW and WA, and the NT has announced an intention to deregulate. Governments variously license operators for routes, set fares and service conditions and limit entrants. The Commission is currently conducting an inquiry into intrastate aviation. The terms of reference require the Commission to report on institutional, regulatory or other arrangements, subject to influence by governments, which lead to inefficient resource use in the industry and advise on courses of action to reduce such inefficiencies.

### ***Sydney (Kingsford Smith) Airport***

As Australia's largest city, the hub of the most populous State and a popular international tourist destination in its own right, Sydney requires air infrastructure of a high capacity. Congestion at Sydney Airport has been argued to be a major impediment to efficiency improvements in some areas of Australian aviation. For example:

- the FAC argues that the deregulation of NSW intrastate aviation would be counter-productive at this stage as resulting increases in the number and frequency of flights, especially during peak periods, would exacerbate Sydney Airport's congestion (Snelling 1991); and
- a joint Australia New Zealand cost/benefit study into a single Australasian aviation market concluded that the net benefits of such an arrangement, although still positive, might be constrained in the short-run by excess demand for runway access at Sydney Airport (BTCE and Jarden Morgan 1990).

The Government has indicated its intention to expand the capacity of the facility by building a third runway, subject to an assessment of environmental impact, and to proceed with a new airport at Badgery's Creek, scheduled for completion in the medium term. In the mean time, peak-period surcharges combined with other scheduling and procedural initiatives are being used at Sydney Airport.

### **International aviation**

The international aviation sector in Australia remains regulated by virtue of Air Service Agreements (ASAs) and the restriction on the carriage of domestic passengers by international airlines.

### ***Air Service Agreements***

ASAs are bilateral agreements which regulate the provision of air services between countries. They limit the number of airlines flying between the two countries involved and the number of passengers each is allowed to carry. Typically, they guarantee a minimum share of entitlements to designated carriers of particular countries — in Australia, this means Qantas. While some concentrate on the benefits of these arrangements, they clearly also incur costs in terms of increased fares and decreased services and choice for international air travellers. The extent of the net costs was

documented in the Industries Assistance Commission report on travel and tourism (IAC 1989).

The Government has indicated a shift in its approach to the negotiation of ASAs by attempting:

to secure a better balance of overall benefits for Australia by placing greater emphasis on tourism and trade, while advancing Qantas' ability to compete in the international market (DTC 1990, p. 14).

### ***Single Australasian aviation market***

A study by an Australian and New Zealand Government joint working party simulated the outcome of various scenarios of trans-Tasman air transport deregulation. The study limited itself to the deregulation of the trans-Tasman market and the removal of Australian regulations prohibiting the carriage of passengers by Australian and New Zealand international carriers between Australian ports.

The study concluded that such an arrangement would result in significant welfare gains to Australia, New Zealand and some third countries:

consumers would benefit from reduced fares, improved service frequencies and greater choice of routes. Airlines would have new market opportunities, but some would lose profits due to increased competition. This could increase the pressure for the rationalisation of airlines or airline operations/capacity (BTCE and Jarden Morgan 1990, p. xi).

### **Airline ownership**

The Government is proceeding with the sale of 49 and 100 per cent respectively of its wholly owned carriers Qantas and Australian Airlines. Both airlines are seeking investment by foreign airlines offering not only capital but the prospect of congruence in marketing and route considerations.

The Government has removed the 'special case' status applying to airlines with respect to the permissible degree of foreign ownership. For the sale of Australian Airlines, foreign airlines will be limited to 25 per cent individual holdings and 40 per cent in aggregate. Other potential foreign investors will be subject only to Foreign Investment Review Board considerations and the market power provisions of the Trade Practices Act.

Guidelines for foreign investment in Qantas have been set in accordance with ASA provisions which effectively limit foreign ownership to 35 per cent (Goode 1991, p. 49). The Government has prohibited Qantas from taking a direct stake in Australian Airlines.

## **The waterfront and coastal shipping**

A three-year program to reform Australia's shipping and waterfront industries was announced by the Minister for Transport and Communications in June 1989. The program involves:

- consultation with the States to reform port authority operations;
- reforming stevedoring practices on the waterfront; and
- a recrewing package to raise productivity in coastal shipping.

In December 1989 the Government also established the Towage Industry Reform Implementation Committee to oversee the towage reform.

### **Ports**

Ports authorities are controlled by State and Territory Governments and play a crucial role in determining infrastructure development on the waterfront. Core port activities include: planning and provision of port facilities such as wharves, buildings and equipment; and the power to grant leases and licenses to stevedores and other port users. In 1989–90 port authorities had revenue of \$816 million and the five main capital city ports employed 4 700 people.

There are three basic administrative forms for ports: State Government departments; statutory authorities; and private ownership. In NSW all ports are controlled by a statutory authority, the Maritime Services Board (MSB). In Victoria, the Port of Melbourne Authority, Port of Geelong Authority and the Port of Portland Authority are the controlling bodies. In South Australia ports are the responsibility of the Department of Marine and Harbours. Private ports exist mainly for the loading of certain bulk commodities.

In its 1989 waterfront investigation the Inter-State Commission (ISC) highlighted a number of inefficiencies associated with the operation of ports and recommended several administrative and pricing reforms. The recommendations included: better specification of the functions allocated between State level agencies and port authorities; greater commercial autonomy for port authorities and freedom from day-to-day ministerial control; performance monitoring of port authorities; and consideration of shorter leases.

The ISC concluded that the port authorities should provide and maintain port infrastructure and regulate the provision of commercial services by private operators within the port. It indicated that actual provision of services to vessels or cargo should be carried out by the private sector as far as is practicable. The ISC made recommendations for the reform of pricing of port services, including reduced reliance on wharfage charges. The importance of pricing reform was also highlighted during the waterfront investigation by a special study undertaken for the ISC that found Australian port pricing practices to have had a greater inhibitory effect on competition than the waterfront unions' imposition of a standard price of labour on all employers (Joy 1989, p. 258).

As a result of the ISC recommendations for reform the Australian Transport Advisory Council (ATAC) decided that port reform would become a standing agenda item at ATAC meetings, requiring the States to report progress in this area. Performance indicators including price indicators are being developed, although no ATAC indicators have been released publicly. The July 1991 special Premiers' Conference sought a progress report from the Council for its November 1991 meeting.

Individual States have been active in port reform although the nature of reform has varied between States:

- In NSW the Maritime Port Charges Act came into force on 30 June 1990. It requires the MSB to charge users of its services in relation to the costs of the services provided. The Maritime Services Board has almost completely privatised coal handling operations. This has seen the work force reduced by half, reductions in some handling charges and an increase in productivity at privatised facilities (Hayes 1991).
- In Victoria the Melbourne, Geelong and Portland Ports have entered their second year of user-pays port pricing. The role of the Port of Melbourne Authority has been revised to that of a strategic port manager and trade facilitator and the Government has abolished the policy under which privately constructed assets reverted to public ownership at the expiry of a stevedore's lease. This will remove a barrier to private sector investment in ports.
- In Queensland port authorities are now required to prepare corporate plans and undergo performance monitoring. Port authority budgets and annual reports now identify community services.
- In South Australia the Department of Marine and Harbours has been further commercialised, with a new organisational structure and a work force reduction of 200. By 1992–93 the Department will be expected to earn a rate of return on assets of about 8 per cent.
- In Western Australia user-pays based port charges have been introduced at Fremantle and Bunbury. A major restructuring program is planned for the Port of Fremantle.

### **Stevedoring reforms**

The Commonwealth reform process concentrates on reforming labour inputs to the stevedoring industry. There are also issues associated with the structure of stevedoring that will influence the success of reform on the waterfront. This section discusses labour reforms and competition in stevedoring.

#### ***Labour reforms***

Stevedoring companies operate at ports and are engaged in loading and unloading vessels. In most cases they lease premises from port authorities. An in-principle agreement (IPA) was signed in September 1989 between the ACTU and the Association of Employers of Waterside Labour (AEWL) to reform labour

arrangements in the stevedoring industry. The Government endorsed the agreement in October 1989.

The main elements of this agreement are the introduction of enterprise based agreements and the reduction in the stevedoring labour force by 2 000 net (3 000 redundancies and recruitment of 1 000 young workers). The Commonwealth Government has provided \$154 million to fund on a dollar-for-dollar basis with industry an early retirement/redundancy package. The IPA also set out a timetable for change. The Waterfront Industry Reform Authority (WIRA) was established in 1989 for three years to oversee the reform program.

Enterprise based agreements (EBAs), negotiated between unions and employers, will dictate how work on the waterfront is carried out. The agreements are required to cover improved work organisation, work and management practices, rostering, manning and changes leading to improved flexibility, reliability and productivity.

The ISC estimated that the overall rationalisation of the work force would translate into at least a 30 per cent improvement in labour productivity.

### *Progress on labour reforms*

A new interim stevedoring award was ratified by the Australian Industrial Relations Commission 12 July 1990. It is intended to operate until a final award, which will operate in conjunction with EBAs, is negotiated. The transition from industry to enterprise employment is therefore occurring at two levels. WIRA, the ACTU, the AEWL, Port Waratah Stevedoring, the P&O Group, and the Waterside Workers' Federation are conducting national negotiations to determine industrial awards, job classifications, and career structures, with some involvement by the Commonwealth Government. EBA negotiations between individual employers and work forces are proceeding concurrently with negotiations at a national level.

As at 1 August WIRA had approved eight enterprise agreements, had given in-principle approval to a further three final drafts of agreements and was assessing another six draft agreements (Evans 1991). As at 30 June only NTAL's (National Terminals Australia Limited) EBA had been implemented.

WIRA reported that in August 1991, 683 employees had left the industry under the early retirement/redundancy arrangements in the IPA. These would have been nightwatchmen, who left when that classification was abolished, and others who left as a result of the implementation of the NTAL agreement.

A major success of the program has been changed practices for the loading of bulk grain. The Australian Wheat Board advised WIRA that the total savings to the grains industry resulting from waterfront reforms under the IPA could be in the order of \$10 million a year.

### ***Competition in stevedoring***

The structure of the stevedoring industry is an important issue because it can affect performance on the waterfront. Port authorities can influence the structure of stevedoring through the control they often exercise over infrastructure on the waterfront, and can influence the level of intra-port competition.

The Prices Surveillance Authority has examined some of these issues in its inquiry into charges by the stevedoring and container depot industries (PSA 1990b). The report focused on the appropriate role for the PSA in ensuring that stevedoring and container depot charges reflect efficiency gains resulting from the Commonwealth Government's reforms. This involved examining the level of competition in the stevedoring industry.

The stevedoring industry can be divided into:

- container terminal operations;
- conventional stevedoring operations; and
- bulk stevedoring operations.

Containerised cargo accounts for more than 70 per cent of non-bulk trade. Although some containers are handled by conventional stevedores, most are handled at container terminals which are capital intensive relative to conventional stevedores. The two largest ports, Sydney and Melbourne, handle 70 to 75 per cent of all containerised cargo.

The PSA concluded that, although the container sector was heavily concentrated and barriers to entry existed (sunk capital costs), there was significant competition in the industry to ensure some of the benefits from reform would be reflected in lower charges. There are cases of operators leaving the industry and others starting up.

In conventional stevedoring, labour costs represent 70 to 80 per cent of the total cost at common user berths and 50 per cent of costs at leased berths. Relatively little capital is therefore employed and, if common user berths exist, access to the industry is relatively easy.

Despite this, the PSA considered the industry is not competitive and the gains from reform may not be passed on to users. The PSA based its conclusion on the low number of operators in conventional stevedoring at most ports, the pricing practices adopted by stevedores, and the observation that costs had risen at a greater rate than the CPI. The PSA recommended regular monitoring of the industry rather than formal surveillance.

In the 1991–92 budget the Commonwealth announced its intention to sell a substantial part of ANL which encompasses both domestic and international shipping, and through a majority-owned subsidiary, stevedoring activities in major ports around Australia.

### **Waterfront performance**

In order to monitor the results of reform WIRA releases stevedoring and other waterfront performance indicators.

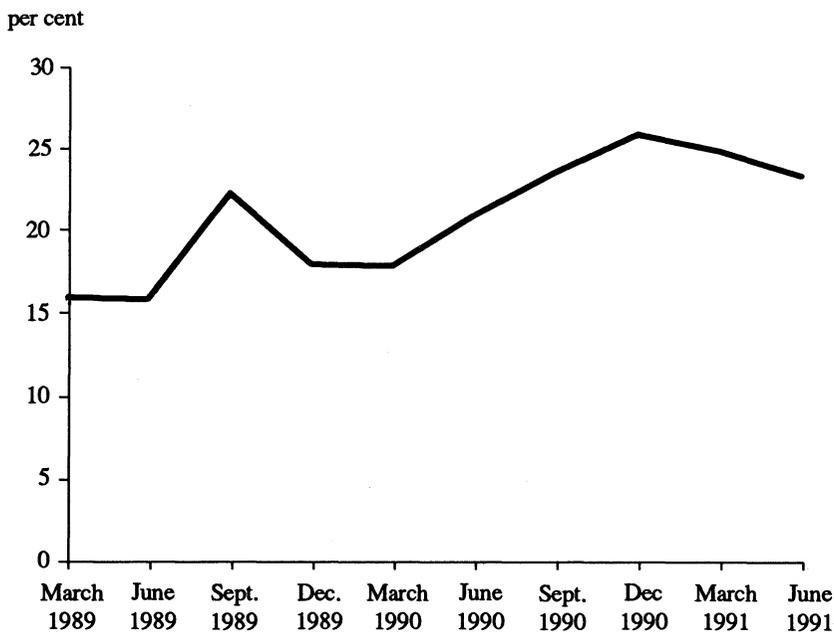
There has been an improvement in crane handling rates at container terminals in five major ports. Compared with the 1989 base year, handling rates per crane hour increased by 13 per cent for cellular ships, 17 per cent for other ships and 17 per cent for roll-on roll-off ships. Handling rates per person shift increased by 8.8 per cent.

The indicators for bulk grain show increased tonnages handled per man shift reflecting the WIRA endorsed agreement to reduce the labour required to load bulk grains. The indicators for bulk fertilisers reflect current stevedoring arrangements and have not as yet shown any significant improvements.

'Idle-time' is the time stevedoring employees are available (and paid) for work but are not required to work. It is expressed as a percentage of total available time.

Figure A1.1 shows the national idle time percentages from March 1989 to March 1991.

**Figure A1.1**  
**Idle time on the Australian waterfront: March 1989 to June 1991**



Source: WIRA(1991).

Idle time has increased from 16 to 23 per cent of total time available. The percentage fell marginally from 26 per cent in the December quarter to 23 per cent in the June quarter because 683 employees left the industry. The average hours worked per employee are also lower than at the beginning of the plan, although they rose to 30.5 hours in the June quarter from a low of 27.8 in the March 1991 quarter. The idle time increases and the decrease in hours worked have occurred because throughput has fallen but the waterfront labour force has not adjusted commensurately.

### **Coastal shipping**

The Government's reform strategy for coastal shipping aims to reduce average crew sizes on major trading ships from 29 in 1989 to 21 by July 1992. As with the waterfront reform strategy, the Commonwealth Government provided funds for early retirement/redundancy packages for seafarers leaving the industry. The shipping reform strategy retained the cabotage policy — whereby coastal shipping must be licensed and, whenever possible, coastal trade carried in Australian controlled and crewed ships — but increased the flexibility of the single and continuous voyage permit system. The Shipping Industry Reform Authority (SIRA) was established for three years to oversee and implement the Government's reform strategy. SIRA released its third six monthly report in December 1990 (SIRA 1990).

### ***Progress on reform***

Crew reductions are taking place in stages, progressing from the oldest to the newest ships in the Australian fleet. Vessels have been categorised according to whether they were operating at the time of various reviews of coastal shipping. The recrewing of ratings berths on pre-Crawford ships (in operation before the Crawford reforms of the early 1980s) was completed in March 1990. According to SIRA report the recrewing of ratings berths on Crawford ships to the levels recommended by the Maritime Industry Development Committee (MIDC) report of 1987 would commence in January 1991 and be completed by mid-1991. Fourth mate berths have been removed from dry cargo vessels. SIRA also anticipated that all electrician berths would be removed by the third quarter of 1991.

Four hundred ratings completed retraining as integrated ratings in the period 1 July 1989 to 31 December 1990.

Previous annual reports of the Commission have drawn attention to the higher crew-to-berth ratio on Australian ships compared with similar international vessels. The higher crew-to-berth ratios, have yet to be fully addressed in the reform process.

As part of the reform package the Government decided to facilitate the greater use of single voyage permits (SVPs) and continuous voyage permits (CVPs). As a result, the number of SVPs issued increased steadily. Sixteen SVPs were issued in 1987–88, 48 in 1988–89, 88 in 1989–90 and a total of 142 in 1990–91. In contrast only three applications for CVPs have been made since their reintroduction on 1 March 1990. Each of the three applications was withdrawn before a decision was made and, as a consequence, no CVPs have yet been issued.

## **Towage reform**

The Chairman of SIRA chairs the Towage Industry Reform Implementation Committee (TIRIC), which was established in December 1989 to implement the towage industry reform strategy.

The main elements of the strategy are:

- a reduction of staffing on harbour and outside tugboats;
- a review of port practices;
- training for tug crews; and
- early retirement/redundancy schemes.

### ***Progress on reform***

The first phase of the recrewing program — a maximum crew of five on harbour tugs — was completed in 1990. The second phase, to reduce crews to a maximum of four, will take place on a progressive port basis from July 1991. According to SIRA, six tugboats will not be recrewed to four owing to the nature of their operations.

### ***PSA report***

The PSA reported in August 1990 on whether reductions in harbour towage costs would flow through to the ships' operators as lower harbour towage charges (PSA 1990a).

The PSA argued that the supply of towage services is highly concentrated and substantial barriers to entry serve to protect existing operators from the threat of competition. It also considered that collusion exists between operators which manifests itself as an unwillingness to compete on price or enter each other's ports.

The PSA recommended performance-based tenders for towage services be introduced by port authorities. By implication the current licensing arrangements for towage operators may inhibit competition. The PSA 'declared' the six largest ports under the *Prices Surveillance Act 1983* which involves formal surveillance and 'would apply regulatory discipline to the pricing behaviour of towage operators'.

The PSA also noted that the Trade Practices Commission was to review the authorisations for agreements allowing cooperation between tug operators. The review resulted in the TPC revoking all authorisations.

## **Telecommunications**

The telecommunications industry is one of the largest in Australia. The services it provides constitute a significant input cost for most industries, particularly in the services sector.

The reforms announced in November 1990 by the Minister for Transport and Communications emphasising network competition follow on from the reforms introduced since May 1988.

### **The telecommunications carriers**

In the past, the three government owned carriers — Telecom, OTC and Aussat — were limited to prescribed markets. Legislation set up each carrier to complement, rather than compete with, the others.

#### ***Telecom***

Telecom was granted monopoly rights to provide and operate the domestic telecommunications network (excluding the satellite based network). This legislation has enabled the carrier to enjoy a privileged market position.

Telecom is by far the largest of the three carriers. In 1990 it accounted for approximately 85 per cent of total industry operating revenue, 91 per cent of total industry assets, and 97 per cent of total industry employment.

#### ***OTC***

OTC was given exclusive rights over the international telecommunications network. The carrier utilises terrestrial and Intelsat satellite technologies to provide international network services, but is prohibited from providing domestic infrastructure.<sup>2</sup> Instead, OTC pays Telecom for the carriage of international traffic over the domestic network.

OTC is the second largest of the three carriers. In 1990 it accounted for approximately 14 per cent of total industry operating revenue, 6 per cent of total industry assets and 3 per cent of total industry employment.

#### ***Aussat***

Legislation permitted Aussat to use only satellite technology in the provision of limited domestic and international network services.

Within Australia, Aussat was only allowed to provide satellite based network for broadcasting<sup>3</sup> and was prohibited from competing with Telecom in the provision of standard telephone services. The carrier was precluded from gaining access to

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2 Intelsat is an international satellite network owned by 114 telecommunications carriers. This is distinct from Australia's own satellite network which is owned and operated by Aussat.

3 Remote broadcasting is heavily subsidised by State and Commonwealth Governments.

international markets outside its prescribed satellite footprint and therefore provided only marginal competition to OTC.

In 1990, Aussat accounted for approximately 1 per cent of total industry operating revenue, 3 per cent of total industry assets and 0.4 per cent of total industry employment. It has traded at a significant loss since its incorporation, with the exception of 1989 when it recorded a small operating profit of \$3.2 million. In that same year the Commonwealth and Telecom, as shareholders in the company, contributed \$100 million in additional equity.

### **Recent reforms: 1988 to 1990**

Between May 1988 and November 1990 the corporate structures of the carriers were altered to better reflect their status as either a statutory corporation (Telecom), a commercial corporation (OTC), or a private company (Aussat).

These reforms affected carrier financial controls, price controls, community service requirements and also included the establishment of an independent regulatory authority.

#### ***Financial controls***

The emphasis shifted away from traditional detailed strategic and day-to-day controls toward a framework making carriers more accountable for their actions. Consequently, a number of financial controls on carriers were either removed or modified:

- the carriers became obliged to submit a detailed three yearly corporate plan to the portfolio minister;
- Loan Council borrowing controls were lessened;
- ministerial control over banking and investment arrangements was reduced; and
- the carriers became obliged to revalue assets every five years.

Telecom was recently made liable for the same taxes that its competitors and other businesses already face when competing for production factors and inputs. The carrier has been liable to pay sales tax and customs duty from May 1987, State payroll tax from July 1988, other State and Local Government charges from July 1989 and income tax from July 1990.

To facilitate greater accounting transparency, all three carriers were encouraged to separate their accounts according to basic network services, value added services and customer premises equipment.

#### ***Price controls***

Price cap controls were introduced by the Government on 1 July 1989 to encourage real productivity improvements and prevent financial targets from being met through price increases. They apply only to Telecom and OTC. The average price increase on basic network services is limited to a percentage below the rate of inflation, that is

(CPI-X). Any unused price increase can be carried forward from one year to the next. The X in the formula (CPI-X) has been set by the Minister for Transport and Communications at 4 per cent based on an estimate of 'available productivity gains' in the industry (Willis 1989).

A concession is extended to OTC to allow for international factors affecting that carrier's revenues. OTC can request Austel to alter the value of X in any one year in which there are adverse exchange rate movements.

### ***Community services***

Under the *Telecommunications Corporations Act 1989*, Telecom was the only carrier obliged to fulfil community services. The carrier was directed to ensure universal access to standard telephone services at an affordable price. Other community services provided by Telecom, although not set out formally in legislation, included the provision of public telephones, free charge on emergency calls, concessions to target groups like pensioners and continued access to untimed local calls. The BTCE (1989) estimated the total cost of Telecom's community services to be \$240 million in 1987-88.

Under Telecom's current pricing arrangements there is substantial cross-subsidisation between different users and services in order to fund community services internally. This means customers pay more than direct cost for some services to support other services provided at below direct cost. STD call revenue is used to subsidise customer network access and local call services in non-metropolitan areas. The total cross-subsidy to these services was reported by the BTCE to be \$670 million in 1986-87. Services such as directory assistance and public telephones are also provided at a loss and are internally subsidised (BTCE 1989).

### ***Independent regulatory authority***

The responsibility for managing the regulatory environment was transferred on 1 July 1989 from Telecom to the independent Australian Telecommunications Authority (Austel). Austel was established to specialise in regulatory arrangements, without directly participating in the market. It is required to report to the portfolio minister on carrier performance, market conduct and overall industry efficiency and is also expected to recommend on the appropriateness of existing regulatory arrangements.

Austel's functions were divided into five main areas:

- protecting the carrier's monopoly;
- protecting competitors from unfair carrier practices;
- protecting consumers from misuse of carrier's monopoly power;
- technical regulation; and
- promoting efficiency within the industry.

## **New directions in telecommunications**

In November 1990 the Government announced a series of reforms to be phased in over the six years to 1997 at which time the telecommunications market is to be opened to full competition. These reforms have been legislated under the *Telecommunications Act 1991* and the *Australian and Overseas Telecommunications Corporations Act 1991*. They include:

- a telecommunications duopoly;
- interconnection and access arrangements;
- ring-fencing of accounts;
- new pricing arrangements;
- an increased role for Austel;
- additional community service requirements; and
- resale of excess capacity.

The overall intention of these reforms is to promote increased network and service competition.

### ***Telecommunications duopoly***

The Australian and Overseas Telecommunications Corporation Act provides for the merger of Telecom (the domestic carrier) and OTC (the international carrier) to form a strong international competitor.

The merged Telecom–OTC will be renamed the Australian and Overseas Telecommunications Corporation and remain under public ownership. AOTC is to provide for the continued supply of community services. An interim board has been established, with representatives from both the Telecom and OTC boards, to develop a new corporate structure for the merged company.

In November 1990 the Minister for Transport and Communications announced that Aussat is to be sold before 31 December 1991 to form a 'vigorous commercial alternative' to AOTC (Beazley 1990, p. 2). The second carrier will have the right to provide any domestic or international telecommunications network facility or service. Current legislation preventing Aussat from using terrestrial technologies will be abolished so that the new entity will be able to compete with AOTC in providing both satellite and terrestrial based telecommunications services. The legislative restriction that Aussat operate only within its current satellite footprint will also be removed.

Due to a conflict of interest, Telecom's 25 per cent ownership stake in Aussat will be sold and its representatives on the Aussat Board removed. Whilst it is to be privately owned, Aussat's sale will be conditional upon majority Australian ownership. When selecting the second carrier licence holder — the purchaser of Aussat — the Government will consider:

- commitment to technology transfer;
- local research and development;

- local sourcing of equipment; and
- exports of locally developed products (Beazley 1990).

To prevent unnecessary duplication of network, the new entity will be permitted to interconnect to AOTC's network. The merger is set to commence once Austel, the regulatory authority, has certified that interconnection and access arrangements between the two carriers are fully in place. Until this is done, Telecom and OTC are to remain as separate entities.

Initially, only AOTC and the privatised Aussat will be granted a licence to provide domestic and international telecommunications facilities and services. They will also be granted licences to provide public mobile phone network services, with a third private licensee to participate some time in 1993. A review of the public mobile phone network will occur in 1995, and further licences may be issued at that time.

The telecommunications duopoly is expected to end on 30 June 1997 when the market will be opened to full competition.

### ***Access and interconnection***

The merged AOTC will have large advantages over the second carrier in terms of network size and capacity, control of the customer base and access to information.

To assist the second carrier to compete effectively, the *Telecommunications Act 1991* grants it access and interconnection rights to AOTC's network. Under new arrangements, AOTC will carry and complete calls on the competitor's behalf. The new entity will also be granted rights to access AOTC's various supplementary services which affect carrier control of customer base, for example, billing, operator, directory assistance and customer information services.

Interconnection and access charges for the second carrier are to be levied at directly attributable incremental cost and are to include allowances for the additional capital costs incurred by Telecom when providing interconnection as well as changes in the timing of capital expenditure. The new carrier will also be required to contribute towards the cost of AOTC's community services on a pro rata basis.

AOTC will be directed to share ducts and radio sites where practicable with the new entity where these sites are acquired through legislation rather than commercial endeavour. The Corporation will also be required to ensure the standard of interconnection, provision of capacity and access to supplementary services and facilities are non discriminatory and provided on the same terms as it provides its own services.

Interconnection and access charges are to be agreed between the two carriers or determined by Austel if disputed. Carriers are required to register all access agreements with Austel. These will then be made public. Austel has the power to refuse to register an access agreement if it is seen to conflict with the promotion of competition.

### ***Ring-fencing of accounts***

The Government will require AOTC to undertake stringent accounting separation (ring-fencing) of its various business activities. The aims of these arrangements are to prevent cross-subsidisation from parts of AOTC that do not face strong competition to parts that do and to ensure that each of the main parts of the overall business are specifically encouraged to improve performance.

The *Telecommunications Act 1991* introduces several mechanisms to encourage the ring-fencing of accounts. These include the following requirements:

- AOTC and the second carrier cooperate with Austel to determine an appropriate chart of accounting procedures and cost allocation manual;
- AOTC and the second carrier quote separate charges for individual services and identify them separately to customers; and
- AOTC undertake detailed and transparent accounting separation of all services, and ensure its accounts conform with an appropriate accounting procedure chart and cost allocation manual.

The second carrier is not required to practice full account separation until the third mobile phone operator is introduced in 1993.

### ***New pricing arrangements***

AOTC will remain subject to price cap arrangements to ensure customers appropriate any benefits arising from increased competition and to safeguard the Government's (and consumers') long-term interest in maintaining a competitive environment. Future values of X in the price control formula (CPI-X) will be determined by Austel before 1 July 1992, but it is likely X will be increased to reflect any efficiency gains (Willis 1989).

Under new arrangements AOTC will be required to charge for services on a uniform basis except where price differences reflect demonstrated cost differences. These prices must be available to all parties on a long-term basis. Both carriers will be prohibited from introducing timed local call charging policies.

AOTC and the second carrier must both submit to Austel a written schedule of their charges for basic network services.

### ***Increased role of Austel***

In addition to its existing functions Austel will be given new powers to promote competition within the regulatory framework. These include:

- issuing carrier licences to provide network services;
- intervening in the event of a charging or interconnection dispute between the carriers;
- controlling the separation of accounts to encourage charging transparency; and
- auditing net costs and timed traffic data provided by carriers and making public such data as well as the method of assessment.

### **Community services**

The *Telecommunications Act 1991* accords a more formal and explicit legislative basis to current community service arrangements. The provision that a standard telephone service should be universally accessible to everyone in Australia at a reasonable price remains. In addition, carriers are now obliged to:

- ensure pay-phones are accessible to all people in Australia;
- supply, install and maintain all pay-phones in Australia; and
- continue to offer untimed local calls.

These community services are compulsory and listed as terms of the carrier licence. Telecom-OTC will be the sole provider of community services, however, the losses resulting from supplying such services are to be shared between all carriers on an equitable basis.

A community service trust fund is to be used to balance the community service cost burden between all carriers. AOTC is eligible to apply to Austel for a community service fund credit if the avoidable costs of fulfilling community services<sup>4</sup> exceed revenue forgone so that net costs are positive. Since it is not obliged to perform community services, the second carrier will always incur a levy debit. Its liability will be calculated on a *pro rata* basis according to interconnection time.

The fund is also to be used to refund any levy overpayments and to reimburse the Commonwealth for costs incurred by Austel in administering the *Telecommunications (Universal Service Levy) Act 1991*. Provision is made under the Act to ensure total carrier plus Austel reimbursements do not exceed total fund deposits.

There is to be no Commonwealth funding of community services. The carriers are expected to bear the full cost of these loss-making services themselves. Consequently, cross-subsidisation will continue as carriers charge prices in excess of direct cost for some commercially viable services to cover their share of community service costs.

### **Resale of capacity**

In November 1990 the Minister for Transport and Communications announced a proposal for full third party resale of capacity, so that the customers could become competitors to the telecommunications carrier. A corporation may lease equipment from a public carrier for an exclusive-use telecommunications network. When the corporation finds it has excess network capacity it may seek to on-sell this to other users. Under current arrangements, the resale of capacity is prohibited.

Resale encourages better utilisation of network capacity. A greater variety of service providers would be allowed to compete to increase customer choice and promote technological innovation. It is expected that any disadvantages, such as loss of traffic due to by-pass, will be offset by overall traffic growth and better network utilisation.

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4 That is, the amount by which total operating costs incurred by the carrier during the financial year exceed what could reasonably be expected if the carrier had not supplied community services, with allowances for the opportunity cost of capital and depreciation.

Resale of capacity will be permitted, subject to several conditions:

- Quality and safety standards must be maintained.
- Carriers will be precluded from discriminating between private network providers and resellers when providing, maintaining, interconnecting or charging.
- International resale to or by other countries will only be permitted if equivalent access is available and capacity is adequate. And even then, foreign service providers would have to acquire the Australian segment of their international circuits from an Australian licensed carrier.
- An International Code of Practice is to be drawn up by Austel to deal with possible misuses of market power by foreign carriers.

## **Appendix 2**

### **Progress on microeconomic reform**

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This appendix presents a list of reform achievements over the last year. It relies on information supplied to the Commission by State and Territory Governments on their progress with microeconomic reform. Detail on Commonwealth reforms was compiled by the Commission. The list is intended to create a broad picture of the scope and depth of new reform rather than provide a compendium of all State, Territory and Commonwealth achievements. As such it records current microeconomic reforms rather than providing a full measure of net progress in each jurisdiction.

This is the second year the Commission has presented this information. The scope of material presented has been extended to cover developments in environmental management and labour market reform. In addition, the States and Territories have provided an indication of the significance of each reform. Reforms have been included which have not been fully implemented, but in these cases evidence has been sought that the implementation process is well in train. On this basis, some important reforms recently announced have not been included in this year's summary. For instance, in the energy sector, corporatisation and privatisation initiatives in Victoria, New South Wales and Western Australia are not included in the survey, although details on these initiatives are contained in appendix 1.

Many of the messages of last year are reinforced by this year's survey:

- All jurisdictions have made progress in implementing reforms while some are significantly more advanced than others.
- Substantial progress has been made in industry-specific reforms through deregulation and reductions in assistance to manufacturing and agricultural industries. The Commonwealth has been the focus of this effort, with contributions from some State Governments, for example, the removal of price fixing controls on wine grapes and some citrus industries in Victoria and in the introduction of transferable water rights in Queensland.
- The services sector has been an area identified for reform by all governments. The transport industry has been at the centre of reform efforts in the Commonwealth and most States. For instance, New South Wales has introduced contracts for non-commercial objectives in the State Transit Authority and Tasmania has opened some bus routes to competition. Most States have also undertaken regulatory reform in different industries in the services sector.
- Reform of environmental regulation has concentrated on administrative reform to reduce compliance costs. For example, Victoria and Western Australia are streamlining the procedures of their Environmental Protection Authorities and South Australia has introduced pastoral land management legislation.

- Labour market reform has been directed at increasing flexibility at the enterprise level (for example, enterprise agreements on the waterfront) and at increasing access to training.
- Increasing the performance of government business enterprises (GBEs) remains a primary focus for reform and the effort has intensified over the last 12 months. There is an emerging consensus that GBEs should operate on a similar commercial basis to other enterprises and administrative reforms are being implemented to achieve this. Some States are just beginning to implement such reforms while others are well advanced. Generally there has been little exposure of GBEs to competition. The exception is NSW where the GIO's monopoly on third party insurance has been removed, the Maritime Services Board has privatised most coal handling operations, and the Electricity Commission's coal mines have been advertised for sale.

Reforms have been categorised into the following sections:

- industry-specific reforms;
- general reforms;
- environmental management;
- labour market reforms; and
- government business enterprise reform.

## Part A: Industry-specific reforms

<i>Sector</i>	<i>Jurisdiction</i>	<i>Date introduced</i>	<i>Nature of reform</i>	<i>Significance</i>
<b><i>Manufacturing</i></b>				
General manufacturing	C'wealth	March 1991	General level of assistance will be reduced from 10 and 15 per cent in 1992 to a general rate of 5 per cent by 1996.	Average nominal rate of assistance will fall to 3 per cent in 2000. The IC estimates that more efficient use of resources resulting from cuts in manufacturing and agricultural protection will increase GDP by \$1.5 b each year in 1988-89 prices.
Passenger motor vehicles	C'wealth	March 1991	Tariffs on PMV will be phased down from 35 per cent in 1992 in annual steps of 2.5 percentage points to 15 per cent in the year 2000.	See above.
TCF	C'wealth	March 1991	Tariff reduction on TCF accelerated so that maximum tariff will be 25 per cent by year 2000 and termination of quotas will be brought forward 2 years to March 1993.	See above.
Harmonising manufacturing regulations	WA	mid-1990	Harmonising regulations relating to general manufacturing (Agreement on Standard Quality and Accreditation).	Removes inconsistencies in standards, allowing greater market access and reduction of costs for WA products.
<b><i>Primary industry</i></b>				
General agriculture	C'wealth	March 1991	Reduce assistance in line with manufacturing.	As for manufacturing above.
Wool industry	C'wealth	1990	Abolition of the reserve price scheme for wool.	Major significance: increases the responsiveness of wool industry to market signals.
Dried vine fruits	C'wealth	January 1991	Removal of price equalisation scheme to dried vine fruits industry.	Increases responsiveness of DVF industry to price signals.

<i>Sector</i>	<i>Jurisdiction</i>	<i>Date introduced</i>	<i>Nature of reform</i>	<i>Significance</i>
Irrigation	Qld	February 1990	Introduction of temporary transfer of water rights.	Greater flexibility in water use.
	Qld	1989-91	Sale of new or additional water rights in some areas. Introduction of permanent transfer of water allocations purchased at auction or 'off-the-shelf'.	Market for water entitlement enables water allocations and other resources to move to higher value uses; removes the previous rigid tie between land and water rights.
Pastoral industry	NT	1990-91	Removal of subsidy to pastoral industry for water drilling.	Saving to Government of approximately \$0.5 m a year.
Grapes/Citrus	Vic	September 1990	Removal of price fixing powers of the Wine Grape Negotiation Commission. Murray Valley Citrus Marketing Board formed as amalgamation of the NSW and Vic bodies.	Facilitates direct negotiations between growers and wineries. Removal of some citrus industry price fixing controls.
Bore Scheme	NT	1990-91	Phasing out of the Dud Bore Scheme which reimbursed the private sector for certain bore drilling expenses.	Saving the Government approximately \$330 000 a year.
Grain	NT	1990-91	Reduced financial assistance to the grain industry and further review of industry assistance for marketing and production.	Minor significance, but part of a larger program to focus and reduce the amount of government assistance to industry.
Fisheries	Tas	1991	Overhaul of abalone licensing arrangements including transfer and property rights.	
Pearling	C'wealth/WA		Implemented New Pearling Act (a joint State-Commonwealth initiative).	Freeing up of transferability arrangements for pearl oyster quotas within the industry.

<i>Sector</i>	<i>Jurisdiction</i>	<i>Date introduced</i>	<i>Nature of reform</i>	<i>Significance</i>
Mining	Qld	1990	Introduced Mineral Development Licence.	Provision of a bridging tenure between mineral exploration and development to allow feasibility studies, planning, etc.
	Qld	February 1990	Established an offshore minerals exploration regime.	Removed administrative barrier to minerals exploration.
	NSW	August 1990	Converted all prospecting licenses to exploration licences to speed up approvals procedure.	Backlog of 788 offers cleared in 12 months compared to 50 per year previously.
	C'wealth	1991	Introduced a resource rent tax for Bass Strait petroleum.	A significantly more efficient royalty regime.
<b>Services</b>				
Aviation	C'wealth	October 1990	Abolished two airlines policy.	Ended restriction on real competition between domestic airlines. Fare discounting boosted travel.
	C'wealth	1990	Decision taken to sell 49 per cent of Qantas and 100 per cent of Australian Airlines, Qantas to pay dividend to government.	Ensures airlines compete on a commercial basis. Exposes airlines to share market scrutiny.
	NT	1 November 1990	Deregulation of intra-territory sectors of domestic airline services.	Improved service efficiency.
	NT	18 April 1991	Deregulation of NT regional air service network.	As above.
	WA	1 March 1991	Deregulation of intrastate air services.	Potential for increased competition and better client services on intrastate air routes.

<i>Sector</i>	<i>Jurisdiction</i>	<i>Date introduced</i>	<i>Nature of reform</i>	<i>Significance</i>
Transport	NSW	14 July 1990	Reform of private bus, ferry, taxi, hire car industries. Changes include: <ul style="list-style-type: none"> <li>• introduction of short-term taxi licences;</li> <li>• elimination of unnecessary regulation and reporting;</li> <li>• placing of private bus operators on performance based contracts;</li> <li>• competitive tendering for new or forfeited route franchises.</li> </ul>	Allows taxi availability to respond efficiently to changes in demand. 30 per cent reduction in Dept of Transport staff numbers. Higher service levels without increased funding; elimination of inefficient operators. Increased competition.
	WA	Oct 1990 June 1991	Fertiliser transport deregulated (October 1990); timber transport regulations revised to allow greater access to road transport (June 1991).	Annual savings estimated at \$2.3 m; savings for timber industry.
Road transport	Vic	November 1990	Introduction of trial of b-double permits and identification of truck routes.	Savings in transport costs and reduced damage to roads.
	SA	1990	Taxi and hire vehicle industry partially deregulated. Changes include phasing-in of open entry into hire vehicle industry with immediate unlimited access for specific purpose hire vehicles.	Significant changes to taxi and hire car regulations have removed onerous and excessive regulations. These changes should produce a more competitive industry with lower costs.
	NT	July 1990	Tourist vehicle category established.	Benefits from separate licensing arrangement for safari/tourist type operations.
	NT	July–August 1990	Authorisation of private motor vehicle dealers to register new vehicles as an agent of the Registrar of Motor Vehicles.	Enable more efficient utilisation of staff and reduces time and cost to register new motor vehicles.

<i>Sector</i>	<i>Jurisdiction</i>	<i>Date introduced</i>	<i>Nature of reform</i>	<i>Significance</i>
	NT	July 1991	Waiving of requirement for roadworthy inspection of new vehicles in the first 3 years of their life in recognition that the new vehicles are usually still under new car warranty for this period.	Saving to consumers.
Rail	NT	June 1991	Restrictions on number of private hire cars removed.	
	C'wealth	October 1990	Decision by States and Commonwealth to establish National Rail Corporation. It is to incorporate all of the railways' interstate rail freight business and operate on a fully commercial basis. Implementation 1991.	Overcomes inefficiencies in carrying freight across rail systems of 5 states.
Trading hours	WA	August 1991	Retail and petrol station trading hours liberalised.	Removes unnecessary restrictions on trade, promoting competition between traders and increasing convenience for consumers.
Food	Tas	1991	Repeal of Acts governing trading hours for service stations and extended shopping hours legislation introduced.	Trading hours deregulated.
	Joint	1991	National Food Authority established. States have agreed to adopt national standards without modification.	Reduces barriers to innovation and reduces compliance costs.
	NSW	July 1990	Abolition of 7 Local Government licences for retail food outlets and replacement with new regime of inspections.	More efficient mechanism for maintaining the health standards of food premises.
	NSW	January 1990	Abolition of Bread Manufacturers' Licence and Operative Bakers' Certificate in NSW approved.	Rationalisation of business and occupational licensing. Reduces barriers to entry.
	WA	1990	Repeal of Margarine Act.	Part of movement towards national standards.

<i>Sector</i>	<i>Jurisdiction</i>	<i>Date introduced</i>	<i>Nature of reform</i>	<i>Significance</i>
Building	NSW	21 March 1990	Introduced simplified and centralised licensing system for the residential building industry, plumbing draining, gasfitting, and electrical industries in NSW.	Reduces administration and compliance costs.
Liquor and accommodation	Tas	1990	Revision of licensing arrangements, including substantially deregulated trading hours, off-licence sales, and accommodation licensing.	
Auctioneer and estate agents	Tas		Amendments introduced deregulating fee scales and modernising controls.	
Health regulation	Vic	June 1990	Implemented uniform national scheduling of drugs, poisons and controlled substances in Victoria.	Reduced interstate variation in standards.
Foreign actors	C'wealth	7 June 1991	Migration regulations for foreign actors participating in Australian films changed.	Slightly increases flexibility in using foreign actors in Australian films.

## Part B: General reforms

<i>Sector</i>	<i>Jurisdiction</i>	<i>Date introduced</i>	<i>Nature of reform</i>	<i>Significance</i>
Wholesale sales tax	C'wealth	March 1991	Widened wholesale sales tax exemption to industry.	Reduce administration and compliance costs and reduce direct costs faced by firms.
Depreciation	C'wealth	March 1991	Reform of depreciation provisions of the Taxation Act to ensure that 'effective life' for tax purposes accurately reflects the actual period an asset can be expected to contribute to the income earning process.	Increase neutrality of depreciation provisions; reduce accounting burden on firms.
Occupational health and safety	ACT	continuing	Efforts continuing to implement a uniform and consistent approach to occupational health and safety issues which are compatible with standards agreed by the National Safety Commission.	Reduce costs to employers and improve productivity and employee well-being.
Asset transfer	NSW	January-March 1990	Transfer of sub-transmission assets from ECNSW to the four metropolitan councils.	Electricity distributors can maintain the transmission assets more efficiently than the ECNSW.
Taxation reform	NSW	1 October 1990	Abolition of cheque duty.	Reduce banking costs.
Regulatory review	NSW		The <i>Subordinate Legislation Act (1989)</i> provides for the preparation of a regulatory impact statement and public consultation before making a new regulation and provides for a staged review of existing regulation.	A mechanism to remove rules and regulations which are unnecessary and to provide for more appropriate and less costly regulation in the future.
Government guarantee fees	NSW	Ongoing 1990-91	Annual review of ratings-based government guarantee fees for commercial authorities introduced.	Encourage more efficient debt management policies by ensuring that GBEs face market interest rates.
Local government	Vic	1990-91	Introduction of resource sharing to deal with financial pressures and community expectations experienced by Local Government.	Provide more efficient and effective means of delivering services to communities.

<i>Sector</i>	<i>Jurisdiction</i>	<i>Date introduced</i>	<i>Nature of reform</i>	<i>Significance</i>
	Vic	1989–1992	Development of State-wide municipal standards and indicators.	Assists assessment of council efficiency.
	WA		Rewriting Local Government Act to increase councils' autonomy in decision making.	Facilitates formation of regional councils to undertake joint or major initiatives; encourages forward planning and deregulation of local government labour market to improve competition.
	SA	October 1990	Changed administrative arrangements between State and Local Governments.	Reduce level of State oversight and resourcing; increase local government independence; and improve relationship between State and Local Government.
Interstate tax harmonisation	Vic	January 1992	Common payroll tax rate and threshold with NSW takes effect.	Important step to simplify tax compliance for businesses.
Consumer protection	Joint	July 1990	Committee of Consumer Affairs Ministers agreement to abolish standard packaging legislation.	Removes artificial restrictions on packaging and promotes access to interstate and overseas markets.
	Tas	1990	Relevant parts of the Commonwealth Trade Practices Act dealing with misleading or deceptive conduct in the sale of goods and services introduced into State law.	
	ACT	1991	The development of legislation to mirror Commonwealth Trade Practices Act provisions to promote fair trading between consumers and traders.	Fewer disputes and more efficient use of resources expected.

<i>Sector</i>	<i>Jurisdiction</i>	<i>Date introduced</i>	<i>Nature of reform</i>	<i>Significance</i>
Urban planning	Vic	1990-91	Introduction of Victorian Code for Residential Development and dual occupancy provisions to promote urban consolidation.	Reduce cost of physical and social infrastructure provision. Lower transport costs. Reduced environmental impact.
	ACT	continuing	Joint venture arrangements for house and land packages as well as private sector land development packages designed to have a moderating influence on price and reduce time taken for land development.	Five joint ventures involving 1100 dwellings where government provides the land, the private sector develops the land and the profit is shared.
Project evaluation	SA	1990	The Government endorsed guidelines for the evaluation of capital projects.	Use of economic evaluation techniques emphasised to assist in making decisions about the viability of major projects.
Business Licence Centre	Tas		One-stop for business licences at Tasmanian Development Authority.	Savings in administrative and compliance costs.
Public sector	NT	1991	Public service reforms.	Enable more efficient use of employees and allow greater private sector participation.

## Part C: Environmental management

<i>Sector</i>	<i>Jurisdiction</i>	<i>Date introduced</i>	<i>Nature of reform</i>	<i>Significance</i>
Pollution licences	NSW	Ongoing 1990-91	Licence review of large firms by State Pollution Control Commission. Twenty firms have entered into pollution reduction programs in return for relaxed licence conditions.	New licensing regime aims to set attainable pollution standards, whilst attempting to introduce uniformity in the licensing system. New system imposes a greater cost on polluters to provide incentive for reduced pollution.
Environmental legislation	C'wealth	12 March 1991	Expenditures incurred in undertaking an environmental impact study eligible as tax deduction.	Will remove bias in the tax system against projects requiring such studies and against appropriate environmental assessment processes.
	Qld	April 1991	New environmental legislation combining several administrative steps into one.	Savings in processing times expected to be considerable.
	Vic	1990-91	Rationalisation of the Environment Protection Authority Regulations.	More targeted controls.
	WA	June 1991	Changes in Environment Protection Authority's environmental impact processing role.	Reduced time taken for processing development proposals without compromising environmental considerations.
Mining	Qld	June 1991	New environmental policy for mining based on financial incentives for good performance incorporating a phase-in period for existing mines.	Reduce large backlog of rehabilitation and improve future environmental management.
Pastoral land management	SA	March 1990	Pastoral Land Management Act established a system of annual rent on pastoral leases based on stock numbers and the stock carrying capacity of the land.	More efficient use of pastoral land in accordance with the principles of sustainable development (sustaining long term yields while maintaining renewable resources).

<i>Sector</i>	<i>Jurisdiction</i>	<i>Date introduced</i>	<i>Nature of reform</i>	<i>Significance</i>
Water resources	NT	1990-91	Introduction of New Water Resource Legislation.	Facilitates increased community involvement in resource management. Enables more consistent approach to environmental protection.
Pulp wood industry	Tas		Performance guidelines and approval processes for the construction of a major pulp mill were decided.	Facilitates future pulp mill development.
Recreational fishing	WA	1991	Adoption of Recreational Fishing Management Strategy	Provides basis for managing recreational fishing, establishment of a mechanism to improve resource utilisation between commercial and recreational fishing sectors.

## Part D: Labour market reforms

<i>Sector</i>	<i>Jurisdiction</i>	<i>Date introduced</i>	<i>Nature of reform</i>	<i>Significance</i>
Waterfront	C'wealth	1990-91	Introduction of some enterprise based agreements in stevedoring under the auspices of Commonwealth reform program.	Introduce flexibility in working arrangements; allow removal of 683 excess workers from the industry.
	C'wealth	1990-91	Work practices at grain loading terminals overhauled.	Australian Wheat Board estimates savings at \$10 m annually.
Industrial relations	NSW	January 1991	<i>Industrial Arbitration (Enterprise Agreements) Amendment Act 1991</i> . Legislation enacted to provide for enterprise agreements as an alternative to State Awards.	Liberalisation of labour market.
	NSW	ongoing 1990-91	Water Board – agreements covering approx 30 per cent of wage employees were implemented, including further award restructuring, multiskilling, and reducing restrictive work practices.	Will build upon 13 per cent productivity improvement over last five years, with a further 11 per cent expected in the next five years.
	Qld	23 June 1990	<i>The Queensland Industrial Relations Act 1990</i> .	Enhance opportunities for flexibility in awards and facilitates enterprise based work arrangements.
Coal industry	WA		Underground coal regulations altered to allow 8 hour, 7 day a week work.	Allow greater capital use and lower coal costs.
Industry-specific redeployment	WA	1991 ongoing	Industry-specific redeployment process. Remove demarcation barriers, improve skills and flexibility of employees.	Reduce turnover rates, improved mobility of workforce in health industry, enhanced efficiency of transfer and other processes.
Training	NSW	1991	ECNSW continued phasing in its Training, Efficiency, and Multiskilling (TEAM) plan. In February 1991 all ECNSW employees came under the one industrial award.	Represents further progress in reform. For example, before TEAM there were 300 salary levels. Under new award there are only 40.

<i>Sector</i>	<i>Jurisdiction</i>	<i>Date introduced</i>	<i>Nature of reform</i>	<i>Significance</i>
	NSW	ongoing 1990-91	Policy of multiskilling of mines inspectorate to increase competence in environmental, safety and engineering functions.	Reduction in staff accompanied by higher productivity.
	NSW	November 1990	Establishment of Vocational Education and Training Accreditation Board.	Encourages market based competition in provision of vocational training.
	NSW	November 1990	Establishment of TAFE Commission with long-term partial self funding targets.	Makes TAFE more responsive to market pressures in provision of training services.
	WA	March 1991	State Employment and Skills Development Authority proclaimed. Established Skills Standards and Accreditation Board.	Coordinate State-wide planning for skills formation and improving efficiency in training.
	Qld	July 1990	Establishment of Vocational Education and Training Technologies Centre.	Change environment of learning within TAFE, Government and Business. \$3 m in client projects in first year.
	NT	1990-91	Private sector award restructuring initiatives to multiskill the workforce and provide increased access to training. New Industry Training Committees.	Increased productivity.
Education	Qld	11 March 1991	Renegotiation of TAFE and Senior College Teacher awards.	Improve delivery of education.
Public sector structural efficiency and redundancies	Vic	1991-92	Negotiation of restructuring proposals according to Structural Efficiency Principles in agencies throughout the public sector including the Public Service. Target geared towards a zero real increase in departmental outlays in 1991-92.	Target reduction in labour cost savings to be achieved equivalent to 10 000 jobs in 1991-92. Average employment in select GBEs fell by 4,500 jobs (14%) in 1990-91.

<i>Sector</i>	<i>Jurisdiction</i>	<i>Date introduced</i>	<i>Nature of reform</i>	<i>Significance</i>
	NT	1990-91	Structural Efficiency Principle initiatives to enhance employees' career paths, provide increased ability to move across occupational groups, and ultimately lead to greater organisational flexibility.	
	NT	1990-91	Variations to public sector awards, revised span of hours and new grievance settling and dispute procedures.	Minor significance.
Award restructuring	Vic	1990-91	SEC unions reduced from 25 to 17 during 1990-91, and working towards goal of four or five. Port of Melbourne to reduce 27 awards to 6.	Reduction in demarcation disputes and promotion of award restructuring.
	Vic	1990-91	Review of work practices in Public Transport Corporation and Grain Elevators Board.	Reduced unnecessary shifts and overservicing. Staff reductions in PTC of 1500. Improved productivity and training availability.

## Part E: Government business enterprise reform

<i>Sector</i>	<i>Jurisdiction</i>	<i>Date introduced</i>	<i>Nature of reform</i>	<i>Significance</i>
<i>Administrative reforms</i>				
Performance monitoring	NSW	late 1990	Introduction of quarterly financial reporting requirement for 15 Government Trading Enterprises, and State Owned Corporations.	Ensures effective monitoring of GTEs and SOCs and enables informed assessment of boards' dividend recommendations.
Accrual accounting	NSW	ongoing 1990-91	The commencement of reporting on an accrual basis for four inner-budget sector departments.	Accrual accounting will mean better management of assets and liabilities and ensure clearer presentation of the State's overall financial position.
Community services	Vic	June 1991	CSOs for SEC, GFC and Board of Works identified, costed and reported to Parliamentary Inquiry.	Promotes transparency of government priorities.
Returns to shareholders	Vic	June 1990	Review of the 4 per cent rate of return target set by the Public Authority Dividend policy.	Major energy and water and port authorities paid dividends of over \$300m in 1990-91.
Taxes	Vic	July 1991	Land taxes to be paid by GBEs.	Exemption removed in 1991-92 Budget.
State Authorities Financial and Management Act	Tas	1990	Reforms financial management, reporting and accountability requirements of statutory authorities.	Ensures more effective monitoring and resource use by state authorities through increased accountability.
Government services	ACT	1991	Government activities such as construction services, landscape services, asset maintenance, accommodation services, plant and fleet hire, and information technology services are all moving towards a commercialised financial environment.	Significant productivity increases and improved client services are expected in these areas.

<i>Sector</i>	<i>Jurisdiction</i>	<i>Date introduced</i>	<i>Nature of reform</i>	<i>Significance</i>
Telecom	C'wealth	July 1990	Telecom subject to income taxation.	
	C'wealth	1990-91	Introduction of universal service levy. Telecom's community services made more explicit in legislation.	Makes community services and associated funding arrangements more transparent.
Rail	NSW	1 July 1990	CSO contracts for State Rail Authority.	Creates commercial relationship between Government and Authority and clearly identifies costs of non-commercial services.
	Qld	1990-91	Establishment of board of directors for Queensland Railways. New legislation provides for the preparation of corporate plans, including performance targets.	First step to a more commercial orientation.
	WA	1991	Removal of fixed rail freight schedules from Agreement Acts governing transport of mined ore.	Increased flexibility and timeliness of cost adjustments, enhanced cost competition.
	WA	July 1991	Rail workshops reorganised to focus on products and customers rather than trades based.	Annual savings of \$8 million.
	Vic	1990-91	Review of non-core businesses, resulting in closure of in-house printing works and clothing factory. Increased urban passenger fares by 25 per cent and phased down subsidies to catering services.	Improved cost recovery of services.
State Transit Authority	NSW	1 July 1990	Funding of STA's CSOs on a commercial basis. STA to pay dividends and tax equivalents.	STA's community services now funded on a commercial basis. Estimated costs of \$41 m in 1990-91 and \$306 m in the following 3 years.

<i>Sector</i>	<i>Jurisdiction</i>	<i>Date introduced</i>	<i>Nature of reform</i>	<i>Significance</i>
Ports	NSW	30 June 1990	The Marine Port Charges Act came into force. MSB required to charge users in relation to the cost of the services provided. (Sale of MSB assets are covered in the section on ownership).	Represents a significant reform of pricing which will result in more efficient use of port facilities.
	Qld	1990-91	Port Authority budgets and annual reports identify CSOs by item, amount and beneficiary. Port authorities required to prepare corporate plans and undergo performance monitoring.	Step towards government funding of community services. Facilitates measurement and management of port authorities' performance.
	Vic	1990-91	Second year of user-pays port pricing at Melbourne, Geelong and Portland ports. Role of Port of Melbourne revised to strategic port manager and trade facilitator. Study into truck queuing delays at Port of Melbourne completed. Standard documentation recommendations fully implemented, and review of vehicle booking system to be undertaken.	Clear commercial focus and direction for authority. Construction and operation of port infrastructure to be progressively left to private sector. Potential savings from truck queuing reforms of \$21 million.
	SA	1991-91	Operations of Dept of Marine and Harbours (DMH) further commercialised; changes to work practices; a new organisational structure; and workforce reduction of 200.	Expected to eliminate DMH's call on the consolidated account. By 1992-93 the Department will be expected to earn a return on its assets of about 8 per cent.
	WA	1990-91	Introduction of user pays based port charges: Fremantle July 1990, Bunbury July 1991.	Improved resource allocation and elimination of cross-subsidisation between port user groups.

<i>Sector</i>	<i>Jurisdiction</i>	<i>Date introduced</i>	<i>Nature of reform</i>	<i>Significance</i>
Water	NSW	1 July 1990	Water Board – Ancillary service providers within the organisation established as Business Units having to compete against the private sector.	Substantial potential savings.
	NSW	1 July 1990	Hunter Water Board – Removal of property tax component of charges for residential sector and corresponding increase in emphasis of user-pays charging.	Represents a further 17% reduction in income derived from property taxes. Substantial step in continued pricing reform along user-pays principles.
	NSW	1 July 1990	Water Board – Abolition of water allowance and replacement by charging for all water used. Also approval for Urban Development Charges to recover infrastructure costs – initially for Northwest sector followed by other sectors.	Very important in establishing the framework for efficient pricing and eventually unwinding cross-subsidies.
	Vic	1990–91	Water charges in Melbourne and Geelong increasingly based on per unit consumption charges, rather than solely on fixed property based ratings.	Correct pricing signals provided to ensure conservation incentives. Deferral of new dam needs.
	Vic	November 1990	Water Act introduced – implementation of transferable water rights.	Property rights in water specified in legislative form (enables autonomy of water rights and Minister to allocate water rights).
	SA	Final stages	E&WS is developing a 3 year business plan. Department introduced a new pricing policy for water based on user-pays principles.	Plan will lead to a turnaround from a net draw on consolidated account of about \$30 million this year to providing a net contribution in 1991–92. It is expected that the pricing policy will substantially reduce consumption.
	NT	1991–91	Commercialisation of certain water resources services.	Application of the user-pays principle to certain services so as to be more in line with the commercial sector.

<i>Sector</i>	<i>Jurisdiction</i>	<i>Date introduced</i>	<i>Nature of reform</i>	<i>Significance</i>
Energy	NSW	1 January 1991	Sydney Electricity converted from a county council to a statutory authority. Board appointed on the basis of commercial enterprise.	Authority now a fully commercial operation.
	NSW	1 July 1991	Further electricity pricing reform through 5.2% increase in retail rates compared to 2.6% in commercial and industrial tariffs.	Further assists in unwinding cross subsidies and making tariffs more cost effective.
	Vic	August 1991	Increases in domestic gas and electricity tariffs of up to 6 per cent to reduce cross-subsidies. Time of use electricity tariffs implemented.	Long-term economic reform to provide correct pricing signals. Cumulative real price decline since 1985-86 of 16 per cent for electricity, 13 per cent for gas, 9 per cent for metropolitan water.
	Vic/SA	May 1990	Interstate trading of electricity. South Australia-Vic link fully operational. Victorian power has been exported to SA.	Reduces interstate barriers to efficient electricity generation and distribution.
	SA		The Electricity Trust has continued towards commercialisation which involves structural change aimed at improving productivity. More commercial electricity pricing policy has seen a continued move towards cost reflective tariffs.	Work force reductions of about 350 positions have occurred this financial year resulting in significant savings.
	SA		SA Gas Company commercialised much of its operations. SAGASCO has progressively introduced more cost reflective tariffs.	

<i>Sector</i>	<i>Jurisdiction</i>	<i>Date introduced</i>	<i>Nature of reform</i>	<i>Significance</i>
	NSW	October 1990	Established new Economic Regulatory System (ERS) for the gas industry in NSW and established Gas Council of NSW to oversee new arrangements. Features include: long-term authorisations for gas distributors; an effective means of adjusting the conditions of the authorisation including the price control formula; appointment of a review panel to settle disputes between the council and distributors; regular review to ensure the price control formula and other conditions remain appropriate.	Encourages efficiency by gas distributors. Inefficiencies cannot be passed onto consumers as they were under profit control, consumers will now share in improved efficiency.
	WA		Signing of performance agreement between State Electricity Commission of WA and Government.	Progress towards introduction of commercial principles.
∞ R&I Bank of WA	WA	January 1991	Corporatised R&I Bank of WA.	Increased accountability, enhanced use of government resources and flexibility in addressing labour issues.
Insurance Commission	WA	March 1991	Corporatised State Government Insurance Commission.	As above.
Department of Mineral Resources	NSW	phased in over 1990-91	Mineral Resources – introduction of charges for various activities including consultancies, provision of information and advertising in Department publications.	Represents a move towards user pays principles. Increased revenue from \$170 000 to \$1 million.
	NSW	phased in over 1990-91	Department of Mineral Resources — implementation of report recommending commercialisation of laboratory services. Other subsidised services to be terminated thereby requiring clients to use existing private sector facilities.	Annual savings of up to \$700 000 including reduction of 12 positions.
Administrative Services Department	Qld	June 1991	Structural reform: establishment of product-oriented business units, specific identification of CSOs.	Significant first step in commercialisation of ASD. Ensure it is not disadvantaged relative to private sector by provision of community services.

<i>Sector</i>	<i>Jurisdiction</i>	<i>Date introduced</i>	<i>Nature of reform</i>	<i>Significance</i>
Queensland Investment Corporation	Qld	1991	QIC became fully corporatised. Control vested in board of directors, performance contract with Government which sets performance targets, payment of all State Government charges and pay equivalent of all federal charges to the State, contract may include dividend payments and rate of return requirement.	First Queensland GBE to be fully corporatised.
Queensland Travel and Tourism Corporation	Qld	1991	Board of Directors introduced legislation providing for establishment of two bodies corporate to undertake separate aspects of the business.	Gives QTTC a commercial focus.
Queensland Industry Development Corporation and Suncorp	Qld	1991	Boards given the autonomy to operate in commercial manner without day-to-day ministerial direction.	First step towards full corporatisation.
Department of Housing and Construction	SA	ongoing	Dept Housing and Construction (SACON) operations are being restructured with the establishment of business units that will bear their share of corporate overheads and have commercial projects.	This process, together with a possible workforce reduction of 370, is expected to achieve annual savings of \$7 m within 3 years.
Government courier	Vic	1991	Placed on commercial footing with full cost recovery.	Improved service delivery matching clients' needs.
Police and Emergency Services	Vic	1990-91	Amendments to police regulations directed at charging for police services at sporting and entertainment events that are commercially sponsored.	Lead to a more efficient allocation of resources in respect of sporting and entertainment events and facilitate public sector cost recovery.
Government Supply Service	Vic	1990-91	Removal of State Supply Service monopoly on supplying government departments.	Rationalisation of service to meet private sector competition.
Fisheries	Vic	November 1990	Removing barriers to entry.	Deregulation of shark importation from interstate.
Office of Ethnic Affairs	Vic	January 1991	Consolidation of State language services.	Important as first step to commercial operations.

<i>Sector</i>	<i>Jurisdiction</i>	<i>Date introduced</i>	<i>Nature of reform</i>	<i>Significance</i>
Government printing office	Tas	1991	Government printing office put on commercial basis.	Improved service delivery more oriented to client needs.
Forestry Commission	Tas	1991	Forestry Commission placed on commercial footing.	As above.
Government travel	WA	1991	Transfer of responsibility for government air transport and accommodation reservations to private sector.	Reduction of 7 positions from WATC, administration and overhead savings of \$150 000.
ACTTAB	ACT	1 January 1991	ACTTAB corporatised. First ACT government business enterprise to be corporatised.	Improved productivity and appropriate return on government investments expected.

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***Competitive reforms***

Telecommunications equipment	C'wealth	July 1990	Telecom's legislated monopoly on first phones abolished.	Allows competition in this sector of the customer equipment market.
Exclusive trading	NSW	1 July 1991	Compulsory third party insurance deregulated ending the GIO's monopoly on third party insurance. Vehicle owners may now choose their own insurer with licensed insurers being able to offer competitive premiums.	Potential saving to each consumer of up to \$100 a year.
Removing privileges	NSW	14 July 1990	Introduction of the Passenger Transport Act placed the STA under the same regulatory conditions as private bus operators, eg STA must comply with accreditation regulations applying to private sector.	Improves competitive neutrality between private and government sectors and assists in moving towards direct competition.

<i>Sector</i>	<i>Jurisdiction</i>	<i>Date introduced</i>	<i>Nature of reform</i>	<i>Significance</i>
Contracting out	NSW	ongoing 1990-91	SRA workshops to compete with the private sector for 20 per cent of work (ultimately 100 per cent).	Workshop functions exposed to competition in order to promote increased efficiency.
	NSW	1990-91 ongoing	Department of Family and Community services – 5 additional social workers employed under contract as part of ongoing plan to contract out much of the work involved in the adoption process to private social workers and solicitors.	Small step in a plan that over the last few years has almost totally privatised the adoption process.
	NSW	September 1990	Contract awarded to develop and implement a commercial trading system (supply line) for NSW government and its suppliers.	Improved cost effectiveness.
	NT	1991-91	Transfer of some development work undertaken by the Water Resources Unit to the private sector.	Saving to Government of approximately \$1.5 m a year.
	Vic	1990-91	SECV transport services contracted out.	Productivity improvement.
	NSW	1990-91 ongoing	60 per cent of capital works program was carried out by private sector. Private sector involvement in infrastructure development in new urban release areas has increased from 86 per cent to 90 per cent in last financial year.	As above.
	NSW	September 1990	Management of the Government Warehouse was transferred to a private company for next three years.	As above.
	NSW	July 1990	Water Board – meter reading partially contracted out.	Has resulted in the meter reading cycle being cut from over 12 weeks to 10 weeks with further savings expected.
Joint venture	NSW	March 1991	Memorandum of Understanding signed for a joint venture with a private company for the construction of the Benerembah Surface Drainage Scheme.	Further progress in private sector involvement in infrastructure provision.

<i>Sector</i>	<i>Jurisdiction</i>	<i>Date introduced</i>	<i>Nature of reform</i>	<i>Significance</i>
Administrative Services Department	Qld	1991	Removal of ASD's monopoly over provision of most government services.	Will be required to operate commercially in new environment.
Ports investment	Vic	March 1991	Removal of asset reversion policy for stevedoring land leased from port authorities.	Removal of significant barrier to private sector investment in ports.
Government printing	Vic	1990-91	Recision of Treasurer's instruction to use the Government Printer's services (except for legislation). Printer constituted into separate business units.	Moved the Government Printer toward commercial viability. Printer withdrawn from unprofitable operations.
Bus transport	Tas	1990	Competition introduced into Hobart-Launceston-Burnie bus trunk route by issue of new licences to a second carrier.	Allows competition in some passenger bus services.
<b>Ownership</b>				
Commonwealth Bank	C'wealth	8 July 1991	Sale, by public offer, of 30 per cent of the equity in the Commonwealth Bank.	Strengthen the Bank's capital base. Expose bank to sharemarket discipline.
Maritime Services Board	NSW	ongoing 1990-91	The MSB has almost completely privatised cargo handling operations in NSW. Major developments include: <ul style="list-style-type: none"> <li>• withdrawal, in July 1990, from provision of wharfside services in Newcastle with the handover of ship loading responsibilities for coal and other bulk materials to the private sector;</li> <li>• MSB disposed of its interest in the Kooragang coal loader;</li> <li>• Aug 1990, a 20 year lease was signed with a private industry consortium of southern and western coal producers for the Port Kembla coal loader.</li> </ul>	Represents major privatisation initiatives which should lead to increased efficiency in cargo handling operations.

<i>Sector</i>	<i>Jurisdiction</i>	<i>Date introduced</i>	<i>Nature of reform</i>	<i>Significance</i>
Tug services at the Port of Portland	Vic	March 1991	Privatisation of tug service and competitive tendering for services.	Savings of \$1m a year and productivity improvements.
GrainCorp	NSW	April 1991	Formal expressions of interest sought for purchase of GrainCorp. Sale expected to proceed in second half of 1991.	First time a government trading enterprise offered for sale.
Government Clothing Factory	NSW	May 1991	Government Clothing Factory was closed and sold to Australian Defence Industries Pty Ltd.	Sale of surplus assets.
Government Insurance Office and State Bank	NSW	17 July 1991	Premier announced the privatisation of the State Bank of NSW and the Government Insurance Office.	Significant privatisation initiative.
ECNSW coal mines	NSW	30 November 1990	Announcement of privatisation of ECNSW coal mines and competitive tendering of coal supply contracts.	Improved cost effectiveness as a result of competition. Should result in rationalisation of uneconomic coal mines.
Private sector infrastructure	VIC	1991	Government guidelines released to promote private sector funding of public infrastructure.	Improved capital funding and efficient construction.
Power lines	NT	1990-91	Private ownership of power lines.	Reduced call on government for provision of infrastructure.
Industrial Supplies Office	WA	February 1991	Privatised the Industrial Supplies Office.	Cost savings to Government of \$500 000 over three years.
SAGASCO	SA	June 1991	Sale of part of SA Government's equity in SAGASCO	Reduced Government owned share from 79.4 per cent to 57.8 per cent of issued capital.
Trust Bank (arrangements)	TAS	1991	Sale and merger of Tasmania Bank with SBT Bank.	Improved capital and client base, and associated economies of size.



## **Appendix 3**

### **Economic instruments for environmental policy: the case of tradeable permits**

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Traditionally, environmental policy has relied heavily, if not exclusively, on command-and-control techniques. Essentially, these are regulations that set out what firms and people can and cannot do in terms of their impact on the environment. The regulations typically specify limits, for example, on emission of pollutants from individual plants or they may specify required production techniques such as use of filters or scrubbers.

Economic instruments are another option. They alter the incentives that people and firms face and guide them toward more environmentally desirable behaviour. Taxes and charges are examples.

Economic instruments bring the prospect of obtaining a given amount of environmental protection at lower cost than a command-and-control approach. They have become more popular over the past decade or so due to: a general move toward less direct government intervention; recognition of the need for cost-effectiveness; and a gradual transition away from 'end-of-pipe' pollution abatement to preventative measures (Pearce and Turner 1990, p. 171).

This appendix draws selectively on Commission reviews of environmental policy instruments. It covers the use of one class of economic instrument only — tradeable permits — as it provides examples of more innovative approaches to policy making. It highlights the experience of the USA, as this is where important examples of permit schemes have been introduced and refined. Selected Australian examples are also reviewed to show that we too have relevant experience upon which to build. Some of the lessons in terms of applicability and implementation are then drawn together.

#### **General approaches to environmental protection**

Markets can handle a wide range of environmental issues, provided private firms or individuals have control over — that is, the property rights to — environmental assets and thus have the incentive to ensure their proper care. But it is also well known that markets, in many cases, do not provide adequate care for environmental assets.

Market failure can be attributed to a number of causes:

- Markets are too thin or costly to operate — too few traders or the coordination of many diffuse interests is too difficult.
- Market interest rates diverge from social rates of discount.
- Information about the environmental effects of activities is lacking.
- The market power of firms, groups or individuals prevents the optimal outcome from emerging.

- Private property rights cannot be adequately defined or enforced. For example, ownership of the air and oceans cannot be assigned to individuals, but lies with a group of unrelated users. Users of common property resources do not face the full cost of their actions, leading to 'overuse'.

The basic response to market failure is for government to intervene and/or for private property rights to be created. Table A3.1 indicates the broad range of measures. Command-and-control regulatory interventions have been the norm. But some economic instruments have been and are used in a number of countries (see OECD 1989a, Hahn 1989).

The Commission noted in its last annual report that no instrument is universally applicable (IC 1990c, app 3). The circumstances of particular cases will determine whether a command-and-control technique, an economic instrument or a pure market approach is appropriate.

The Commission has examined a number of economic instruments in detail: carbon taxes and tradeable emission permits in the greenhouse gases inquiry (IC, 1991j), sales tax exemptions, disposal charges, and a deposit-refund scheme in recycling (IC 1991a) and rehabilitation and performance bonds in mining (IC, 1991b). A general message from these investigations is that the efficacy of economic instruments varies widely and, indeed, they can have perverse effects if not properly applied (for example, container deposit legislation).

### Tradeable permits: US examples

The USA is the locus of most activity on tradeable permits. The emissions trading program is perhaps the best known. But there are also examples in trading of lead as a fuel additive, water pollution control and CFCs. The recent introduction of tradeable permits as the principal instrument for the control of acid rain emissions has brought the use of this instrument from the periphery into the main stream of US environmental policy.

#### Emissions trading — the early experience<sup>1</sup>

The US Clean Air Act provides the legislative basis for federal approaches to control of air pollution. Policies are developed and administered by the Environmental Protection Agency (EPA). The EPA sets National Ambient Air Quality Standards that are implemented by states under State Implementation Plans (SIPs).

The Clean Air Act is fundamentally in the command-and-control mould. Technology-based emission standards form the main approach. But, in 1974, the EPA began experimenting with supplementary measures through a program of trading in rights to emit specific air pollutants. The emissions trading

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1 The main source of information is Hahn and Hester (1989b).

**Table A3.1**  
**Policy instruments for environmental policy**

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*1 Suasion*

- Publicity, social pressure against harmful activities

*2 Command and control*

- Regulations preventing specified uses of resources
- Regulations limiting the permissible levels of pollutants, or the permissible level of use or extraction of resources
- Specification of mandatory processes or equipment
- Regulations preventing certain activities and sale of certain goods
- Specification of the use and/or disposal of certain types of materials

*3 Economic instruments*

- Taxes and charges based on environmental damage and emissions of pollutants (for example, effluent charges)
- Taxes or tax exemptions on goods and services to influence demand (for example, product charges)
- Charges to cover costs of provision of services (user charges) and administration
- Subsidies and taxation allowances based on reductions in emissions or the use of more environmentally friendly equipment
- Refundable deposits
- Rehabilitation and performance bonds
- Tradeable permits and licences

*4 Pure market approaches*

- (Re)allocation of property rights over environmental assets to private hands to provide a proprietary interest in improved environmental quality (for example, private conservation lands)

*5 Government provision*

- Prevention and treatment facilities (for example, sewage)
  - Regeneration activities (for example, reforestation)
  - Dissemination of information, research and education
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Source: Adaptation and augmentation of Baumol and Oates (1988 p. 218)

program distinguishes between existing sources (those identified in an initial mid-1970s inventory), new sources (those built since the inventory) and modified sources (those existing sources which produce significant increases in emissions because of alterations). New and modified sources must generally meet more stringent standards.

The Act also distinguishes geographically between attainment areas (regions that meet the ambient air quality standard for a specific pollutant) and non-attainment areas. Sources in non-attainment areas are generally subject to more stringent limits.

The currency of the emissions trading program is an Emissions Reduction Credit (ERC) which, upon approval, is a transferable property right to emit air pollutants. Permits are not issued to cover existing emissions. Rather, ERCs are created by firms reducing their emissions below their set standards.

A trade can be granted in restricted and somewhat complicated circumstances (see box A3.1). However, the essential feature of the program is that increases in emissions from one source have to be more or less balanced by reductions elsewhere.

The program hardly represents a free trading market. It is very much wedded to an existing regulatory system that specifies source-specific emission limits which, in turn, are the reference points for establishing ERCs. Trades must be approved by the authorities. New and modified sources of emissions have the greatest incentive to trade because they face the strictest standards. But the ability of new sources to trade is the most restricted, because they are confined to offsets and are prevented from purchasing credits to cover any emissions in excess of their set limits. Modified sources are also subject to offsets, but they can avoid the most stringent emission limits through the netting option. Existing sources have the greatest flexibility to trade, but the least incentive, because they are subject to less stringent emission standards (Hahn and Hester 1989b, p. 373).

Despite these restrictions, savings from netting and bubbles have been evident. Savings of between US\$525 million and US\$12 billion have been attributed to netting and about US\$435 million to bubbles (Hahn and Hester 1989b, p. 374).<sup>2</sup> Tietenberg (1990) states that most studies estimate the capital cost savings to be in excess of US\$10 billion, with additional recurrent savings. These have emerged despite limitations on trading which have severely restricted trading possibilities.

None of the four trading elements has had any significant *direct* impact on environmental quality. Some small net increases in emissions have occurred as a result of netting transactions, and some net reductions have occurred through offsets since they involve trading ratios greater than 1:1 (that is, the offsetting reduction from another source must be greater than the addition from the new or modified source).<sup>3</sup>

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2 The wide range in the estimates is attributed to uncertainty about the number of netting trades and the cost saving per trade.

3 Whilst such trading ratios have the potential to improve air quality, they also act as an impediment to trade.

**Box A3.1: Elements of the US emissions trading program**

Trading can take place within a plant (internal trading) or with another plant or firm (external trading).

A system of netting was introduced in 1974. Firms which reduced emissions from existing sources within a plant, were allowed to create new sources of emissions within the same plant. Thus netting involves internal trading only. It is restricted to modified sources, and allows limited net increases in emissions (below a level considered significant).

In 1976 a system of offsets was introduced. New sources were permitted to operate so long as they could obtain sufficient credits from other sources within the same geographic area to offset the new emissions. Offsets can be obtained by internal or external trading. They can be used by new and modified sources in non-attainment areas and, in certain cases, in attainment areas. Offsets were formulated when it became clear that states would not meet their SIP deadlines and following concern that new economic activity was being stifled by attempts to meet those deadlines.

In 1979 a system of bubbles was introduced for existing sources in attainment and non-attainment areas. This system allows sources within a plant to exceed the emission limits, so long as there are no increases in overall emissions from the plant.

Banking was also introduced in that year. This enabled existing sources to save credits for future use.

(For a more extensive review of the operation of the four planks of the program, and factors affecting their performance, see Hahn and Hester 1989a).

Tietenberg (1990) suggests that environmental benefits have come indirectly. He considered that by making compliance easier, the program has hastened and improved compliance and has encouraged improvements beyond the provisions of the Act.

The net benefits of the program are stifled not only by restrictions on trading, but also by transactions costs. Monitoring is a prime issue. With technology-based standards, firms generally complied by installing the specified technology. Apparently, widespread verification was not undertaken. However, to establish the availability of credits and the need for permit cover, more accurate information was required. Consequently, moving from unverified technology-based standards to a tradeable permit scheme required the installation of monitoring systems.

Detailed scrutiny of trades, delays in approval, additional information requirements and uncertainty about approval of trades also added to transactions costs. The experience has been that external trades have been subject to much greater scrutiny than internal trades.

Finally, uncertainty about how possible future tightening of standards would be implemented has diminished or devalued the property rights embodied in emission permits. Possible concerns include the confiscation of some traded rights.

### **Lead trading<sup>4</sup>**

A scheme for trading in lead as a petrol additive was introduced in the USA in 1982. The scheme was modified in 1985 to include banking of credits that had to be used by the end of 1987. Refiners created credits by adding less lead than a specified standard.

This market was very active, and saved refiners hundreds of millions of dollars (Hahn and Hester 1989*b*, p. 387). It did not undermine environmental standards and possibly assisted some refiners in the transition to lower lead content standards.

The success of the program was due, in part, to the general absence of restrictions on trading. The only real restriction was the limited tenure of the rights — within the calendar year — before the introduction of banking in 1985. Moreover, administrative requirements were low, relying on a system of quarterly reporting from refiners. The reporting did not involve information that was not already readily available. Finally, trading was able to build on an established market in refinery feedstocks and products.

### **Water pollution discharge rights — Dillion Reservoir, Colorado<sup>5</sup>**

The Dillion Reservoir provides half of Denver's water and is important locally for the recreation activity it supports. In 1984, and in the face of eutrophication of the reservoir, the Colorado State Government instituted a plan to stem discharges of phosphorous into its waters.

The plan tackled both point sources (four municipal treatment plants and one industrial treatment plant) and non-point sources (septic systems and urban run-off). It required advanced treatment methods for all point sources and the installation of controls to minimise non-point discharges created after 1984.

The plan also allowed trading in discharge rights. Current and new point sources can increase their discharges above their limit only if they provide greater reductions (twice as large) in discharges from pre-1984 non-point sources within the watershed. The 2:1 ratio was designed to cover uncertainty about the effectiveness of non-point controls. But it also raised the prospect of not just limiting pollution, but also increasing water quality.

The incentive for participating in the scheme comes from the relative costs of control. The marginal cost of removal of phosphorous from a typical plant is up to 7 times the average cost at a non-point source. Potential annual savings from point/non-point source trading were estimated in 1984 to be US\$0.75 million (Hahn and Hester 1989*b*, pp. 393–6).

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4 Hahn and Hester (1989*b*) is the source of information.

5 Hahn and Hester (1989*b*) is the source of information.

### *More emissions trading — acid rain*<sup>6</sup>

Pressure for control of acid rain emissions in the USA came from both Canada and domestic sources with 'New England and other Northeastern states that were suffering from the effects of acid deposition pitted against the high emitting States of the Midwest' (Kete 1991, p. 3).

The regulatory approach had been tried and failed. 'Best available technology' standards for new coal-fired generating plants were enacted in 1977. The essential requirement was that new plants be fitted with scrubbers that are expensive to install, run and maintain. But, existing plants that accounted for about 95 per cent of emissions were left untouched (Kulp 1990, p. 47). Despite strong support from environmentalists, the approach was not environmentally effective. By focusing the requirements on new plants, it slowed the rate of replacement of existing, dirtier plants (Crandall 1983).<sup>7</sup> Regional politics again played a major role. The regulation allowed Eastern and Midwestern utilities to buy high-sulphur coal rather than low-sulphur Western coal and thus supported coal mining activity in Midwestern and Appalachian (eastern) regions.<sup>8</sup>

After a ten-year Congressional deadlock, new acid rain amendments to the Clean Air Act were introduced in November 1990. The amendments combined plans for significant reductions in emissions, a permanent cap on sulphur dioxide emissions and a tradeable permit system. The permit scheme was seen as a vehicle for implementing stringent targets — because their lower cost made emissions reductions easier — and as a means of establishing a cap on total sulphur dioxide emissions. This helped gain support from at least some environmental groups, including those who had viewed marketable permits in the earlier emissions trading program as morally repugnant.

A reduction in emissions of 10 million tons (from 1980 levels) was implemented more as a political compromise than as a result of a formal cost-benefit analysis. The reductions will be implemented in two phases — a 5 million ton reduction in 1995 and a further 5 million tons in 2000. The phasing allows time to design and introduce emission control equipment. The permanent cap thereafter will be 8.9 million tons.

The scheme is confined to power authorities which, although less numerous than industrial sources, contribute about 70 per cent of sulphur dioxide emissions. (Non-utility sources can participate voluntarily).

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6 Kete (1991) is a major source of information.

7 Crandall also notes that, in view of the expense in maintaining scrubbers in good working order, the lack of monitoring and enforcement from authorities was likely to allow scrubbers to perform poorly, leading to greater emissions from utilities using cheaper high-sulphur coal than if they were using low-sulphur coal.

8 Older plants, more prevalent in the east, were exempt from the regulations and could continue purchasing high-sulphur coal from the Midwest and Appalachia. Moreover, to the extent that new plants commenced, the requirement to install scrubbers removed the incentive there would be to purchase low-sulphur coal if (say) the regulations specified quantities by which emissions had to be reduced, rather than the method by which they had to be reduced (Crandall, 1983).

The scheme provides for 'allowances' for emissions within the aggregate cap. Each allowance permits a utility to emit one ton of sulphur dioxide and is tradeable. The initial allocation rule is essentially grandfathering — allocating allowances to existing polluters — based on 1985 emissions. Adjustments in the allocation are made for relatively 'clean' and 'dirty' sources (the geographic distribution of which again touches on regional politics).

The amendments were based on the experience gained from the previous use of tradeable permits. But, compared with the general emission trading program, the acid rain trading market has been established in an unfettered fashion. The main features of the system are:

- permits are freely tradeable across the 48 contiguous states;
- no approval for sale is required, although the EPA will keep track of trades;
- banking is permitted;
- compliance is annual and emissions without permit are prohibited and enforceable by strict penalties;
- allowances can be sold to anyone — for example, brokers and environmental groups — to support the development of a robust market (and to allow groups to reduce emissions by purchasing allowances and withdrawing them from the market);
- a small part (2 per cent) of total allowances has been reserved for a 'market of last resort' to guard against the possibility that some players will be able to dominate the market and restrict new entrants' access to allowances;
- permits remain with existing owners of the utility if it becomes unoperational (to prevent prolonging operation beyond planned retirement date); and
- sources are required to install and operate continuous emissions monitoring systems.

Allowances are issued annually to holders. In 1995 and in 2000 the number of allowances issued will be reduced on a pro rata basis.

Property rights are comparatively well-defined. However, they are mildly devalued or attenuated by the residual freedom of the Congress to terminate or limit allowances, although that would require further revisions to the Clean Air Act. For some sources, allowances may become unusable due to local air quality standards (which are independent of the federal program). However, the allowances can still be sold to a utility in another region, to the benefit of both parties.

The cost savings attributable to the implementation of a tradeable permit scheme, as opposed to command-and-control instruments, have been put at US\$3 billion annually (Hahn and Stavins 1990, p. 13).

## **Australian examples**

Australia has been a pioneer in the use of tradeable quotas in fisheries management, and markets in tradeable water entitlements have been evolving over the past decade or so. More recent examples involve CFCs and the foundation being laid for trading in salt reduction credits in the Murray–Darling Basin.

### **Individual transferable quotas for southern bluefin tuna**

The southern bluefin tuna is a highly migratory species of fish. It spawns in the Indian Ocean south of Indonesia and travels down the coast of Western Australia to the Southern and Pacific Oceans (DPIE 1989). It is fished commercially by Australia, Japan, New Zealand, Korea, Indonesia and Taiwan.

The fishery was biologically and economically overexploited. Poorly-defined property rights provided little incentive for individual fishermen to conserve fish stock, especially when any benefit from doing so was likely to be enjoyed by others. The introduction of individual transferable quotas (ITQs) to the tuna fishery was an attempt to assign property rights to the capture of fish. It was the first use in Australia, and one of the first in the world, of tradeable quotas for fisheries management.

The initial allocation of quota entitlements was based on individuals' financial commitment to, and history of involvement with, the industry. Quota entitlements are expressed in weight and are based on a percentage of the total catch. A unit holder can surrender, lease or sell some or all of their units. Levies are payable on each unit of quota.

A number of benefits from the use of ITQs have been claimed (DPIE 1989, Geen and Nayar 1989). The scheme gives an incentive to the most efficient fishermen to purchase quotas from less efficient fishermen. By this means, a fishery can restructure without government intervention. The number of vessels in this fishery has been reduced by about 80 per cent, with less economic hardship in many cases, as fishermen sold their quotas upon leaving the industry. With a guaranteed proportion of the total catch, fishermen can concentrate on the economically efficient method of taking their catch and take advantage of more favourable market conditions. It is also claimed that the scheme provides an incentive for self regulation. That is, in order for fishermen to safeguard their own catches there is an incentive to report those fishermen taking in excess of their quota.

The Australian Government determines the annual total allowable catch. Despite severe cuts in the total allowable catch since the inception of ITQs, the resource has continued to decline (DPIE 1989, p. 47). This reflects a general problem in establishing sustainable catches in fisheries — a problem regardless of the type of policy instrument used — and not a deficiency in the permit scheme itself.

## Tradeable rural water rights<sup>9</sup>

Under the Constitution, water policy is the responsibility of the States. Originally, States required individuals to obtain licences to draw (unlimited quantities of) water for irrigation. As demand for water increased, restrictions were imposed on the total amount that could be drawn in one region and subsequent limits on individual water licences were introduced.

Under fixed allocations, there was no mechanism to redistribute water to its most productive or high value use. Lack of pricing incentives to use water most efficiently resulted in overuse of water in some regions, adding to environmental degradation in the form of increased salinity and waterlogging.

Faced with increasing demands for water and options for increasing supplies becoming increasingly expensive, State Governments made tentative moves away from a strict regulatory approach to water management. Tradeable water entitlements are being progressively introduced (see box A3.2).

Restrictions on trading have determined duration of transfer (annual, five-year and permanent), region (specified zones and no transfers between States), volumes (reductions in volumes imposed to protect reliability of supplies and non-transferable entitlements), use (exclusion of non-agricultural activities), and environmental constraints (disallowing trades that would exacerbate salinity and other problems). Security of supply is affected by the ability of the authorities to determine total entitlements according to seasonal conditions.

The steps to date demonstrate that tradeable water entitlements are workable. Transferability increases flexibility and consequently allows greater choice of response to changing market conditions and input costs, including increased water charges. By assigning a market price, and consequently an opportunity cost, trading provides signals to conserve water and to sell entitlements to serve the most productive ends. For example, one study has estimated that the limited transferability of water entitlements in NSW increased rural income by \$32.5 million in the first six years (Sturgess and Wright 1990). This included transfers in the drought year of 1987–88 that lifted rural income by \$17 million. Furthermore, reallocations to more productive ends can occur without raising the political difficulties of bureaucratic intervention (Delforce et al, 1990, p. 52).

Transferable entitlements have also enabled landholders to move more easily out of irrigation and into dryland farming through the sale of entitlements. Previously, entitlements had to be forfeited or property sold.

The experience to date indicates that tradeable water entitlements can bring substantial benefits. More economic and environmental benefits are likely to be realised as the scope for trading is further explored.

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9 Information is sourced from Pigram and Musgrave (1991), Simmons et al (1991) and Delforce et al (1990).

**Box A3.2: The evolution of tradeable water entitlements**

Unofficially, transfers of water entitlements were possible (and occurred in small numbers in the 1970s) through the sale of land with entitlements and resale without entitlements. Official transfers came in New South Wales and South Australia in the mid to late 1970s between lands in common ownership.

In NSW, temporary transfers were introduced in 1983 and permanent transfers came into some areas in 1989. Minimum non-transferable entitlements are tied to packages of land and transfers must remain within specified zones. Over half a million megalitres were transferred in NSW between 1983–84 and 1988–89. A peak of 342 000 megalitres was transferred in the drought year of 1987–88.

In 1983, South Australia became the first State to introduce permanent transfers of entitlements, but only in restricted areas and circumstances. Other areas were subsequently included and permanent transfers are now possible for both surface water and groundwater and between different sectors of the water industry (for example, agricultural, urban and industrial use). Transfers involve reduction factors of 10 per cent generally and 70 per cent of amounts transferred to industrial or other non-commercial irrigation uses. About 20 000 megalitres were transferred between 1983 and 1990.

Victoria introduced temporary transfers in 1987 in specific areas and permanent transfers, still within regional and engineering constraints, are about to come into effect. About 50 000 megalitres were transferred in government operations in the first two years.

Some permanent transferability has been introduced recently in Queensland. Transferability has also been trialled in Tasmania and Western Australia.

**Chlorofluorocarbons (CFCs)<sup>10</sup>**

In line with the initial Montreal Protocol on Ozone Depleting Substances, a national system of regulation, licences, levies and tradeable quotas for the production, import and export of ozone-depleting substances has been implemented in Australia through the *Ozone Protection Act 1989*.

Initially, 13 licences, with a life of 10 years, were issued. Quotas, based on 1986 industry information, were allocated to each licence holder. Quotas are to be re-issued each year to the licence holder. Separate quotas apply for manufacture, export and import. The quantity of CFCs allowed for export is reduced each year by 5 per cent. The quota for manufacture (including exports) and import is not reduced unless the Minister concerned considers this necessary to maintain Australia's obligations under the Montreal Protocol.<sup>11</sup> However, as the year 2000 deadline for phasing out CFCs approaches, these quotas will have to be reduced.

10 Information is based on Commission investigations for its inquiry on greenhouse gases.

11 Allocations for manufacture were reduced from 1989–90 to 1990–91 and by more than 5 per cent in the case of exports. For 1991–92, allocations for manufacture were unchanged and for export were reduced by 5 per cent.

Quotas can be transferred between licensees. The market was active in the first year (1989–90) and dominated by small firms purchasing additional volumes from larger producers. Few transactions took place in the following year.

### **Salt-reduction credits: the Murray–Darling Basin**

A strategy recently implemented to address salinity problems in the Murray–Darling Basin has the potential to develop into a tradeable permits scheme.

The Murray–Darling Basin covers one-seventh of the Australian continent. It contains almost 75 per cent of Australia's irrigated land and produces approximately one-third of Australia's total rural output. However, agricultural activities have contributed to widespread land degradation, deteriorating water quality, rising groundwater and loss of native flora and fauna (Murray–Darling Basin Ministerial Council 1990).

A major impediment to solving the problems of the Murray–Darling Basin has been that its geographic area spans several States. A Ministerial Council was established in November 1985, comprising ministers from New South Wales, Victorian, South Australia and the Commonwealth. Its primary aim is to promote and coordinate effective planning and management for the equitable, efficient and sustainable use of land, water and environmental resources of the Basin.

A key initiative, agreed to in 1989, was to develop a strategy to manage the Basin's river salinity, land salinisation and waterlogging problems. Engineering (salt interception and drainage) and non-engineering (land and water management) programs form the basis of the strategy.

There are two main problems. First, land management practices (and irrigation, in particular) in upstream States produce saline groundwater discharge, so that river salinity rises as the waters flow westward. Water salinity is a major problem for downstream areas, especially in South Australia, where the River Murray is an important source of urban as well as irrigation water. Second, activities in upstream regions have also led to increased land salinisation and waterlogging in those areas. These problems could be most easily addressed by increased drainage into the river system, but that would exacerbate river salinity and compound the disadvantage of downstream users.

The cost of salt to downstream urban, industrial, and agricultural users has been put at around \$37 million a year, while an estimated value of production forgone from land salinisation and waterlogging in the Basin is \$65 million annually (Young et al 1990, p. 13)

The major elements of the Council strategy are as follows:

- The aim is to reduce the level of salinity at Morgan, South Australia by a net 80 EC (units of electrical conductivity) through salt interception schemes.
- The salt interception schemes will be funded by the States and the Commonwealth.
- In return for their contribution to funding interception, New South Wales and Victoria will receive 15 EC salinity credits which will enable them to discharge

saline drainage into the river system. (These salinity increases will be intercepted at Morgan).

- Penalties will be imposed for salinity levels above the agreed baseline.
- Additional salinity mitigation undertaken by the States, will earn additional salinity credits.
- Each State can undertake activity that increases river salinity so long as the State's salinity credits are not exceeded.

Under this scheme individual States have become responsible for management practices that affect river salinity. However, the extent of efficiency gains will depend on the way in which States allocate their salt discharge quotas.

At this stage, interception and management programs are underway with salinity credits available on a pro rata basis according to the completion of effective salt interception works. While there has been some discussion of trading, it has not yet become practice. However, the strategy as it now stands provides a foundation for trading to develop.

### **The applicability and implementation of tradeable permits**

Experience has shown that tradeable permits have met with degrees of success in a range of circumstances. This section examines where and why tradeable permits might be applicable and the factors that influence the degree of success in implementation.

#### **Some advantages of tradeable permits**

While there are dangers in generalisations, the review of practice suggests tradeable permits bring a number of advantages. It also points to some factors that can limit the circumstances in which they can apply.

A major benefit of tradeable permits is that they provide a cheaper way of meeting a given environmental standard.<sup>12</sup> They offer producers flexibility in the way they approach emission controls or operate within a total quota. This flexibility translates into greater efficiency, for example, as abatement activity focuses on plants and methods that involve lower cost.<sup>13</sup> In the case of (say) acid rain, tradeable permits allow cheaper control strategies such as the use of low-sulphur coal, rather than necessarily using expensive scrubbers. They also allow control efforts to focus

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12 Here and in the following discussion the command-and-control approach is the implicit benchmark. However, actual instrument choice would also involve comparisons with the characteristics of other economic instruments.

13 High compliance costs with command-and-control instruments can come about from the usual practice of setting uniform standards. Emissions levels, for example, are set at a common level across firms, when the most efficient outcome would be to equate marginal abatement costs. Thus, achievement of a standard requires action from 'high-cost' as well as 'low-cost' abatement firms. Technology and process standards tend to specify 'high-cost' methods, when lower-cost methods may be available.

on plants that can most cheaply introduce abatement methods, rather than requiring plants to achieve a uniform reduction.

Tietenberg (1990) surveyed a number of empirical studies of air pollution control. The results suggest that, typically, economic instruments are 2 to 6 times more efficient than the command-and-control alternative. While such theoretical studies can only be indicative, the review in this appendix suggests that substantial gains can be delivered in practice — amounting to tens of billions of dollars in the control of US air pollution. Gains have been evident even in cases in which quite severe restrictions on trading have been imposed.

Tradeable permits are environmentally effective.<sup>14</sup> US experience suggests that by making compliance easier, achievement of standards has improved in terms of extent and timing. The acid rain experience suggests that cheaper compliance makes stringent targets more realistic. Also, depending on design (for example, setting high trading ratios), tradeable permits can be used to handle uncertainty about the effectiveness of control measures and are a means of achieving ongoing improvements in quality.

A closely associated advantage is that tradeable permits are dependable. That is, they can deliver a specified amount of protection with a high degree of precision and certainty. The dependability comes about because tradeable permit schemes fix a total amount of permitted activity (or emissions).

Thus tradeable permits combine the advantages of dependability, often associated with command-and-control measures<sup>15</sup>, and efficiency. In the US acid rain case, the environmentalists saw the cap on emissions as an important factor, while producers saw the cheaper compliance as important.

Another main advantage suggested for tradeable permits is the ongoing incentive they provide to develop and adopt newer, better pollution-control technologies. If emissions can be further reduced through new techniques, the scope for reward through sale of permits opens up.

The application of command-and-control instruments is often non-neutral in the sense that they impose tougher requirements on new entrants than on existing firms. For this reason, they are often favoured by existing producers as they act as a competitive barrier to entry. Tradeable permits schemes, in the other hand, embrace new and existing firms.<sup>16</sup>

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14 More strictly, they can improve on the environmental effectiveness that would be possible with command-and-control instruments. The effectiveness of both command-and-control and tradeable permits depends on the ability of the authorities to set the optimum amount of emissions or activity.

15 Command-and-control measures that specify an outright ban or a quantity reduction in emissions and are monitored for verification are equally dependable. However, technology-based standards that apply to new sources may be neither effective nor dependable, as was illustrated by the earlier regulatory approach to controlling acid rain in the US.

16 Depending in part on the initial allocation rule, the existence of market power may make it more difficult for new entrants to gain access to permits.

In implementing a scheme, the authorities have to set a total number of permits, decide on an initial allocation of permits, and determine the rules for trading. These steps will be open to vigorous debate and representation. But once set, the room for negotiation and pleading of special circumstances narrows. To the extent that wasteful lobbying activity is avoided, the community is better off.

Environmental protection can have an equity as well as an efficiency dimension — in the greenhouse debate, for example, the ability of developing countries to meet uniform targets. Tradeable permits have the ability to address distributional issues through the rule adopted for initially allocating permits. For example, grandfathering<sup>17</sup> and auctioning of rights have very different distributional consequences. However, if transactions costs are low and there is a competitive market, efficiency will not be affected by the allocation rule (Tietenberg 1990, p. 22). Allocation can be used as an exit adjustment mechanism, providing some financial compensation to those selling quotas and entitlements upon leaving the industry — for example, those going from irrigated to dryland farming.

### Broad areas of application

Tradeable permits can be most readily used in situations in which the activities of individual firms do not matter as much environmentally as the collective activities of all firms. That is, the total amount of emissions in a region, or the total catch, or irrigation water allocated may be important environmentally, but how that total is distributed between firms and operators is of less importance. However, property rights of individual firms and operators need to be relatively easily definable and enforceable, without controversy and expense. Otherwise, trading will not develop.

Monitoring is crucial in providing the necessary information to establish property rights and the scope and need for trading. Three different monitoring situations that bear on the potential benefits of a tradeable permits scheme can be envisaged. In the first case, if standards are technology-based and not verified — as in the early US regulatory approach to controlling emissions — a permit scheme may entail additional costs in installing monitoring systems. Net benefits from the scheme still can (and do) ensue. In the second case, monitoring may already be in place to verify compliance with regulations. Introduction of a permits scheme would involve little if any change to monitoring costs. In the third case, the ability to monitor individual pollutants from individual sources is so severely restricted, that establishing a market scheme is economically irresponsible.

While the ability to monitor may be an impediment in some cases, it may not be for all time. The technology for monitoring is advancing — for example, in the use of tracers to identify sources of air pollution (Anderson and Leal 1991, p. 165–7).

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17 Grandfathering uses the allocation of permits (*de jure* rights) to favour those with existing (*de facto*) rights. For example, those previously polluting or fishing are issued with permits upon introduction of the scheme.

Another possible problem with tradeable permits is that markets may be too thin to support trading. For example, a single firm that is a source of a region-specific pollution problem would have no other firm with which to trade, assuming no new entrants to the industry or region. The inclusion of non-polluting parties in the market (for example brokers, environmentalists), as in the US acid rain case, can help support properly functioning markets.

### **Implementation issues**

The review of experience with tradeable permits points to the importance of implementation issues.

Tradeable permits can offer large potential cost savings. But, for fully functioning and efficient markets to operate, property rights need to be as clearly defined as possible. Trading will be restricted if property rights are diminished or attenuated by uncertainty about future government amendments to the scheme, limitations on tenure, and restrictions on trading. Uncertainty about underlying causes and effects of environmental problems may make some attenuation unavoidable and even appropriate (Noll 1982). But to avoid unnecessary attenuation, the authorities need to get it as right as possible upon initial implementation.

The benefits of permit schemes are likely to be more fully realised if administrative intervention (such as the need for approval and reporting) is kept to a minimum.

Attention also needs to be given to circumventing potential trading impediments. For example, where there is concentration of market power in an industry, the initial allocation of permits will have a crucial influence on the development of trading.

Distributional issues are important in policy formulation. In designing a permit scheme, there is scope to address distributional concerns without necessarily undermining the realisation of efficiency gains.

Finally, irrespective of the type of policy instrument involved, good policy making requires transparency of procedures to help inform all of those that have a stake in the outcomes.

## Appendix 4

### Trends in productivity

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Increased productivity provides the wherewithal to improve the welfare of Australians. As the Commission's 1989–90 Annual Report noted, Australians cannot rely on favourable movements in the terms of trade or new mineral discoveries to do this. However, productivity growth can be fostered by industry reform through promoting competition and streamlining regulations.

Productivity improvements result from increasing the capacity to produce more with less resources and thus reducing the costs of production. Increased productivity can boost the sales of Australian export and import competing industries and promote greater employment, although as EPAC (1991) noted this depends upon how productivity gains are spread between wages, profits and prices. The interlinked nature of the Australian economy means that increases in productivity in any sector contribute to improving the performance of other activities. Australia's recent productivity record is considered below, while concepts of productivity are examined further in the next section.

#### Comparisons of productivity

Tables A4.1 and A4.2 present estimates of the levels and rates of growth of productivity.<sup>1</sup> Some major components of the Australian economy have low levels of productivity compared with their foreign counterparts. This suggests that there are large potential gains to be made. Australia's level of productivity in the business sector was 86 per cent of a five country average in 1986.<sup>2</sup> While Australia's agriculture and mining sectors perform better than an international average, other sectors — manufacturing; electricity, gas and water; and transport and communication — are significantly below the average (see table A4.2).<sup>3</sup>

Aggregate productivity growth in Australia has been slower in the last five years, and over the last 20 years, compared with some major OECD economies (see table A4.1).

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- 1 Estimates of total factor productivity (TFP) for overlapping periods were compared with those published by ABS (1990), Lattimore (1989) and OECD (1990) and were found to be consistent. The industry estimates of TFP used in this appendix have been calculated using data from ABS collections, while the sector and aggregate estimates were derived from the OECD's International Sectorial Databank (ISDB) which provides estimates of output, employment and gross capital stock at varying levels of disaggregation for OECD countries. Estimates of capital stock for the manufacturing sector were derived from ABS (1991) and Lattimore (1989).
  - 2 The business sector is the basis of aggregate measurement used by the OECD. It excludes public sector non-market activities such as administration and defence. The data are derived from the ISDB and 1986 is the latest year that consistent data are available. Data for the total economy (including public administration for which there is no suitable measure of output) in 1989 derived from IMF (1991) indicate that Australia was 90 per cent of the five country average.
  - 3 The five sectors chosen were those considered to have satisfactory independent estimates of output and inputs and accounted for 36 per cent of GDP in 1988–89. This data problem is discussed in the next section and in Dixon and McDonald (1991).

**Table A4.1**  
**Business sector productivity: Australia and other OECD economies**  
 (average annual percentage change)

	1985–90	1970–90
Australia	0.40	0.68
USA	0.98	0.26
West Germany	0.56	1.39
UK	2.99	0.98
Japan	1.18	1.78

*Note:* Estimates of total factor productivity growth rates in this table are based on estimates of net capital stock.

*Sources:* OECD (1989, 1991).

Also, average productivity in Australia has tended to fall relative to other major OECD countries, although West Germany and Japan too have experienced falls in their rates of productivity growth in the last five years.

At the sector and industry levels, rates of productivity growth vary significantly. Recent Australian rates of growth compare favourably with major OECD countries for: agriculture and forestry; mining; electricity, gas and water; and transport and communication (see table A4.2). However, in the case of electricity, gas and water, and transport and communication these sectors are estimated to have low relative levels of productivity.

While the manufacturing sector has displayed low productivity growth compared with other countries, the productivity data presented in table A4.3 indicate a diverse range of growth rates, with cyclical effects apparently depressing measured productivity growth over the five years to 1989–90. However, industries such as chemicals and chemical products, and fabricated metal products have achieved rates of productivity growth similar to those of the overall manufacturing sectors in the UK and Japan.

### Concepts of productivity

Two main measures of productivity can be estimated: labour (or single factor) productivity and total factor productivity (TFP), which measures the combined effects of labour and capital on output. Both measures are often associated with technical progress.

When most people think of productivity they think of labour productivity — the average product of labour.<sup>4</sup> But this statistic can be misleading as it captures changes in output per head (or hour) resulting from changes both in labour and in capital used.

<sup>4</sup> The average product of labour is usually measured by dividing gross product (the difference between the value of output produced and the intermediate inputs used to produce it) by either the number of persons employed, or by total hours worked.

**Table A4.2**  
**Sectoral productivity comparisons: Australia and other OECD economies**

	<i>Average product of labour per cent of 5 country average (1986)</i>	<i>Total factor productivity trend growth rates</i>	
		<i>1970-82</i>	<i>1982-87</i>
<i>Agriculture and forestry</i>			
Australia	150	1.17	3.95
USA		0.12	5.85
West Germany		4.00	1.99
UK		2.61	3.28
Japan		- 1.44	- 0.78
<i>Mining</i>			
Australia	114	- 0.38	5.76
USA		- 4.87	3.03
West Germany		- 1.71	- 6.84
UK		na	na
Japan		4.31	- 2.95
<i>Manufacturing</i>			
Australia	76	1.28	2.52
USA		0.76	4.69
West Germany		1.72	0.76
UK		0.06	3.95
Japan		3.49	3.73
<i>Electricity, gas and water</i>			
Australia	54	1.90	5.03
USA		0.80	1.29
West Germany		2.53	2.67
UK		1.05	4.50
Japan		- 0.18	1.30
<i>Transport and communication</i>			
Australia	75	2.69	3.83
USA		1.50	2.61
West Germany		na	na
UK		na	na
Japan		0.20	1.90

*Note:* Estimates of TFP growth rates in this table are derived using data on gross capital stock and persons employed. This is consistent with the method of calculation used in OECD (1990).

*Source:* OECD (1991).

**Table A4.3**  
**Total factor productivity growth in Australian manufacturing industries**  
 (average annual percentage change)

	<i>1984–85 to 1989–90</i>	<i>1969–70 to 1989–90</i>
Food, beverages and tobacco	1.16	1.38
Textiles, clothing and footwear	- 0.17	3.40
Paper, paper products and printing	- 1.03	2.33
Chemicals and chemical products	3.62	3.50
Basic metal products	1.24	2.83
Transport equipment	- 3.05	0.55
Fabricated metal products	3.62	2.23
Other	0.71	2.04

*Source: Commission estimates.*

TFP is a more useful measure, but harder to estimate. It is calculated as the difference between the growth of real output and increases in the services of capital and labour used in production weighted by their respective cost shares in production. In other words, it is the growth of output not accounted for by the growth of inputs.

Improvements in TFP can arise in a number of ways. Many of these require considerable investments of time and resources such as: increased R&D and technical change; better education and training; making use of economies of scale; and additional investment in infrastructure. Industry reform, on the other hand, can enable us to increase our productivity simply by doing better with what we already have through, for example: better work and management practices; removing unnecessary government regulation; and making government enterprises more efficient. However, the changes required will vary between firms and to a large extent cannot be measured easily as they are based on changes in attitudes as well as changes to processes.

The Bureau of Industry Economics undertook a study to identify 'influential variables which might be manipulated by government policy to stimulate TFP change', but found that 'the causes of productivity improvements are not only elusive, but constantly changing' (BIE, 1986, pp. x, 10). That is, there was no simple systematic relationship between the variables examined and TFP growth.

The BIE concluded that this lack of knowledge precluded 'any meaningful policy prescriptions for stimulating productivity growth' (BIE, 1986, p. 12). The absence of a systematic relationship suggests that a sound general policy is to remove regulatory impediments to productivity growth, promote more efficient targeting of infrastructure spending and allow firms to search for solutions appropriate to their particular needs.

Productivity growth is often associated with technical progress and distinctions between the two concepts are often blurred. The two processes overlap, but are not

identical. Technical progress can occur without a measured increase in TFP. New technologies can be embodied in new capital equipment and associated new work processes. As such, increases in output can be accounted for by the increase in the capital equipment. However, technical progress can also involve changes in work practices that entail no measured change in the machinery or labour that is used. As such, TFP can increase.

Two major problems that arise in estimating TFP relate to obtaining independent measures of output and inputs, especially capital. Output measures which account for changes in the quality and mix of output over time are not always available.<sup>5</sup> It is difficult to obtain measures of nominal output, such as for many public sector activities, and appropriate deflators to produce estimates of real output. Even in areas where satisfactory measures of output are available, there are substantial difficulties in fully accounting for changes in quality over time.

In the case of inputs, it is necessary to estimate satisfactory indexes of labour and capital services used in production. This problem is not new, and in the case of capital, is associated with the difficulties involved in aggregating pieces of physical capital with different uses into a monetary measure. The issue was analysed extensively during the Cambridge debates of the 1950s and 1960s. Estimates of capital stock are generally used as proxies and involve additional problems related to determining the asset life of pieces of capital along with their retirement and depreciation patterns. Such estimates do not cope well with the observed effects of variations in the level of economic activity and technological obsolescence on asset lives and retirement of assets.

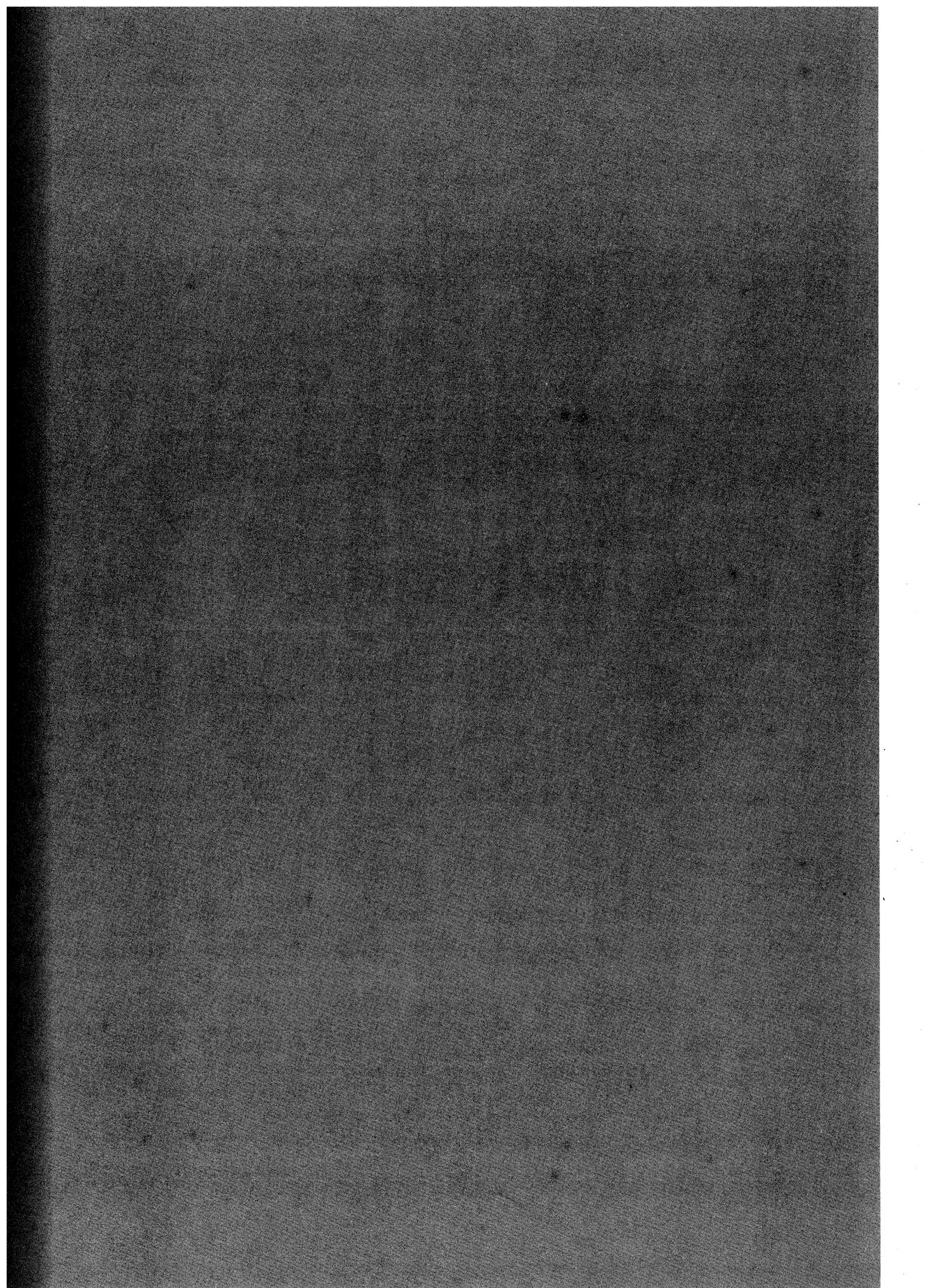
In calculating productivity it is generally assumed that the capital stock is being used fully. Such an assumption can be challenged on the grounds that in the downturns of the business cycle, much plant and equipment lies idle or is not used to its full capacity. To this extent, estimates of TFP can be biased by the business cycle. This suggests that year-on-year estimates of TFP do not necessarily present an accurate picture of underlying productivity growth and it is more appropriate to analyse productivity growth over a longer period.

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<sup>5</sup> A discussion of the problems of TFP estimation using Australian data is presented in Dixon and McDonald (1991).



**Assistance and regulation review**



## **Appendix 5**

### **Specific industry arrangements**

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In order to monitor the economic performance of industry and factors affecting that performance, annual reports of the Commission (and before it, the IAC) have reviewed selected industry specific arrangements.

These arrangements illustrate the scope and complexity of institutional, regulatory and assistance mechanisms which affect the performance of Australian industries. Many of these complexities cannot be captured in the Commission's assistance measurement systems or otherwise be readily quantified. The confidentiality problems associated with firm-specific assistance also works against transparency.

Developments in infrastructure services are reported in appendix 1. This appendix details recent changes and developments relating to:

- wool marketing;
- the automotive industry;
- textiles, clothing and footwear;
- pharmaceutical products (the factor f scheme);
- customer premises telecommunications equipment;
- the supply of hearing aids;
- citric acid production; and
- photographic colour film production.

The Commission has conducted inquiries on assistance to some of these industries (such as the automotive industry) or has investigated them as part of its assistance evaluation work (for example, recent wool industry developments). The assistance arrangements for photographic film, citric acid production, pharmaceutical products and customer premises equipment were established outside the usual public inquiry processes for evaluating claims for special assistance. While the focus of this monitoring is on Commonwealth activity, the States are also involved. For example, in addition to Commonwealth assistance of \$36 million to photographic film production, the Victorian Government provided for an additional \$6 million.

#### **Wool marketing**

Historically the wool industry had been characterised by relatively low levels of assistance from government intervention. In particular, the Government sanctioned reserve price scheme for wool had been financed by woolgrowers. However, this situation was drastically altered in 1989–90 when, in response to the deteriorating financial position of the Australian Wool Corporation (AWC), the Government

decided to increase its support of the industry while new marketing arrangements were considered and implemented.

This additional government support was to be temporary and took four main forms: loan guarantees; credit facilities for exports; a supplementary payments scheme; and interest-payment grants. As a result of the combined effect of these additional forms of support, assistance to the wool industry is expected to increase sharply in 1990–91. Afterwards, assistance should decline as all forms of additional government support are intended to be phased out by 1997–98, when the Government guaranteed loans are planned to be fully repaid. At that time, assistance to the wool industry should return to its previous relatively low level.

### **The reserve price scheme**

Since 1974 the marketing arrangements for wool had been underpinned by a reserve price scheme which provided woolgrowers with a guaranteed minimum price for their wool. The scheme was financed by growers through a tax on wool sales which also funded growers' contributions to research and promotion. Any surplus funds were returned to woolgrowers on a first-in first-out basis. The AWC, which operated the scheme, had actively participated in the wool market, buying and selling wool to try to offset the price consequences of shifts in demand and supply. At times of low prices, the AWC purchased wool which failed to reach the pre-announced minimum reserve price. This wool was stored until the prices improved and was then re-offered to the market.

As part of a general policy of reforming statutory marketing authorities along more commercial lines, the industry was granted the power to set the minimum reserve price in 1987. Before then, the reserve price had been set by the Minister for Primary Industries and Energy following advice from the industry, among others. Following significant increases in world prices, the minimum reserve price was raised 70 per cent between 1987 and 1989.

During 1989–90 the previously buoyant market for wool began to deteriorate. Under the ensuing difficult market conditions of falling demand and rising supply — a response to the earlier high prices and favourable seasonal conditions — the AWC attempted to maintain the high reserve price previously set. As a result, AWC's wool stock pile rose dramatically — from 188 000 bales in June 1989 to 4.7 million bales at the end of 1990.

### **Changes to wool marketing arrangements**

In response to the large volume of purchases by the AWC and the pending exhaustion of the AWC's available sources of credit, the Government intervened on 31 May 1990 and directed the AWC to reduce the minimum reserve price for wool from 870 cents to 700 cents a kilogram. The Minister also announced amendments to the *Wool Marketing Act 1987* to provide a Commonwealth Government guarantee on all borrowings by the AWC until July 1992, with a cap of \$2.5 billion.

The wool tax was increased from 8 per cent to 18 per cent in July 1990. The tax was further increased in October 1990 to 25 per cent.

In November 1990 the AWC responded to the continuing imbalance between supply and demand by introducing a flock reduction scheme which resulted in the slaughter of 10 million sheep. The AWC also sought to introduce marketing quotas to restrict wool deliveries.

In December 1990 the Minister for Primary Industries and Energy announced the signing of an agreement by the Australian Government for a \$400 million roll-over credit facility to the USSR, predominantly for the purchase of wool, but also for mutton and butter.

Despite the lower floor price, the flock reduction scheme and the credit facility for exports to the USSR, oversupply persisted and the stocks of wool continued to grow. In February 1991 the Minister announced the suspension of the reserve price scheme for wool until 30 June 1991 as well as a recovery package for the wool industry:

- A supplementary payments scheme was established. The supplementary payments were to make up the difference between the market price for wool and what woolgrowers would have received if the reserve price scheme had not been suspended. The payments were jointly funded by a Government contribution of \$300 million and industry contributions from the wool tax.
- The government guarantee on AWC borrowings was increased from \$2.5 billion to \$3.5 billion. The time period for the guarantee was extended from 1992 to whatever period is required to manage the run-down of the industry's debt (Kerin 1991a).
- The quota scheme proposed by the AWC was scrapped and the flock reduction scheme reviewed.

### **Longer term arrangements**

In July 1990 the Minister for Primary Industries and Energy set up a committee, chaired by Sir William Vines, to review Australia's wool marketing arrangements. On 30 April 1991, in response to the Vines Committee report, the Minister announced new arrangements for the wool industry to apply from 1 July 1991. Key elements of the new arrangements were:

- the permanent removal of the reserve price scheme;
- the AWC was to be replaced by three new statutory bodies — a Wool Realisation Commission, responsible for managing the AWC's debt and stock pile; a new Australian Wool Corporation, responsible for wool promotion, marketing and quality control; and a Wool Research and Development Corporation;
- the provision of a \$200 million interest free loan for two years to the Wool Realisation Commission;
- the AWC's debt is to be repaid over a maximum of seven years. AWC assets, such as wool stores, are to be sold to help repay the debt. The Government indicated a schedule for repayment of the debt as follows: \$20 million to be paid off in

1991–92; \$300 million in 1992–93; \$400 million in 1993–94; \$500 million in 1994–95; and \$550 million in both 1995–96 and 1996–97. The remaining debt of \$559 million is to be paid out in 1997–98; and

- the levy on woolgrowers to be reduced from 25 per cent to 15 per cent on 1 July 1991.

On 21 June 1991 the Minister announced that Parliament had agreed to an implemented tax rate of 12 per cent effective from 1 July 1991 and a ceiling tax rate of 15 per cent. Also in June the Government redefined the intention of the April announcement of a \$200 million interest free loan to be an offer to facilitate a loan of \$200 million, by way of a grant of \$22.5 million for two years to cover interest payable on loans of up to \$200 million.

The termination of the reserve price scheme has seen the re-emergence of a strong and viable greasy wool futures market.

### **Implications for assistance**

In the past, assistance to the wool industry had remained relatively low. Most assistance to the industry had been in the form of government contributions for wool promotion and research, assistance provided through the rural adjustment scheme, and favourable taxation arrangements for primary producers. Before 1989–90, the reserve price scheme did not require government funding as any deficits incurred by the AWC from the operation of the stock holding scheme were fully financed by woolgrowers through the wool tax.

Recent changes in the wool market have resulted in four main new forms of assistance to the wool industry:

- the Government guarantee of AWC borrowings, which are planned to be fully repaid by 1997–98;
- a revolving credit facility for exports to the USSR;
- a supplementary payments scheme to compensate wool growers for falling wool prices, which applied only in 1990–91; and
- government grants in 1990–91 and 1991–92 to cover interest payable on a loan of up to \$200 million.

In total these measures are estimated to provide assistance to the industry of about \$460 million in 1990–91, the year when such assistance is expected to peak.

Assistance to the wool industry remained low in 1989–90 as the loan guarantee for AWC borrowings only came into effect for the last month of the 1989–90 financial year. Provisional estimates for 1990–91, which include the effects of the higher average guaranteed debt, all of the supplementary support payments and the credit facility, indicate that the nominal rate of assistance is likely to have increased from about 1 per cent in 1989–90 to around 10 per cent in 1990–91 and the effective rate from around 3 per cent to 23 per cent.

Estimates for 1991–92 indicate a decline in the level of assistance with the ending of the supplementary payments, but with the continuation of the government guarantee

and the interest facility. In that year, the nominal and effective rates are expected to be around 5 and 16 per cent, respectively. Further reduction in assistance should take place as the various new forms of assistance are phased out. By 1997–98 when the government guaranteed loans are planned to be fully repaid, the nominal and effective rates of assistance to the wool industry should return to their previous relatively low levels.

### **The new passenger motor vehicle plan**

As part of the March Industry Statement, the Government announced details of the post-1992 assistance arrangements for the passenger vehicle industry. The new arrangements, which will apply until the year 2000, follow closely recommendations contained in the Commission's report on the industry (IC 1990*d*).

In brief, the main elements of the new arrangements are:

- a continuation of annual tariff reductions for passenger vehicles (and derivatives) and original equipment (oe) components for those vehicles of 2.5 percentage points which will see tariffs fall from 35 per cent at the end of the current plan in 1992 to 15 per cent by the year 2000;
- maintenance of the tariff on replacement components for passenger vehicles (and derivatives) at 15 per cent over the period 1993 to 2000;
- a reduction in the tariff on light commercial and four wheel drive vehicles and components for those vehicles from 15 per cent at the end of the current plan, to 5 per cent by 1 July 1996 in accordance with the general post-1992 tariff reduction program;
- retention of the automatic 15 per cent duty free entitlement provided to vehicle producers;
- retention of modified export facilitation arrangements for passenger vehicle and component producers and vehicle importers;
- retention of penalties for low volume production until the end of 1996;
- a reduction in the sales tax payable on luxury vehicles from 50 to 30 per cent;
- a more generous labour adjustment package for employees retrenched from the industry;
- continuation of an independent industry monitoring body; and
- a review of the arrangements before 31 December 2000.

In announcing the new arrangements the Minister for Industry, Technology and Commerce spoke of the need for stability in the vehicle industry and on the desirability of maintaining the policy directions established under the current assistance arrangements:

The new arrangements announced today reinforce the stability of the previous Plan and provide firms with certainty in the assistance framework they will face until the year 2000. Without such certainty firms would be reluctant to undertake the investments needed.

They also maintain the policy direction already established by continuing the existing rate of tariff reductions, while making the Export Facilitation Scheme more flexible and rewarding to those firms prepared to make the investments needed to considerably expand their exports.

This will encourage the Australian industry to build on its past achievements of increasing its competitiveness, achieving a higher level of global integration, and improving product quality at reduced prices. (DPM&C 1991, pp. 3.5–3.6).

## **The package in detail**

### ***Tariff reductions***

The tariff arrangements announced in the new package are summarised in table A5.1.

These tariff rates closely follow the recommendations in the Commission's recent report. The only departure is the decision to maintain the tariff on replacement components for passenger vehicles at 15 per cent over the period 1993 to 2000. The Commission had recommended that this tariff be reduced in accordance with the post-1992 general tariff reduction program.

The reductions in tariffs on passenger vehicles and oe components under the new arrangements will result in a significant narrowing of the disparity in assistance afforded passenger vehicle production and the rest of the manufacturing sector. The tariff of 15 per cent to apply in the year 2000 will provide nominal assistance of around 13 per cent compared to an average of 3 per cent for the manufacturing sector as a whole at the conclusion of the post-1992 general tariff reduction programs. This differential of 10 percentage points compares with the 22 percentage points difference — 30 per cent for passenger vehicle production and 8 per cent for the manufacturing sector as a whole — that will prevail at the end of the current plan in 1992.

Effective rate calculations are complicated by the as yet unknown impact of changes to the export facilitation arrangements (see below). However, the Commission estimates that in the year 2000 the effective rate of protection for vehicle production as a whole will be of the order of 30 per cent. This compares with an estimated 86 per cent at the end of the current plan in 1992. By way of comparison, it is estimated that the average effective rate of protection for the manufacturing sector as a whole will decline from 12 per cent to 5 per cent over that period.

### ***The automatic duty free entitlement***

In accordance with a Commission recommendation, the Government has, subject to the minimum volume provisions (see below), retained the automatic duty free entitlement for vehicle producers for the period 1993 to 2000. Under this provision, passenger vehicle producers are able to import, free of duty, vehicles or components up to a value of 15 per cent of their total value of production. The vehicle industry will continue to be excluded from the commercial tariff concession system.

**Table A5.1**  
**Post-1992 tariff arrangements for the vehicle industry**  
 (per cent)

	<i>Passenger</i>			<i>LCV and 4WD</i>	
	<i>built-up</i>	<i>oe components</i>	<i>replacement components</i>	<i>built-up</i>	<i>components</i>
1992 <sup>a</sup>	35	35	15	15	15
1993	32.5	32.5	15	12	12
1994	30	30	15	10	10
1995	27.5	27.5	15	8	8
1996	25	25	15	5	5
1997	22.5	22.5	15		
1998	20	20	15		
1990	17.5	17.5	15		
2000	15	15	15		

a Current plan.

### ***Export facilitation***

The new arrangements retain export facilitation for passenger vehicle and component producers and for vehicle importers. The export facilitation scheme provides firms which arrange or undertake exports of Australian vehicles or components with duty-free entitlements or 'export credits'. For vehicle producers, these entitlements are additional to those available under the automatic duty-free provisions referred to above.

While retaining export facilitation, a number of modifications have been made to the current schemes. These are summarised in table A5.2.

Some of the modifications — in particular the abolition of the base year hurdles — will increase industry participants' access to export credits. However, the move to link export credits to value added in the automotive industry in eligible exports, as distinct from local content in those exports, should have the effect of reducing the industry's access to credits. And, given the significance of the New Zealand market — it currently accounts for some 25 to 30 per cent of Australia's automotive exports — removing 'certain' exports to New Zealand from the export facilitation scheme, might also be expected to reduce the Australian industry's access to export credits.

Overall, while the revised export facilitation scheme is likely to prove more generous than that recommended by the Commission, it appears probable that it will still be

less generous than the current scheme. Moreover, the tariff reductions embodied in the new arrangements will significantly reduce the value of export credits by the year 2000. In view of the adverse efficiency consequences of export facilitation, this diminution of the scheme will reinforce the primary efficiency benefits flowing from lower tariffs.

### ***Minimum volume provisions***

In contrast to the assistance arrangements for most other industries, the current plan for the passenger vehicle industry contains directive measures aimed at improving industry efficiency by reducing both the number of firms producing passenger vehicles in Australia and the number of models they produce. The Government has specified a target industry structure for 1992 of three manufacturing groups producing at most six vehicle models.

Penalties in the form of withdrawal of some, or all of the 15 per cent automatic duty free allowance, apply to discourage low-volume production. The rate of withdrawal is determined according to a complex formula which could see vehicles with annual outputs as high as 40 000 units a year subject to some penalties over the remainder of the current plan.

To date, penalties have not been applied even though volumes for some models have been below the levels specified in the penalty provisions. Producers of the models concerned have avoided penalties by either ceasing production of the vehicles concerned or putting in train action to increase output.

In its recent report, the Commission recommended that directive restructuring and the associated penalties for low-volume production be discontinued at the expiry of the current plan. It argued that appropriate rationalisation in the industry will occur as tariffs are reduced and that directive restructuring may entail efficiency losses if it is in conflict with market-driven decisions.

In formulating the post-1992 assistance package, the Government dispensed with a target industry structure. However, it decided to retain revised and simplified minimum volume requirements until the end of 1996. During the intervening period, the full 15 per cent automatic duty free entitlement will only be available on individual models produced at more than 30 000 units a year. Duty free entitlements will be progressively reduced to zero for models produced at 20 000 units a year. In contrast to the current arrangements, there will be no administrative discretion to exempt or defer the imposition of penalties.

While the Commission considers it unlikely that these revised penalty arrangements will have significant adverse efficiency implications, it observes that the non-availability of automatic duty-free entitlements on small volume production 'means that such production will receive less assistance in effective rate terms than relatively high volume production. Just as disparities in assistance between industries are likely to lead to resource allocation problems, so too are disparities in assistance within industries

**Table A5.2**  
**Modifications to export facilitation**

	<i>Commission recommendation</i>	<i>Government decision</i>
Base year hurdles which restrict the earning of export credits to exports over and above the level achieved in the base year	Abolish	Abolish
Basis for earning export credits	Abolish the current local content basis supplemented with value added testing, and link credit earning solely to value added in the automotive industry in eligible exports. All credits to accrue on a dollar for dollar basis, as distinct from the 50 cents to the dollar (or less) basis currently applying to some eligible exports.	All credits to accrue on a dollar for dollar basis on value added in the automotive industry in eligible exports, subject to a phasing out by 1995 of existing allowances based on local content. In calculating entitlements to export credits, local content in complete vehicles and relatively complex assemblies such as engines and transmissions will, for the duration of the new arrangements, be considered as 100 per cent value added.
Ceilings on export credits	Abolish	Abolish
Restrictions on the direct use of credits by component producers	Abolish	Abolish
Restrictions on the sale and transferability of export credits	Abolish	Abolish
Use of credits	Extend to permit importation of any light automotive product including light commercial and 4WD vehicles and replacement components.	As per Commission recommendation.
Coverage of arrangements		Extend to include exports of automotive machine tooling, automotive tooling and services related to automotive design and production.
Exports to New Zealand	Entitlements to credits on exports to New Zealand be phased out by 1996.	New scheme not to apply to 'certain' exports to New Zealand. A further announcement to be made following discussions between the New Zealand and Australian Governments.

### ***Sales tax***

In May 1990, the rate of sales tax on luxury vehicles was increased from 30 to 50 per cent.<sup>1</sup> The rate of tax on non-luxury vehicles was retained at 20 per cent.

Since the introduction of the higher sales tax rate, demand for luxury vehicles had fallen by more than 60 per cent. In introducing the new arrangements, the Minister for Industry, Technology and Commerce said that this had had serious consequences for the businesses of vehicle importers (who are responsible for supplying most luxury vehicles), and had put at risk their wider operations and their capacity to grow in Australia. Accordingly, the Minister announced that the sales tax on luxury vehicles would revert to 30 per cent from 12 March 1991.

### ***Labour adjustment measures***

A revised labour adjustment package for the passenger vehicle industry — to be known as PMV-LAP — began on 1 February 1991 to replace the previous Labour Adjustment Training Arrangements. Some \$40 million has been approved for the operation of the new scheme until the year 2000.

### ***Industry monitoring and review procedures***

The Automotive Industry Authority is responsible for monitoring the operation of the current package and for some administrative functions.

Under the new arrangements an independent body will be retained to monitor the performance of the automotive industry, to provide information and advice on the industry to the Government and to undertake administrative functions in respect of export facilitation and the minimum volume requirements. The decision to retain an independent monitoring body is in line with a recommendation in the Commission's report.

The Government also announced that a review of the new arrangements would be undertaken before 31 December 2000.

### ***Offsets***

In line with a Commission recommendation, the Government announced that it would be initiating negotiations with the States with a view to exempting passenger, light commercial and 4WD vehicles supplied to Commonwealth and State Governments from offsets obligations (see appendix 6 for the requirements of these schemes).

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1 The threshold retail vehicle value for the luxury tax in 1990-91 is \$45 056. Under an amendment to the luxury tax in August 1990, a split rate tax structure was introduced, with the rate payable being the lesser of 50 per cent or 30 per cent up to the threshold and 75 per cent on the value above the threshold.

## **Textiles, clothing and footwear**

The textiles, clothing and footwear (TCF) plan aims to encourage improved efficiency and international competitiveness in the most highly assisted industries of the manufacturing sector. The plan began full operation on 1 March 1989 and was scheduled to run until mid-1995, with a review by 1992.

The plan, as implemented in 1989, sought to lower border assistance by removing tariff quotas to provide tariff-only protection against imports from July 1995. Tariffs of up to 55 per cent were then to apply.

The Government announced major changes to the plan as part of the March 1991 Statement. The reductions in protection for the TCF industries have been accelerated, and extended beyond 1995. The changes provide a clear signal to the industries of the Government's commitment to lowering protection levels in pursuit of the plan's objectives.

At the completion of the new program in the year 2000, assistance to the TCF industries will be reduced and greatly simplified. With the early abolition of quotas and the phasing down of tariffs to a maximum of 25 per cent, the industries will be made less dependent on community support.

However, at the end of the century the industries will still be left as the most highly protected in Australia, with tariffs as high as five times the general level. The Commission estimates that, by the end of the plan, the effective rate of assistance for the textiles industry subdivision will fall to just over 20 per cent, and for clothing and footwear to 50 per cent. This compares with a projected average effective rate of 5 per cent for the manufacturing sector as a whole at the end of the tariff reduction program.

Assistance to the clothing and footwear industries will continue to be very high in the early years of the plan. The cost to consumers, in terms of the higher prices paid for clothing and footwear, totalled some \$2 billion in 1990–91. This amounts to an average of over \$300 per household, with the taxing effect of the assistance being regressive across households. The changes contained in the March 1991 Statement will be of considerable benefit to consumers in the long term. However, at the end of the plan, the effect of assistance on the prices of clothing and footwear will remain substantially higher than for other goods (IC 1991g, p. 23).

### **Report on the state of the industries**

In October 1990 the Textiles, Clothing and Footwear Development Authority (TCFDA), which administers and monitors the operation of the plan, published a report on the state of the TCF industries. In its report, the TCFDA noted that major restructuring and change was still required (TCFDA 1990a).

As part of its deliberations for the March 1991 Statement, and after consideration of the TCFDA report, the Government noted that:

- the decline in TCF production since late 1989 is attributable to the wider downturn in the economy, and not due to the effects of the plan;

- while import penetration has continued to increase, current protection levels remain too high to encourage restructuring in the least competitive areas of the industry; and
- the TCF industries remain solidly focused on the domestic market, with exports (excluding scoured wool and tops) still constituting less than 5 per cent of sales.

The Government concluded that further reductions in protection were unavoidable if the plan's objectives are to be achieved (DPM&C 1991, pp. 5.10–5.11).

### **Changes to the plan in detail**

The main features of the changes to the plan announced in the March 1991 Statement were:

- the acceleration of the abolition of tariff quotas;
- the lowering of tariffs from a maximum of 55 per cent to a maximum of 25 per cent;
- the phasing out of the bounties on textile yarns, bed sheeting and textile printing;
- alterations to the administration of the textile yarns bounty;
- the introduction of an import credits scheme;
- a revised industries development strategy; and
- the abolition of the safeguard mechanism which could have allowed the assistance reductions to be suspended.

The other major change in TCF arrangements during 1990–91 was the announcement, in November 1990, of the return of security deposits to importers of TCF products which are currently subject to import quotas.

### ***Abolition of tariff quotas***

Quotas have applied to imports of TCF products since the early 1970s. The existing tariff quotas are to be abolished in two steps. The out-of-quota penalty rates are to be halved on 1 March 1992, and set to zero on 1 March 1993. From that date, all TCF imports will be dutiable at the applicable tariff rate. This means that assistance to the industries will no longer automatically increase in response to a decline in their competitiveness. Quotas were previously due to be phased out by 1 July 1995.

The following quota arrangements will also terminate on 1 March 1993:

- industrial craft quotas — imports of these goods will then attract the same tariffs as those applying to other TCF goods, with the standard 5 percentage point developing country margin of preference to apply;
- the special footwear parts quota scheme — the export credits component of the scheme was abolished when the import credits scheme began on 1 July 1991; and
- the handmade footwear concession (quota category 663) — duty free by-law entry will then apply.

### ***Tariffs***

Tariffs on TCF imports are to be significantly reduced by 1 July 2000. Beginning on 1 March 1992, tariffs will be phased down as follows:

- apparel and certain finished textiles (currently 55 per cent) to 25 per cent;
- footwear (45 per cent), cotton sheeting and woven fabrics (40 per cent), and other fabrics (35 per cent) to 15 per cent;
- footwear parts (35 per cent) and existing non-quota TCF goods (25 per cent) to 10 per cent.

Tariffs on other TCF goods, which are to have duty rates of 15 per cent or less by 1992, will phase down in line with the general tariff reductions (that is, to 5 per cent by 1 July 1996). Details of the phasing arrangements are provided in DPM&C (1991, p. 5.14).

### ***By-laws***

The duty on by-law Item 40D, which applies to imported bed sheeting and unprinted fabrics or 'fabrics in the grey', will phase to 15 per cent by 1 July 2000 in line with the tariff on cotton sheeting and fabrics.

The by-law covering certain industrial craft household goods will be abolished on 1 March 1993. Imports of these goods will then attract the same tariffs as those applying to other TCF goods, including the standard developing country margin of preference.

The by-law on textile yarns, which currently allows imports to enter duty free, is to be removed on 1 July 1995 when the bounty on yarns is to be replaced with a 5 per cent tariff.

Other TCF policy by-laws will remain at their current rates wherever they continue to provide concessional entry.

### ***Bounties***

The bed sheeting, textile yarns and fabric printing bounties are to be phased out by 1 July 1995. As noted above, the textile yarns bounty will then be replaced with a 5 per cent tariff.

Under the previous arrangements, the yarns and fabric printing bounties began phasing down on 1 March 1989 and were to reduce to 30 per cent of value added by 1 July 1995, and the bed sheeting bounty was to be reviewed by 1 March 1993.

### ***Bounty administrative changes — textile yarns***

Although the textile yarn bounty is to be phased out, the Government included its response to the TCFDA's review of the administration of the bounty in the March 1991 Statement. As from 1 July 1991 the Government, adopting some of the TCFDA's

recommendations, redefined and restricted the type of costs which attract bounty payments (DPM&C 1991, p. 5.15).

The TCFDA, in its review, had concluded that elements of the existing arrangements were at variance with the objectives of the TCF plan. It considered that payment of the bounty on the basis of the factory cost of eligible processes was in conflict with the plan's objective of encouraging greater efficiency. The plan's aim of encouraging value added processing of Australia's wool and cotton was found to be poorly served by the bounty, as 51 per cent of bounty payments were expended on man-made fibre production.

The TCFDA also concluded that the existing administrative arrangements had become 'complex and cumbersome' because of the Act's complexity, necessitating extensive interpretation by Customs (TCFDA 1989, p. 36). The Authority recommended that, at a minimum, the bounty arrangements should be clarified and simplified.

### ***Import credits***

A TCF import credits scheme has been introduced from 1 July 1991 and is to operate until 30 June 2000. The scheme is designed to act as an incentive for firms to increase their exports. Credits are freely transferable and can only be used to reduce tariff duties payable on TCF imports.

Import credits will initially accrue at the rate of 30 per cent of the domestic value added in exports (excluding wool, wooltops and raw or ginned cotton). The rate will phase down to 15 per cent over the life of the scheme. Exports to New Zealand will not attract credits and credits will only accrue to companies exporting more than \$100 000 a year.

The import credits scheme will provide lower assistance to TCF exports than is received by most TCF production for domestic consumption. However, as with the export facilitation scheme for passenger motor vehicles, the exports which will be encouraged by the scheme will often be at the expense of production in other industries which receive much lower assistance than the TCF industries.

### ***Industries development strategy***

The plan's industries development strategy (IDS) began operation on 1 July 1987, two years before the remainder of the plan. Its stated aim was to 'provide comprehensive programs aimed at ... lifting industry efficiency, enhancing the skill base of TCF workers and increasing penetration into export markets' (Button 1986, p. 2).

In the March 1991 Statement, the Government re-stated its commitment to make available up to \$120 million for the IDS over the period to 30 June 1995. It also announced changes to the strategy designed to allow easier administration and greater take-up of the funds provided.

The revised IDS comprises four sub-programs:

- the incentives for international competitiveness program, which has the objective of encouraging exports, and import replacement, with an emphasis on early and intermediate materials processing;
- the infrastructure support program, which provides funding for the establishment of infrastructure such as training facilities, and for research and development;
- the imports credits scheme (discussed above); and
- the capitalisation grants program, under which a once-off payment is made to a firm in lieu of future yarn bounty payments in order to encourage accelerated restructuring.

These programs are administered by the TCFDA, although the capitalisation grants and the import credits programs are managed in cooperation with the Australian Customs Service. The Government will provide \$15 million a year, until 30 June 1995, for the incentives for international competitiveness program and the infrastructure support program.

Eligibility criteria for funding under the IDS are to be liberalised to enable a greater number of firms to participate. Take-up of funding had been low. For example, under the incentives for international competitiveness program, from its commencement until 30 June 1990 there were 62 applications for funding. Of these, 42 were rejected, eight accepted and 12 remained under consideration. The TCFDA gave as the reasons for the high rate of rejections: failure to provide a satisfactory business plan; failure to identify clear export and import replacement targets; and the lack of audited financial statements (TCFDA 1990b, p. 6).

### *Labour adjustment strategy*

The TCF labour adjustment program is to be reviewed to ensure that current arrangements and funding levels 'are adequate for the needs of workers displaced by the effects of the Government's decisions on TCF assistance' (DPM&C 1991, p. 5.16).

The level of retraining under the scheme has been low. The TCFDA reported that in 1989-90, out of 4 500 retrenchments notified to the Commonwealth Employment Service, 280 persons received labour adjustment assistance (TCFDA 1990b, p. 17).

TCF employment declined from 113 900 in May 1990 to 99 000 in May 1991, the latest period for which data are available. Since the plan was announced in 1986, the decline in employment has been concentrated in the footwear industry and amongst females employed in the clothing industry. For example, the decline in employment in the footwear industries totalled some 4 300 persons between November 1986 and May 1991. Over the same period male employment in the clothing industry increased.

### ***Abolition of safeguard mechanism***

The safeguard mechanism, whereby the TCFDA could suspend assistance reductions for up to twelve months if domestic production declined or was likely to decline below certain threshold levels, has been abolished. This removes an important threat to the progress of the plan before significant adjustment has had a chance to occur.

### ***Other changes***

The scheduled mid-term review of the plan has been cancelled. The operations of the TCFDA will be reviewed before its enabling legislation expires on 30 June 1995.

The Prices Surveillance Authority will monitor the prices of TCF goods with the aim of ensuring the benefits of lower protection are passed on to consumers.

### ***Return of tender security deposits***

On 11 November 1990 the Minister for Industry, Technology and Commerce announced the return of all TCF tender security deposits paid by importers to cover their 1990 and 1991 tender imports. The rationale given for the decision was that 'some importers did not want to take up quotas in the current market environment' (Button 1990). This decision has been reported to release to importers a total of \$150 million in security deposits — \$60 million from the 1990 round and \$90 million from the 1991 round.

Firms who successfully bid for TCF quota allocations were required to lodge a security deposit equal to 10 per cent of the estimated average import value for each quota category. Security deposits are normally forfeited for that part of the quota allocation which is not used. However, firms also have the option of selling their quota.

Faced with the loss of their deposits, importers could have been expected to adopt a loss minimisation strategy, and to import up to the point at which their loss from importing the next item did not exceed the 10 per cent they would otherwise forfeit to the Government. However, following the decision, importers would be expected to import only so long as they were able to recover the base duty and the quota tender premium, in addition to other costs. As a result, domestic manufacturers were subject to less competition from imports and consumers were faced with higher prices for TCF products covered by tender quota. In effect, the protection afforded domestic producers was increased by the return of the security deposits.

## **Pharmaceuticals industry**

In September 1987 the Government announced a set of policies to promote the development of the Australian pharmaceutical industry. It was stated that:

The objective was to create an environment which would encourage a significant increase in research and development performance by the industry, together with increased investment, production and export performance, and strengthened employment opportunities (Button and Blewett 1987).

The most significant of these initiatives was the requirement that the Pharmaceutical Benefits Pricing Authority (PBPA) take into account the level of a company's pharmaceutical activity in Australia when negotiating manufacturers' prices for products sold under the Pharmaceutical Benefits Scheme (PBS).

The means by which the PBPA gives effect to this requirement is known as the factor *f* scheme. Firms participating in the scheme receive increased prices for pharmaceuticals provided they meet either quantitative targets for research and development and export activity or satisfy the PBPA that they are substantially increasing activity in Australia. The scheme operates until 1992–93.

On 19 November 1990 the Commonwealth Government announced increased funding for the program of \$40 million and called for applications from drug companies wanting to join the scheme. New companies joining the scheme would be able to obtain higher prices for selected drugs for three years (Button and Staples 1990).

There are now nine companies in the scheme. The value of these price increases is approximately \$170 million if the companies' expectations are fully met. Price increases granted so far are valued at \$1.3 million in 1988–89, \$12.9 million in 1989–90, and \$16.6 million in 1990–91. The estimated value for 1991–92 is \$46 million. The PBPA expects companies to receive much larger price increases in latter years of the scheme because of lead times involved in increasing research and development and export capacity.

### **BIE review**

On 19 November 1990 the Government announced the Bureau of Industry Economics (BIE) would review the factor *f* scheme to assess how effective the program had been since it began in 1988. The review was due to be held in 1993, but was brought forward by the Government to avoid uncertainty about the future of the program. The review will report on:

- the current state of the industry and research linkages and the prospects for its development;
- factors constraining the development of the industry in Australia and the effectiveness and efficiency of factor *f* price increases under the pricing guidelines of the PBPA in addressing these constraints; and

- strategic options that may better meet the Government's objective of providing a competitive environment for the Australian pharmaceutical industry (Button and Staples 1991).

The BIE has presented an interim report to the Government, but no decision on the future of the scheme will be made until the final report, which will be publicly released, has been considered. The economic performance of the scheme depends crucially on how well the additional activity stimulated by it matches the activity which would have taken place in the absence of government controls over Australian pharmaceutical prices. At present there does not appear to be an explicit requirement that the PBPA consider this issue. As a result, key issues in assessing the scheme include:

- the degree to which domestic pricing arrangements for drugs influence the level of pharmaceutical activities in Australia, such as R&D, exports and production;
- the types of activity likely to be influenced by domestic pricing policy — for example, it is unlikely that the manufacture of a product in Australia that is almost totally aimed at the US or European markets would be significantly influenced by domestic price levels;
- whether the level of support available under the current factor f scheme more than compensates for the lower prices that would have been paid to manufacturers under the PBS;
- whether the current eligibility for the factor f scheme is the most effective way of overcoming any pricing distortions; and
- the relative importance of such a distortion in comparison with other factors which may inhibit the development of the pharmaceutical industry.

Restrictions on clinical trials have been identified by drug companies as an impediment to the industry's development. In his report on Australia's drug approval and evaluation process, Professor Peter Baume made recommendations 'to make the process more flexible and streamlined and to overcome any remaining impediment to the conduct of clinical trials in Australia' (Howe 1991). (See also appendix 7.)

The report's recommendations follow other initiatives implemented in 1991 such as breaking the link between clinical trials and marketing applications, and the introduction of a clinical trials notification scheme.

### **Customer premises telecommunications equipment**

Until 1993 access to the Australian market for certain customer premises equipment (CPE) is governed by a set of industry development arrangements (IDAs). The arrangements were introduced in July 1989 to replace various purchasing schemes operated by Telecom and are intended to provide a transition period for CPE producers to adjust to the tariff-only scheme that will take effect on 1 July 1993. [The tariff is scheduled to be set at 15 per cent. The arrangements are intended to encourage greater local production and exports, and move the industry to a position where it can compete internationally (DITAC 1991a).]

The customer equipment included in the scheme is: the first telephone; private automatic branch exchanges; small business systems/key systems; and cellular mobile telephones. Under the IDAs, firms wishing to gain access to the Australian market for customer equipment must receive authorisation from Austel. A points scheme has been introduced such that authorisation to connect to the telecommunications network will be restricted to those firms which achieve a threshold level of points for local content, research and development, and export activity. The number of points needed to retain endorsement progressively increases over the life of the arrangements. Failure to meet the required level of points results in a supplier having its endorsement cancelled and it is ineligible to re-apply until the next year. \*

Austel assumed responsibility for administering the arrangements in December 1989, but the Department of Industry, Technology and Commerce (DITAC) retains responsibility for determining policy matters.

### **Operation of the IDA**

In May 1991 Austel released its third quarter report for year two of the arrangements. There are 31 firms endorsed by Austel although some of these suppliers have yet to commence trading. Austel is arranging for these suppliers to seek a postponement of entry until the next financial year. The report also makes comparisons between the first year and the second year of the arrangements.

In the first nine months of the second year, endorsed suppliers reported a turnover of \$267 million. This is down \$99 million on the turnover reported in the first nine months of the first year. Local content was reported at 34.6 per cent of Australian production, down 8.2 per cent compared to the same period of the first year. Exports totalled \$32.6 million for the first nine months of year two. This was 4.6 per cent above turnover in the same period of year one. Suppliers invested \$13.0 million in research and development, or 4.9 per cent of turnover. This compares with \$14.1 million or 3.9 per cent of turnover in the first nine months of the first year of the arrangements.

### **Changes to the arrangements**

A bonus points system has been introduced in addition to the other methods for achieving the necessary points for endorsement:

Bonus points will be allocated annually on a pro rata basis of two bonus points for each \$200 000 (minimum \$200 000) invested in depreciable plant and equipment used in the processes of production of eligible customer premises equipment (DITAC 1991a, p. 3).

The method for the determination of research and development has also been 'reviewed and revised', but it is not clear whether this also makes it easier to achieve the necessary number of points.

## Report on developing telecommunications industry strategies in Australia

On 15 July 1991, DITAC released a report prepared for it by the Allen Consulting Group on developing telecommunications industry strategies in Australia (Allen 1991). The report examined current and future prospects for Australian industry in international telecommunications markets for equipment and services. As part of this examination the report partially evaluated the IDAs for customer equipment against the objectives of the scheme. The report noted that the IDAs only cover around one third of the \$1 billion CPE market. In comparing the equipment covered by IDAs with the sector of the industry not covered, the report questioned the effectiveness of the arrangements. It stated:

There is little evidence that IDA segments are leading to higher local content or export achievement than non-IDA segments. Little progress was recorded on local content in year two of the IDA program and exports remained a modest share of shipments (Allen 1991, p. 48).

The report also implied that the arrangements may be imposing significant costs on participating firms.

The IDA process is combining with recession to make most segments profitless — industry rationalisation is a likely consequence.

The authors of the report concluded that the present industry development arrangements for the sector will not be appropriate in the future deregulated environment. They stated that:

This applies particularly to local content requirements, as applied via the procurement processes of Telecom, OTC and Aussat, and as apply in the present IDAs for CPE. Using such requirements to protect industry segments which are not competitive, at least in an import substitution sense, would undermine the fundamental objective of delivering competitive services to telecommunications users.

In previous annual reports the Commission has commented that it is almost impossible to assess the level of assistance the IDAs provide to the local industry. Clearly, however, by restricting access to the Australian market, endorsed suppliers do receive assistance. This is confirmed by the report to DITAC which found that little of the CPE sector covered by the IDAs are competitive on an import substitution basis. Because telecommunications service providers must source their equipment locally, prices to Australian consumers will be higher than if the arrangements did not apply. In the report prepared for DITAC, NEC commented that in its case 'Australian production is at least 15% more expensive than Asian sources'.

Overall the IDAs are highly complex and directive in nature. They provide a transition from a regulated to a deregulated setting, but in a way which involves continuing costs to consumers, the firms involved, and in the administration needed to oversee the arrangements. The apparent lack of benefits from the arrangements illustrates the dangers of an approach to restructuring which attempts to encourage a specific industry structure. A less costly approach to transition would have been to introduce a tariff or bounty and phase assistance down to the rate that will apply in 1993.

## **Government supply of hearing aids**

The Commonwealth provides hearing aids free of charge through the National Acoustic Laboratories (NAL) to those people eligible under the Hearing Services Program. Hearing aids and services for eligible people are not free of charge if they are provided by a supplier other than NAL. NAL accounts for about two-thirds of the total market for hearing aids.

In the past, hearing aids dispensed by NAL were most often purchased by NAL by tender from producers/assemblers in Australia. Commonly, the case and mechanical parts of the aids were made in Australia while electronic components such as microphones and receivers were imported from the producers holding world-wide patents.

In October 1990 the Government announced new arrangements under which NAL will collaborate with Australian Hearing Aids (AHA) in the research, design, development and testing of hearing products while AHA will manufacture the hearing aids in Australia under a government contract. Supply of hearing aids to NAL will commence in January 1993. The contractual arrangement between NAL and AHA expires on 30 June 1997.

There is a clear division in the range of services available to those hearing-impaired people who are eligible for Commonwealth assistance and those who are not. Effectively, NAL has a monopoly of provision to those qualified for the Hearing Services Program. The Commission's report on aids and appliances for people with disabilities found that NAL's monopoly position adversely affected the efficiency and performance of hearing services in many areas. Clients of the Hearing Services Program were subject to restricted choice of aids and longer waiting times. It also increased prices for those not eligible for the Hearing Services Program and inhibited growth of a wider range of hearing services (IC, 1990a, p. 61).

The Commission had recommended that NAL cease to have a monopoly over supply to Hearing Services Program clients, and that other suppliers be permitted to compete with NAL to provide hearing aids and services to those clients, with subsequent reimbursement from the Commonwealth.

However, the collaborative arrangement is dependent upon NAL maintaining its monopoly of Hearing Services Program clients. As a result, the benefits from less restrictive supply arrangements have been forgone. Those benefits would have been available both to Hearing Services Program clients and to people with hearing disabilities generally.

## Citric acid production

The Government announced a bounty on the production of citric acid in the March 1991 Statement. The bounty is to be paid on citric acid produced from 12 March 1991 to 31 December 1995. No public review was conducted before the decision was announced.

In introducing the Bill, the Minister for Science and Technology stated that the Government had decided to introduce the bounty because:

of the importance of the Sirius technology and production facilities as the foundation of a carbohydrate based fermentation industry in Australia (Crean 1991a, p. 2069).

The Minister further stated:

the Bounty is not a protection measure but is a support mechanism aimed at offsetting the distortions which prevent the intrinsic competitiveness of the Sirius technology being realised, enabling the company to achieve commercial viability in citric acid production.

The bounty is to be paid at a rate of \$700 per tonne in the first year reducing to \$150 per tonne in the final year. The total cost of the bounty is expected to be \$7.27 million in current prices. The financial year breakdown is as follows:

1991–92	\$1.05 million
1992–93	\$1.65 million
1993–94	\$2.17 million
1994–95	\$1.85 million
1995–96	\$0.55 million.

Bounty payments will be contingent on a number of conditions being met. Recipients will have to:

- continue to research, develop and apply the technology to the commercialisation of citric acid in Australia;
- contribute to research in new product development in fermentation technology with a view to commercialising that technology in Australia;
- explore international market opportunities for the product; and
- ensure maximum advantage is taken from the expertise and know-how associated with the development and production of citric acid and other new products in Australia by suitable licensing, franchise or other arrangements.

According to the Minister the 'level of support will be linked to success in commercialising the technology in Australia and it directly addresses the pricing distortions' (Crean 1991a). Although the bounty is paid on citric acid production it is firm specific, as Sirius Biotechnology Ltd is likely to be the only bounty recipient.

Part of the rationale for this assistance is to offset the higher domestic price of sugar which is said to make citric acid production less competitive. However reducing this distortion on a highly selective basis risks worsening, rather than improving, resource allocation by increasing the disparity in assistance levels between citric acid

production and other industries not able to obtain assistance to offset price distortions on their inputs.

The other rationale for the bounty is to 'support citric acid production to facilitate the continued development and commercialisation of leading edge Australian fermentation technology' (DPM&C 1991, p. 5.4, emphasis added). However, paying a bounty on an uncompetitive product which embodies this technology is an indirect way of supporting the technology. It is not clear that this approach will fulfil the Government's objectives as well as one which assisted the desired activity directly.

Assisting an industry to use advanced technology, will not necessarily enable it to make a greater contribution to the growth of real wealth — it may acquire the specified outward appearances of competitiveness, but remain reliant on public support.

The bounty is in addition to other government assistance provided to developing the technology. Sirius has received \$375 000 in grants relating to citric acid production, and research projects with the CSIRO and the University of Melbourne are receiving a total of \$932 000 in Commonwealth funding.

### **Photographic colour film production**

The bounty on the production of photographic colour film, which commenced on 1 January 1990, is only available to those producers who are registered for the entire five year bounty period. This limits the receipt of the bounty to Kodak Australasia.

The bounty payments have a ceiling of \$36 million over the life of the agreement and only the first three years are to receive an appropriation. Some details on the bounty were provided in the Commission's 1989–90 Annual Report. Among the conditions is the requirement to maintain export commitments for five years. Many of the specific details, however, about conditions applying to the bounty are contained within the Photographic Industry Development Agreement which has not been made public by the Government.

Payments of \$12 million were made in 1990–91. According to DITAC (1991c, p. 70) the bounty contributed to a 25 per cent increase in exports of photographic film and chemicals over 1989–90 levels.

The bounty is providing significant assistance to one activity by one company. It is difficult to estimate the rate of assistance to Kodak, however the bounty has had a substantial impact upon ASIC class 3341 (Photographic and optical goods) to which colour film production belongs. The effective rate of assistance to photographic and optical goods increased from 4.3 per cent in 1988–89, before the bounty was introduced, to 17 per cent in 1990–91 after one full year of bounty payments. The substantial increase in the effective rate is despite phased reductions of tariffs to other commodities in the class. For such an increase to emerge at a much broader level of aggregation than the activity to which the bounty applies indicates the effective rate of assistance to Kodak's colour film production must be extremely high.

The conditions attached to the bounty relating to exports have been referred to at the GATT by the European Community (EC). The EC has alleged that:

the granting of this subsidy is expressly contingent upon Kodak maintaining and increasing its exports from Australia (notably to Asian Markets) at least over the next five years (GATT 1990).

It has further alleged that:

The granting of a straightforward export subsidy, even in the absence of explicit export performance requirements in the relevant legislation ... is contrary to Article 9 of the [GATT] Agreement, in particular as exemplified by item (a) of the Illustrative List of Export Subsidies annexed to the Agreement (GATT 1990).

The EC has requested the Committee on Subsidies and Countervailing Measures to undertake an effort for conciliation under the Agreement.

Attention of this kind has the potential to undermine Australia's efforts in the GATT to reduce protection generally, and is a factor to be taken into account when considering such assistance.

## Appendix 6

### Alternative assistance measures

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This appendix reports on a range of assistance measures and policies that support selected groups of industries or particular activities. The measures reported are:

- civil offsets, partnerships for development and fixed term agreements;
- government purchasing;
- defence procurement;
- export assistance;
- research and development; and
- industry extension services.

While tariffs are falling, these alternative measures can provide substantial assistance in ways that are not often transparent. This year has seen some significant changes to existing schemes and the introduction of some new measures. The budgetary costs of export assistance and R&D support are about \$3 billion. Other measures have less obvious costs. It is therefore difficult for the community to assess the extent, and effects of the assistance provided.

#### Australian civil offsets program

The civil offsets program has operated in various forms since 1970. With the accession of the Australian Capital Territory to the Australian Civil Offsets Agreement in May 1990, all States and Territories participate in the program. The Australian Civil Offsets Agreement originally covered all Commonwealth civil procurement and State and Territory purchases of information technology products. The extension of the agreement to cover State procurement of commercial vehicles, plant and equipment and power generation and distribution equipment from 1 January 1990 'is expected to result in substantial increases in total offsets obligations administered on a national basis' (DITAC 1991*b*, p. 5).

The civil offsets program uses the bargaining power of government procurement programs to assist Australian firms gain access to markets and technology that are available to the large overseas corporations supplying Australian governments.<sup>1</sup> In 1989–90, \$1 895 million of government procurement incurred offset obligations of \$372 million. The aerospace and information technology sectors accounted for 71 per cent and 17 per cent respectively of offsets obligations.

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<sup>1</sup> Offsets are required in respect of purchases which individually or collectively exceed \$2.5 million and the imported content exceeds 30 per cent. In areas not covered by the national agreement, such as medical and scientific equipment, the States use a \$1 million imported content threshold.

Offset obligations can be met by exports of goods and services, research and development, technology transfer and a range of other activities. In 1989–90, \$353 million of offsets obligations were discharged, principally through exports (\$165 million) and R&D (\$127 million).

Offset activities are generally valued on the basis of the activity generated for Australian industry. However, for expenditure on research and development and training, a multiplier of three can be applied. The most recent annual report on the offsets program has clarified that this multiplier for R&D:

is only applicable where commercialisation in Australia is intended. Where this is not the case R&D will be viewed as the export of a service and only be eligible for offsets credits on a one for one basis (DITAC 1991*b*, p. 6).

Another development in 1989–90 was that Qantas' air freight services became accepted as an offsets activity to the value of the high technology information components used in the services. This is taken to be 30 per cent of the cost of the freight service. Activities of this type are seen as promoting and assisting the internationalisation of Australia's service industries.

Civil offsets benefit a narrow range of Australian companies, particularly those in the aerospace and information technology industries. Indeed, the offsets program has been 'the main industry development tool for the aerospace industry' (DITAC 1991*b*, p. 20). The net benefit to Australia from the assistance provided by the civil offsets program is unclear because it is not possible to identify procurement costs with and without offsets obligations. The difference between the contract price paid by government and that which would have been paid without offset obligations represents a subsidy from taxpayers to selected local activities.

The offset program criteria supposedly preclude deals that increase the price paid by government for goods and services but it is difficult to accept that the additional obligations imposed by the civil offsets program on overseas suppliers do not affect contract prices. Past information suggests that cost penalties have been associated with offsets (IAC 1989*d*, p. 66).

Confirmation that offsets involve an extra cost burden is also to be found in the Commonwealth's policy of only applying offsets to purchases made by organisations having a 'Commonwealth bestowed protective advantage'. The States also exempt a number of their authorities on the basis of similar criteria. In the March 1991 Statement the Government announced that offsets would not apply to aircraft purchased for domestic use and delivered after 31 October 1990 — the commencement of domestic airline deregulation. However, Qantas and the Civil Aviation Authority, for example, remain in the program. The continued application of offsets obligations to OTC, Aussat and Telecom has been under review for several years and is now subsumed into the wider debate about the introduction of the second carrier in the telecommunications industry.

Activities which benefit from the offsets program are also eligible for other government support such as export, R&D and bounty assistance and this makes the

assistance implications even less transparent. Overlaps exist with other industry programs such as for firms participating under the industry development arrangements (IDAs) in the telecommunications sector (see appendix 5). Companies with offsets obligations undertaking work to meet IDA arrangements and which also meet offsets program requirements can claim the activity for both schemes (DITAC 1991*b*, p. 23).

The transparency of the civil offsets program could be increased by a system of dual tendering — where the overseas supplier submits two tender prices, one with and one without offset or similar obligations. Dual tendering would allow the additional cost of civil offsets to be identified better and be compared with other budgetary priorities. This was recommended by the 1985 Inglis Report but was not taken up by the Commonwealth.

### **New arrangements**

Major changes to offsets arrangements were announced in the March 1991 Statement. Civil offsets are no longer seen as an appropriate mechanism for the development of an Australian aerocomponents industry which is to be based on the formation of 'risk sharing ventures' with the world's major aerospace firms. The Government will be negotiating with these firms to replace existing civil offset arrangements with 'longer term strategic agreements' (DPM&C 1991, p. 3.25). These agreements will absolve participating firms of all existing and future obligations under the civil offsets program. A long term agreement has been signed with the Boeing company.

The March Statement also announced that partnerships for development and fixed term agreements would replace the civil offsets program in the information technology industry. These changes are discussed below. The Commonwealth also announced that it would negotiate with State Governments to exempt purchases of passenger, light commercial and four wheel drive vehicles from offsets obligations.

### **Partnerships for development and fixed term agreements**

The partnerships for development program was initiated in 1987 as part of a strategy to promote the development of Australian information industries. Partnership agreements provide an alternative long-term arrangement to participation in the civil offsets scheme for overseas suppliers whose sales to government exceed \$40 million.

Partnership agreements aim to increase the commitment of transnational information technology companies to making Australia a base for doing business with the world. The Department of Industry, Technology and Commerce anticipates that participating transnational companies will form alliances with Australian firms to market local firms' products, and through local manufacturing, to make demands on Australian suppliers to meet word standards (DITAC 1991*b*, p. 41)

When a transnational company signs a standard partnership agreement with the Commonwealth it makes commitments to achieve by the seventh year: expenditure on R&D equal to 5 per cent of its local annual turnover; exports equal to 50 per cent of its annual imports; and an average of 70 per cent local value added across all exports.

In 1989–90 six more transnational companies signed partnership agreements, adding to the 12 existing participating overseas firms. Partnership agreements also involve over two hundred local firms and institutions.

In 1989–90 the partnership program exceeded aggregate export targets by 5 per cent and research and development targets by 38 per cent. The Department of Industry, Technology and Commerce estimates the partnerships program will generate exports worth in excess of \$1.7 billion a year and research and development worth \$400 million a year by 1997 (DITAC 1991*b*, p. 42).

In the March 1991 Statement the Government announced that partnership agreements will be mandatory for all companies with information technology sales of over \$40 million to government while firms with sales between \$10 million and \$40 million are expected to sign fixed term agreements. Offset obligations will not apply in the information technology industry for sales of less than \$10 million (DPM&C 1991, p. 3.27).

Fixed term agreements allow for more flexibility as obligations can be discharged outside of a contract-by-contract environment. These agreements will last three to five years and combine elements of the pre-qualified offsets and partnership agreements. The pre-qualified offsets agreement allows for the provision of offsets to be undertaken in advance of obligations that arise over a three to five year period.

There is a growing trend to replace offset obligations with 'strategic agreements' of various descriptions. This will make it increasingly difficult to assess the impact of offset and similar local content programs on procurement contract prices. While partnership and fixed term agreements have a different administrative structure to civil offset obligations, they have the same purpose — using government purchasing as leverage to get foreign firms to increase local content and to export from Australia.

Like the basic offsets program, partnership and fixed term agreements provide assistance to a few industries at the expense of taxpayers (through higher prices in government contracts) and the many other projects competing for resources and market share across the economy.

Partnership and fixed term agreements, like the civil offsets obligations, impede the extent to which world prices, domestic costs and relative rates of return determine the success and scale of alternative business ventures open to Australians. Partnership and fixed term agreements may, however, mitigate the cost of the overall offsets program by expanding the options available to overseas firms for the discharge of offset obligations. The Industry Commission is to review long term agreements for industries supplying goods and services to governments in 1993.

### **Government purchasing policy**

The Commonwealth purchases about \$10 billion in goods and services each year. The combined purchasing power of the Commonwealth, States, Territories and Local Government totals \$30 billion. In some industries, such as computer equipment, government purchases represent almost half of all sales in Australia. As a

consequence, the potential for government purchasing policy to affect industry development is significant.

A major policy development in 1990–91 was the 'Purchase Australian' campaign — a promotion campaign to encourage all levels of the public sector to consider the local product if it represents value for money. The program also emphasises increased pre-tender communication with additional suppliers through, for example, publication of draft tender specifications so that more firms will have time to consider tendering for government contracts.

Several changes were announced in the March 1991 Statement affecting purchasing from the information technology industry. The Commonwealth is establishing a panel of companies that will service the major public sector information technology projects. The panel will be composed of both local and overseas companies with a demonstrated commitment to significant activity in Australia.

Over the last few years Commonwealth purchasing policy has undergone reforms to emphasise value for money, increased flexibility and the abolition of local preference. As with the offsets program and its derivatives, it is important that any additional costs associated with promoting the chances of success for local suppliers in government tendering be made clear to the community.

## **Defence procurement**

The increased emphasis on local involvement in defence capital expenditure is giving defence procurement policies a substantial and growing influence on Australian industries such as shipbuilding, ship repair and aerospace. The defence procurement program has the potential to provide considerable assistance to selected industries. While Australian involvement may contribute to achieving the Government's objective of defence self reliance, it is important that the accompanying costs to the taxpayer and the economy be made clear.

In 1989–90 the Commonwealth spent about \$8.5 billion on defence, including long-term commitments to projects lasting to the end of the century. Ten major new equipment acquisition projects or project phases valued at \$3.9 billion were approved (DOD 1990, p. 52).

Defence outlays over the 1990s should sum to about \$100 billion. Of this, about \$25 billion is anticipated to be new capital equipment and facilities, with almost half already committed to projects (Ray 1991). Until recently, about 30 per cent of defence capital expenditure was incurred in Australia but this figure is rising significantly because projects such as the new submarines and patrol frigates have substantial local content.

The objective of Australian industry involvement is to foster an indigenous capacity for the repair, overhaul and adaptation of military equipment and supplies and to encourage a range of technology, supply and support capabilities consistent with the longer term requirements of the defence force and government policy. The Australian industry involvement program promotes Australian participation in defence-related

acquisitions and facilitates the commercial exploitation of locally developed equipment and intellectual property. The Australian industry involvement program also incorporates offsets by overseas suppliers. The value of new defence offset obligations in 1989–90 was \$347 million (DOD 1990, p. 63).

There is evidence that Australian industry involvement in defence procurement has entailed significant cost premiums and project overruns (IAC 1988, app 5). In recent years considerable effort has been devoted to improving efficiency in the Australian defence industries and defence procurement processes. A public examination of the extra costs attached to local sourcing in defence procurement programs would permit a better evaluation of their relative contribution to the defence of Australia and the economic welfare of the community.

### **Export assistance**

Commonwealth assistance to exporters in 1990–91 involved direct expenditure of around \$550 million. The purpose of this assistance is to promote a greater level of export orientation for Australian industry (Kerin and Willis 1991, p. 3.185). A number of strategies are employed including: the provision of information and promotional assistance; the provision of direct financial assistance for developing export markets; and the provision of finance and insurance services including concessional export finance. Table A6.1 provides details of assistance afforded to exports through these strategies.

The Commonwealth also provides export assistance directly to specific industries. For example, \$25 million was allocated to the Australian Wool Corporation in 1990–91 for wool promotion by the International Wool Secretariat. Export assistance is also available to the Australian automotive industry through the export facilitation scheme. The effects of this scheme are virtually identical to those of a straight export subsidy funded by the revenue forgone from import duties that would otherwise be payable on the products imported duty free under the scheme (IC 1990*d*).

### **Recent developments**

The Commonwealth Government announced a number of changes to its export assistance measures in its March 1991 Statement. Included among these changes was a commitment to implement the recommendations made by McKinsey and Co in their review of Austrade. These include:

- the transfer of Austrade from the Department of Industry Technology and Commerce to the Department of Foreign Affairs and Trade in order to provide closer linkages with Australia's diplomatic network;
- a greater concentration on markets that are perceived to provide 'more substantial trade opportunities', in particular those of north and southeast Asia;
- an increase in overseas staff who will have greater independence and responsibility under new management arrangements;

- transfer of some functions to regional offices to ensure greater attention is paid to the needs of exporting firms;
- the rationalisation of domestic services with an increasing concentration on firms with the potential to make a substantial contribution to exports; and
- the establishment of closer cooperation between Austrade and others providing export related services (DPM&C 1991, p. 5.40).

**Table A6.1**  
**Assistance to exports: 1990–91 and 1991–92**  
(\$ million)

<i>Program</i>	<i>1990–91</i>	<i>1991–92<sup>a</sup></i>
<b>Australian Trade Commission</b>		
Marketing operations	99.9	124.4
Special purpose programs		
textiles clothing and footwear	0.9	0.5
engineering internationalisation	1.8	1.3
investment promotion	5.4	7.9
<b>Export market development scheme</b>		
Operating expenses	5.9	3.5
Payments under the EMDG Act 1974	162.0	134.0
<b>Trade enhancement schemes</b>		
Innovative agricultural marketing	4.1	8.4
Other trade enhancement schemes (including the international trade enhancement scheme and the international business development program)	4.5	43.9
<b>Export finance and insurance</b>		
Interest subsidy for financing eligible export transactions	7.9	14.7
Payments in respect of national interest business	234.8	264.4
<b>Product development<sup>b</sup></b>		
Operating expenses	6.0	5.4
Asia–Pacific fellowship scheme	0.0	4.1
<b>Total</b>	<b>533.2</b>	<b>612.5</b>

a Budget estimates

b Product development in 1990–91 included activities such as Austrade's sponsorship of the 1990 Australian Export Awards and the inaugural International Business Week.

Source: DITAC (1991c).

EFIC is to be split from Austrade and re-established as an independent statutory corporation by 1 November 1991, subject to legislation being in place. Other changes to EFIC include:

- allowing greater use of interest subsidies in EFIC's export financing activities;
- establishing a new \$50 million facility to cover bonding requirements for firms with a proven record of performance but which are unable to meet the requirements of private bonders; and
- provision of \$200 million in callable capital to supplement existing reserves which back EFIC's insurance guarantee and lending operations.

As well as the changes to Austrade and EFIC, the Government also announced the establishment of a new program — the Asia-Pacific Fellowship Scheme — which aims to aid Australian companies to trade successfully in the Asia-Pacific region by assisting business managers and graduates of commercially oriented disciplines to gain experience of work and language in Asia. The scheme is to be administered by Austrade and is estimated to cost \$4.1 million in 1991-92 and a further \$6.4 million in the following two years (DPM&C 1991, p. 4.21 and DITAC 1991c, p. 262).

Another program announced in the March economic statement was the small to medium enterprise development program which aims to remove major impediments to small business identified by the Beddall Report (1990a). Further details of this program are provided in appendix 8.

Apart from these changes, a number of other developments in export assistance have occurred in the past year.

The first payments were made under the recently established International Trade Enhancement Scheme (ITES). A total of \$5 million in funds has been disbursed to three companies under the scheme. ITES is a discretionary scheme which provides funds to companies which already have a record of exporting. For instance, one of the firms receiving ITES funding plans to use the funds to expand its sales of engineering services and automotive and other transport industry products in southeast and north Asia. Another plans to use its ITES funding to give it the 'support necessary to establish a comprehensive presence' in the international market for advanced public transport ticketing systems. The third firm is to use its ITES funding to expand its exports of construction and engineering services to the international minerals processing industry (Button 1991a, b).

Another development with implications for the cost of Commonwealth export assistance has been the Iraq-Kuwait war. Iraqi defaults on payments of Australian Wheat Board credit sales have left the Commonwealth liable for over \$250 million in national interest business insurance payments in 1991-92. National interest business payments are also expected to increase in 1991-92 and subsequent years as a result of an interest rate reduction arising from the Paris Club write down of Egyptian debt. This effectively reduces by half the Egyptian wheat debt of more than \$280 million, insured by the Commonwealth (Kerin and Willis 1991, p. 3.186).

These payments represent a large proportion of the Commonwealth's potential liabilities in respect of the national interest business it undertakes. The Commonwealth's contingent liabilities for insurance contracts, indemnity and guarantees under its national interest business totalled \$1.1 billion in 1990. The payments in respect to the Iraqi debts account for almost one quarter of this. While not exposed to insurance liabilities as risky as those undertaken by the Commonwealth, EFIC has significant contingent liabilities totalling almost \$2.9 billion in 1989–90 (Australian Trade Commission 1990, p. 92).

## **Research and development**

Direct Commonwealth support for research and development (R&D) involved expenditure of around \$2.4 billion in 1990–91. This represents a real increase of 15 per cent in expenditure compared with 1984–85 levels (figure A6.1). This support is divided among a variety of programs and agencies including:

- higher education research which accounted for around 40 per cent of the Commonwealth's R&D budget in 1990–91, and includes funding of the Australian Research Council and the research component of general university funding;
- Commonwealth research organisations which attracted 34 per cent of total R&D support in 1990–91, and includes the Commonwealth Scientific and Industrial Research Organisation and the Defence Science and Technology Organisation;
- special purpose or directed grant schemes which accounted for 16 per cent of the R&D budget and includes the national procurement development program and the grants for industrial research and development scheme (on which the Commission is to receive references in 1991 and 1992); and
- revenue forgone as a result of the 150 per cent tax concession for R&D expenditure and the 100 per cent tax concession for investment in Management and Investment Companies, which accounted for the remaining 10 per cent of the Commonwealth R&D budget.

A summary of the main areas receiving direct Commonwealth support for R&D is shown in table A6.2. In addition to direct support, there are a number of Commonwealth schemes that provide indirect support to R&D activities: for example, the partnerships for development program and the Australian civil offsets program. The factor f pharmaceutical scheme and the customer premises telecommunications equipment scheme also support the performance of R&D. Details of these schemes are contained in appendix 5.

## **Recent developments**

A number of changes to the Government's R&D programs were announced in the March 1991 statement. These included a permanent extension of the tax concession for R&D at the 125 per cent level and the establishment of an advanced manufacturing technology program. The first 15 successful applicants for grants under the

cooperative research scheme were also announced in March 1991. Details of these programs are contained in appendix 8.

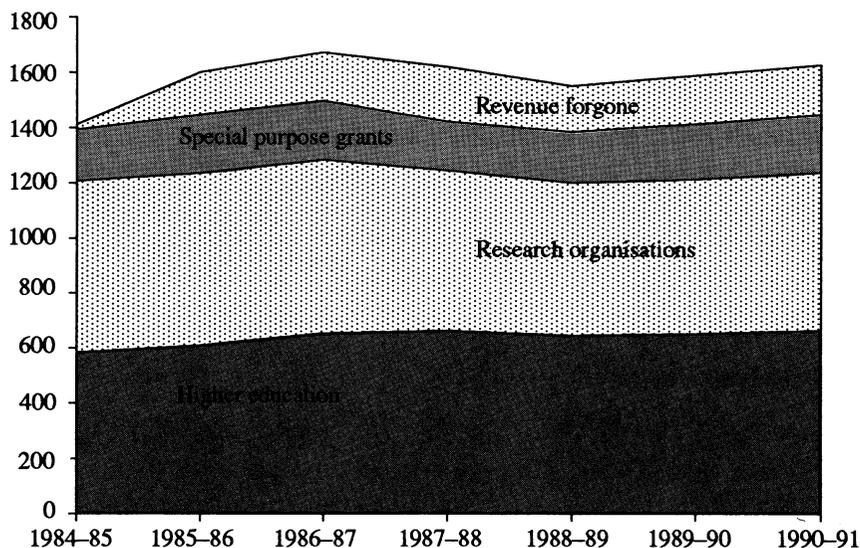
The Government also announced the provision of a bounty for the production of citric acid by way of fermentation in order to enable the 'continued development and commercialisation of leading edge Australian fermentation technology' (DPM&C 1991). Details are provided in appendix 5.

### Commercialisation

Another recent development has been the increasing emphasis placed by the Government on the commercialisation of the public sector research effort by Australian firms. The commercialisation emphasis is in response to the perception that Commonwealth funded research is developed more by overseas firms than Australian firms and that, as a result 'Australia is not deriving all the potential benefits from its strengths in research' (Free 1991a).

Concern over the commercialisation of publicly funded research led the Government to establish a task force to examine and recommend possible methods to promote commercialisation of Australian R&D. The Government also announced that it would be promoting greater commercialisation of medical research within the existing National Health and Medical Research Council funding arrangements (DPM&C 1991, p. 5.32). Most of the Commonwealth research organisations have also acted to assist commercialisation by establishing or improving the performance of intermediaries which act as brokers selling publicly funded research to private companies for commercial development (BIE 1990).

**Figure A6.1**  
Real R&D funding: 1984-85 to 1990-91  
(\$ million)



Source: Free (1991b)

**Table A6.2**  
**R&D expenditure : 1990–91 and 1991–92**  
 (\$ million)

	1990–91	1991–92 <sup>a</sup>
<b>Higher education</b>	<b>987.4</b>	<b>1 081.8</b>
<i>of which</i>		
Estimated research component of general university funding	660.0	680.0
Identifiable research support for universities	155.0	160.0
Australian Research Council and other funding <sup>b</sup>	171.4	239.9
<b>Commonwealth research organisations</b>	<b>859.9</b>	<b>891.7</b>
<i>of which</i>		
Commonwealth Scientific and Industrial Research Organisation	421.1	448.1
Defence Science and Technology Organisation	227.2	221.1
Bureau of Mineral Resources	52.9	54.2
Antarctic Division	62.8	68.2
Australian Nuclear Science and Technology Organisation	62.6	64.9
<b>Special purpose and directed grants</b>	<b>309.1</b>	<b>384.0</b>
<i>of which</i>		
Grants for industry research and development	29.6	32.2
Primary industries and energy research and development net of industry contributions	98.2	116.6
(NH&MRC) research grants	94.7	103.3
Motor vehicle R&D	4.7	2.8
Cooperative research centre grants	–	19.5
<b>Revenue forgone as a result of tax concessions</b>	<b>266.0</b>	<b>250.0</b>
<i>of which</i>		
150 per cent tax concession for R&D expenditure	232.0	250.0
100 per cent tax concession for investment in Management Investment Companies	34.0	–
<b>Total</b>	<b>2 422.0</b>	<b>2 607.0</b>

a Budget estimate

b Other funding includes postgraduate awards, fellowships, overseas postgraduate research scholarships, special centres and infrastructure.

Source: Free (1991b)

The commercialisation of publicly funded research has the potential to benefit industry, through increased access to commercially relevant technology, and research organisations through additional funding and input from industry. However, it may also have the potential to affect future research programs because some projects are more likely to attract industry funding than others. Projects that promise substantial benefits to the community but which have low commercial returns, such as some environmental research, may be overlooked if there is too much emphasis on commercialisation. Similarly, an overemphasis on commercialisation could divert resources into activities in which Australia will not have a comparative advantage. Requiring Commonwealth research organisations to give preference to local industry when seeking a commercial partner may mean that the community will forgo greater returns available from licensing technology overseas or from partnerships with foreign firms. As a result, Australia will be the poorer.

### **Industry extension services**

One of extension services provided by governments to industry is the National Industry Extension Service (NIES). This scheme is jointly funded and administered by Commonwealth, State and Territory Governments to provide a network of business, informational and advisory services. The program is designed to improve the effectiveness and efficiency of small and medium businesses in the traded goods and service sectors, thereby increasing their competitiveness in international markets. NIES provides a free diagnostic service for client companies and may provide subsidies for external consultancies, usually on a dollar for dollar basis.

In February 1990 the Commonwealth Government decided to extend the NIES program until 1995. State and Territory Governments have also indicated their willingness to preserve the existing partnership arrangements with the Commonwealth Government until 1995. The Industry Commission is to review the effectiveness of NIES before the end of 1993.

In the March 1991 Statement the Government announced the establishment of a sub-component qualification scheme, now referred to as the sub-component suppliers scheme. To facilitate the development of a network of Australian subcontractors, the Commonwealth and State governments, working through NIES, were to examine the establishment of a scheme to assist smaller manufacturers meet the quality, design and process standards of overseas aerospace companies. The scheme 'will help to identify important value-adding activities which are not currently available on a sub-contract basis in Australia' and support the necessary qualification procedures (DPM&C 1991, p. 5.45).

Also in the March 1991 Statement the Government announced the introduction of the NIES enterprise network program. The purpose of this program is to facilitate small business building the 'critical mass' that is perceived as being necessary for international competitiveness. The program will seek to form networks and joint ventures between complementary small business enterprises. NIES has already provided funds for a number of pilot network programs in the food, furniture, steel,

scientific equipment, electronics, agricultural machinery and medical sectors. This program is funded as part of the small to medium enterprise development program which has been allocated \$3.4 million for 1991–92.

Commonwealth funding for NIES during 1990–91 was \$15 million of which \$10.5 million was allocated to the States and Territories. An estimated \$16.5 million will be outlaid for NIES in 1991–92.

In the 1991–92 budget, the Government announced the introduction of two new schemes to facilitate rural and regional development: the business advisers for rural areas program and a rural industries business extension service. Details of outlays under these schemes are provided in appendix 8.



## **Appendix 7**

### **Developments in regulation review**

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The review of existing regulation of the private sector, and the vetting of new regulatory proposals, is a fundamental component of any program of microeconomic reform. The policy guidelines of the Industry Commission Act reflect the Commonwealth Government's intent to reduce regulation of industry — at all levels of government in Australia — where this is consistent with social and economic goals.

The incorporation of the Business Regulation Review Unit — now called the Office of Regulation Review (ORR) — into the Industry Commission has thus provided an opportunity to consolidate the Commission's work on regulation. Accordingly, the modus operandi of the ORR has changed. Its public information role has been, to a large extent, incorporated into that of the Commission. In particular, the ORR has provided input to Commission inquiries in the areas of business law and administrative regulation of government business enterprises and statutory marketing authorities. Meanwhile, the ORR has increasingly drawn on Commission expertise and reporting in providing advice on regulatory matters to the Structural Adjustment Committee of Cabinet.

This appendix describes major changes in the regulatory environment of business and draws attention to some specific reforms in sectors which have been subject to review. It also comments upon the implications for economic efficiency of some of the reforms and includes a case study of deregulation in practice. Changes in particular Commonwealth regulatory regimes are the subject of the first section. The second section discusses prospective changes to regulation making processes, and the impact of deregulation on NSW egg markets is analysed in the appended case study.

#### **Changes in Commonwealth regulation**

The rate of Commonwealth Government regulation making remains historically high. One measure of this rate is the number of regulations considered for disallowance by the Senate's Standing Committee on Regulations and Ordinances. The Committee examined 1 258 individual regulatory instruments in 1989–90 (SSCRO 1991, p. 3). This is approximately 20 per cent higher than the number of comparable regulations considered in 1988–89, a previous record year.

Only part of this high rate of regulation can be explained by the implementation of reform measures and changes to administrative arrangements.

During the year the Commonwealth Government assumed, from the States, prime responsibility for companies and securities regulation. In some product markets, it implemented reform measures proposed by the Commission and others. And a number of important new law reform initiatives were announced.

## **Companies and securities regulation**

The new Commonwealth companies and securities legislation is perhaps the best current example, in the area of economic regulation, of a shift in emphasis from a predominantly administrative regime to one which relies on regulation by civil and criminal law. It was presented to Parliament in 1988 largely in an attempt to address the need, recognised by the 1974 Rae Committee, for a single, national regime for companies and securities control. The legislation replaced the separate State corporate affairs commissions and the National Companies and Securities Commission with a more independent Australian Securities Commission. But as well as unifying and simplifying companies and securities law Australia-wide, the new regime was designed to significantly deregulate business activity.

Under the new regime, the Australian Securities Commission (ASC) operates more as a corporate 'watchdog', rather than in the administrative role of the former State corporate affairs agencies. The ASC is less interventionist, with the emphasis on providing a framework for the market to operate — by ensuring transparency in dealings through the general disclosure provisions rather than telling market participants how they should behave and precisely specifying what should be included in prospectuses. The purpose of the regulation has become less concerned with forcing detailed disclosure and more focused on protection of the integrity of the market.

Some parts of industry and the legal profession have cautioned that the new prospectus requirements in the Corporations Act are overly onerous and likely to increase the costs of seeking capital from the public. The Commission is aware that the new requirements have increased uncertainty in capital markets and is examining the issues in its inquiry on the availability of capital.

It is apparent that some of the changes are designed simply to ensure the effectiveness of the provisions as a whole and close opportunities for evasion, such as by increasing the range of people held accountable for the accuracy and bona fides of prospectuses. Defences ensure that only those participants in a position to know or recognise the offensive inclusions or omissions are held liable.

Other changes may not be as onerous as at first they appear. For example, the new 'due diligence' provisions may simply reflect similar existing provisions of the Trade Practices Act rather than much more onerous interpretations in the USA and Canada.

And, in some areas, the new prospectus provisions are much less onerous. Previously, someone charged with including an 'untrue statement or non-disclosure' in a prospectus had the onus of disproving the claim on the balance of probabilities. Under the new provisions, the onus is on the prosecution to prove the offence according to the conventional burden of proof in criminal law.

The Commission has yet to judge the net impacts of these matters on the costs of capital raising and the balance of market incentives.

## **Competition policy**

Several aspects of restrictive trade practices regulation are under review. These include Trade Practices Commission (TPC) proposals to increase the maximum level of penalties under Part IV of the Act and to extend the operation of the mergers provision to include takeovers by consortiums. In addition, the Senate Standing Committee on Legal and Constitutional Affairs is reviewing the market dominance test in mergers, and considering whether compulsory pre-merger notification should be introduced and whether compulsory divestiture of existing monopolies should be available.

The TPC argues that the present pecuniary penalties are inadequate.<sup>1</sup> The maximum penalty is \$50 000 in the case of a person not being a body corporate, or \$250 000 in the case of a body corporate. New Zealand has recently increased the maximum penalty for major breaches of their competition law to \$NZ5 million, a sum the TPC considers far more realistic (TPC 1990, p. 4).

The mergers provision (section 50) of Part IV of the Act has been a contentious area since its inception. This is largely because mergers can have both negative and positive effects on economic efficiency. Thus, mergers regulation is always a question of balancing likely beneficial and harmful effects.

Firms might use mergers to improve their efficiency by rationalising their operations to reap economies of scale or scope, or by internalising activities previously undertaken with other firms. Mergers are also a form of market discipline on firms.

However, mergers can be used to eliminate competition, even when predominantly motivated by organisational improvements. Restrictive trade practices are also more likely to occur, and are likely to be much more damaging, where market power already exists.

Other factors may act to mitigate the potential anti-competitive effects of mergers, such as alternative sources of competitive pressure from imports or substitutes, or from potential new domestic firms. Together with factors such as increased market size and changes in technology and consumer tastes, these may prevent market power from being exercised in any significant way in the long term. Indeed, where import competition is strong, the efficiency improving potential of mergers may be critical for the competitiveness of Australian producers.

If firms are prevented from merging through the operation of the Trade Practices Act, they may seek to achieve the same objective through alternative, more costly, routes. Further, some firms may use the Act for their own advantage. Managers may fight takeover bids to protect their own positions, rather than the interests of shareholders, and a firm may shore up its position by opposing the merging of two weaker competitors.

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1 Pecuniary penalties are fines in all but name. The terminology stems from the fact that 'prosecutions' under Part VI of the Act are technically civil rather than criminal proceedings, involving a civil rather than a criminal burden of proof.

The TPC uses a diverse range of mechanisms to promote the aims of the restrictive trade practices provisions of the Trade Practices Act. These include the investigation of possible breaches and prosecution, conducting civil actions on behalf of 'deserving' litigants, and the administration of sector by sector compliance with the spirit of the Act through the release of guidelines, and negotiation of industry codes of practice. Recently, the TPC has used administrative settlements to avoid the need to go to court on some matters.<sup>2</sup>

On the one hand, administrative settlements could be seen as simply a mechanism to ensure the enforceability of settlements out of court — they invariably involve an undertaking not to offend in the future. On the other hand, their widespread use could represent a shift towards more administrative regulation. The TPC has, however, indicated that there would not be a substantial increase in actions under Part IV of the Act as a result of the availability of administrative settlements.

### **Insurance and superannuation**

Developments in the regulation of the insurance and superannuation sectors addressed perceived failings in financial markets. The difficulties of Regal Life and Occidental Life insurance companies prompted the Government to institute a rescue package funded by an industry levy. At the same time, the supervisory arrangements applicable to life and general insurers were upgraded. These reforms included increases in the minimum capital requirements for both life offices and general insurers and enhanced supervisory powers for the Insurance and Superannuation Commission (Keating, 1991).

These interventions, designed to compensate the policy holders of the companies in financial difficulties, raise important policy questions.

Was it reasonable, for example, for the Government to compel the policy holders of other insurance firms, rather than the whole community, to make good the potential losses of the policy holders of Occidental Life and Regal Life? Will such an action change investors' expectations about the riskiness of insurance generally, causing them to direct their savings to other forms of investment? And can the Insurance and Superannuation Commission be expected to ensure that no firms in the industry fail without imposing costs on all consumers of life insurance?

### **Therapeutic goods**

The *Therapeutic Goods Act 1989*, which commenced on 15 February 1991, extends Commonwealth control over therapeutic goods marketed in Australia. Most therapeutic products are now required to be registered or listed and manufacturing facilities are to be licensed by the Commonwealth. The Act contains transitional

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2 An administrative settlement involves an agreement (called a compliance deed) between the TPC and a suspected offending party in which the TPC agrees not to proceed with its action if the other party agrees to take certain remedial measures and modify its future behaviour.

provisions which allow products currently supplied to be exempted from the requirement for registration or listing.

Drug evaluation was reviewed again during the year. The review committee, chaired by Professor Peter Baume, made 164 recommendations — many of which had been proposed, but not adopted, in previous reviews (Baume, 1991). The Government has accepted the Baume Committee recommendations and directed their immediate implementation. These include that: the timely availability of new drugs be added to the existing objectives of quality, safety and efficacy; Australian new drug information requirements be aligned with those of the European Community; and there be strict processing time limits for new drug applications, with sanctions on the Therapeutic Goods Authority if deadlines are not met.

### **Food and packaging**

Partial implementation of decisions to abandon standard pack sizes in trade measurement legislation and the commencement of the Commonwealth National Food Authority Act were the main regulatory reforms in the food processing industry during the year.

Standard pack size regulation has been abandoned in principle by the Commonwealth and all States other than Western Australia. Enabling legislation has been passed in NSW and the Northern Territory. Commonwealth import controls are yet to be lifted. Although Western Australia is not changing its legislation, the Commission is unaware of any serious attempt by that State to restrict imports not complying with its regulation.

Responsibility for developing food standards has now passed to a single Commonwealth body — the National Food Authority. The States have agreed to adopt its standards without modification, subject to a right to regulate individually in public health emergencies (with a later determination of the matter by the National Food Authority).

The National Food Authority has statutory independence and is obliged to implement policy guidelines set out in legislation. Also it must use efficient administrative methods in considering applications for changes to food standards. The Authority has yet to decide on its approach to the structure and content of the standards. The Industries Assistance Commission (1989) made recommendations on these matters in its report on the food processing and beverages industries.

### **Cosmetics labelling**

The Minister for Justice and Consumer Affairs announced in November 1990 his intention to use the product information standards provisions of the Trade Practices Act to require that cosmetics products be labelled with full ingredient lists. This regulation will force disclosure of detailed compositional information so that consumers can make value-for-money comparisons between products and avoid potentially harmful ingredients.

The disclosure rule is more detailed than those specified for personal use products having high safety risks (such as over-the-counter pharmaceuticals). Manufacturers and some importers will incur added costs in maintaining consistency between product composition and labelling. Some imported products, moreover, are labelled to the proposed standard.

### **Hazardous products in the workplace**

The control of chemicals in the workplace is one of six priority hazards in the Government's national occupational and health and safety strategy. The six areas were selected on the basis of statistical evidence which showed them to be major workplace issues which should be addressed at the national level.

However Worksafe Australia admits that the extent of the problem in respect of chemicals is difficult to define:

The use of over 300 000 chemicals is widespread across industry and it can be *assumed* that exposure to chemicals is also widespread; certainly there is considerable anxiety about chemical safety in the community (Worksafe 1989a, p. 37).

According to a number of submissions received by Worksafe, workplace exposure to chemical substances is declining and, in fact, the total claims involving chemical exposures is relatively small compared to claims for other work-related accidents.

Worksafe has prepared *Draft National Model Regulations to Control Workplace Hazardous Substances* and a *Draft National Code of Practice to Control Workplace Hazardous Substances*. Both are expected to be adopted by all levels of government in order to create uniformity, though they may not be possible to take up verbatim.

These proposals superimpose a third layer of regulation on existing employment (award) specific arrangements and employers' common law duty of care. Additionally, in some States, workers' compensation legislation has replaced or complemented the tort-based common law system with 'no-fault' schemes. The costs of such an accumulation of regulation and the impact of the layering of regulation on employees' and employers' incentives to negotiate and maintain mutually acceptable levels of safety are not fully understood.

The Government has announced it will send a reference on workers' compensation to the Commission in 1992.

### **Product liability**

Product safety in Australia is regulated by a mix of administrative and civil law regimes. A limited number of mandatory standards, some recommended standards, and product safety monitoring arrangements under the Trade Practices Act combine with a civil law regime which provides consumers with access to compensation from producers who supply defective goods.

An appropriate civil law regime should minimise the level of direct measures by providing incentives both to producers and consumers to adopt the 'optimal' level of

safety in the production and use of goods. Following public inquiries by the Australian Law Reform Commission and the Industry Commission, there is wide agreement in the community that current laws do not achieve this.

From the point of view of economic theory, the Industry Commission's report on product liability identified three main deficiencies in current product liability laws:

- the difficulties in proving actions under tort law mean that deserving claimants who cannot sue under contract law often cannot attain a remedy;
- claimants who can sue under contract law often receive full compensation when their misuse of the product contributed to their loss; and
- current legal onuses require parties to an action to prove aspects that they know least about rather than those that they know most. On this point, however, the Commission recognised that there were significant legal and practical problems associated with attempting to put desired theory into practice (IC 1990).

In addition, the costs of enforcing legal rights under current laws are high. Lack of a single product liability law, lack of uniformity in State and Commonwealth laws, and uncertainty surrounding the application of current laws have also been identified as deficiencies in the current product liability regime which inflate the costs of enforcing legal rights. But other identified deficiencies reflect problems with Australia's dispute resolution regime rather than product liability laws, such as the high cost of and lack of competition in the provision of legal services.

In the March 1991 Statement, the Government announced that it had accepted the Commission's recommendation to reject the Australian Law Reform Commission's proposals and that it would develop a new product liability proposal based on the 1987 European Directive. But the Government's proposed regime would include a unique double reversal of legal onuses compared with the norm. Claimants will have only to show that their losses did not arise *solely* through misuse of the product. In turn, the onus of proving whether or not a defect in the product caused loss will be on producers. This aspect was said to be linked to the Industry Commission's report 'which has said that it would be more economically efficient' to adopt such an approach (Tate, 1991).

The Commission has indicated publicly that it viewed reports on its position as misunderstandings. Further, to utilise the expertise developed during its inquiry on product liability and in response to an invitation from Senator Tate, the Commission, through the ORR, will continue to provide input on the general issue of the most appropriate product liability regime for Australia.

### **Regulation making processes**

The special Premiers' Conference arrangements have allowed Commonwealth and State Governments to better consider the interaction of regulation making processes and their combined impact on the Australian community. One outcome of this consultation has been the development of arrangements for the mutual recognition of regulation. The principles and administrative procedures proposed are described below.

Individual governments, nonetheless, need to improve the efficiency and accessibility of the processes used for developing and assessing all new regulation. The Administrative Review Council has been asked to review the Commonwealth's regulation making practices. Its preliminary views are outlined in the latter part of this section.

### **Mutual recognition**

There are overlapping and/or different Commonwealth, State and Territory laws, regulations, policies and procedures relating to the production and distribution of goods and services and the employment of labour.

Remedial efforts to date have been laborious and often unproductive, despite the fact that the costs of inconsistent regulation are widely recognised. Perhaps more importantly, there has been a tendency to increase, rather than reduce, the average level of regulation, by either combining the regulatory regimes of several States or adopting provisions of the more heavily regulated States.

In Europe, efforts to harmonise national regulations across the Community originally proved to be very difficult and protracted. So the European Commission adopted selective harmonisation combined with the mutual recognition of each member state's standards in the areas remaining. Australia has learnt from this experience.

In developing mutual recognition models for consideration in the context of the special Premiers' Conferences, a range of different approaches to the substance of, and means of implementing, mutual recognition were canvassed. In the end, a regime has been adopted which is very similar to that proposed in the Commission's 1989–90 Annual Report.

The model facilitates — in fact encourages — the development of uniform standards where such an approach is efficient. Efforts to achieve uniformity in some areas have been given a fillip. The national registration system for agricultural and veterinary chemicals is an example. Further, uniformity would continue to be the goal in the transport and communications sectors. Heads of Government have not, however, accepted that all current initiatives for uniform standards should proceed outside the mutual recognition process.

The goal is freedom of movement of goods and labour within the Australian national market — the so-called 'cross-border model'. This approach was preferred to the 'local production model' — whereby producers could operate anywhere in Australia by complying with any existing State or Territory regulatory regime — because of the likely complexities of implementation and administration of the local- production model and because, unlike the cross-border model, this approach was considered not to encourage competition between jurisdictions. Approaches based on measures adopted by the European Community and on mere in-principle agreement between the Commonwealth, States and Territories, were also rejected as inappropriate.

Individual versions of the model deal with goods and occupations.

### ***The goods model***

Producers of goods which comply with the laws in the place of production within Australia, or the jurisdiction into which the goods were imported from overseas, may then freely sell them anywhere in Australia. The origin of products which do not comply with an importing State's standards must be clearly identified. Consumers will be able to choose between goods made under different jurisdictions, while producers will be able to choose between jurisdictions in rationalising production facilities or deciding on 'greenfield' investment.

A State or Territory will be able to suspend mutual recognition of particular goods for 12 months if there is a real risk to health or safety. This period will allow time for Commonwealth, State and Territory Governments to negotiate minimum standards to deal with the problem if considered necessary. If agreement is not reached, mutual recognition will apply at the expiry of the 12 months.

A small number of products, such as fireworks, gaming machines and pornographic material, will be excluded from mutual recognition where the approach varies quite distinctly between individual States. Such exemptions will require a majority decision of Heads of Government.

Ministerial Councils will resolve disputes over anomalies and determine minimum standards on the basis of a two-thirds majority, thus removing the right of single State veto. These decisions will bind State and Territory Governments and their regulatory authorities.

### ***The occupations model***

A person registered, licensed or certified to carry out a particular occupation or use a particular skill in one jurisdiction is automatically deemed to be registered in another jurisdiction where the occupation or skill is *substantially the same*. The person need only notify the registration authority in the second jurisdiction of his or her right to practise in the first jurisdiction.

Unlike the goods model, there is a need under this approach for the Commonwealth, States and Territories to negotiate what occupations or skills are 'substantially the same'. There are wide variations in the skills content of many nominally similar occupations which will delay implementation and generate some uncertainty.

The occupations model does not assist where a person moves from a State or Territory in which their occupation is not registered or licensed to one where it is regulated. The solution offered by the Vocational Education, Employment and Training Advisory Committee (VEETAC) is to totally deregulate most, if not all, of these occupations. This would be a matter for separate decision by Heads of Government.

Heads of Government and appropriate Ministers in relevant jurisdictions will have to ensure that awards are restructured to accommodate the mobility of labour under mutual recognition.

As with uniform standards for goods, national competency standards, when resolved, will complement mutual recognition principles. VEETAC contemplates that such standards are the ultimate objective for many occupations, including the professions.

### ***Implementation***

The preferred approach to implementation of the cross-border models of mutual recognition is a reference of powers to enable the Commonwealth to enact general mutual recognition legislation. This would provide a framework to make mutual recognition work and, in effect, would enable the States and Territories to cede sovereignty to one another in order to establish a national market.

Alternative approaches include: an attempt by the Commonwealth to enact mutual recognition alone, with uncertain results; the implementation of parallel legislation by the Commonwealth, states and territories, which could be unilaterally repealed by any individual jurisdiction; or an administrative approach, which could not include characteristics which are considered essential to the cross-border model.

It is expected that agreement on the method of implementation will be reached at the November 1991 special Premiers' Conference and legislation will be enacted in the first half of 1992 to enable mutual recognition of goods and occupations to commence from 1 January 1993.

### **Administrative Review Council recommendations**

The Attorney General has requested this Council to report on the making of regulation by Commonwealth agencies. Its terms of reference require the Council to:

- propose a basis for distinguishing between primary and other forms of legislation;
- examine the range of legislative instruments in use;
- consider the legislation establishing rule making processes; and
- review notice and consultation procedures in rule making, and the accessibility of subordinate legislation.

The Council identified general and specific deficiencies in rule making processes (ARC, 1991). These included low quality drafting and a blurring, in practice, of the distinction between primary and secondary legislation.

The Council has made 18 preliminary proposals to improve the quality of regulation and the efficiency of regulatory processes. Criteria for the determination of the legislative (as distinct from administrative) character of instruments are suggested, central drafting of all legislative instruments by the Office of Legislative Drafting is proposed, as are mandatory public consultation processes.

Adoption of the Council's preliminary proposals by the Government and the Parliament should lead to better regulation making practices. In particular, mandatory public consultation is a desirable extension of current regulation review procedures. It will oblige regulatory bodies to better take account of the economic impact of new regulations.

## **Deregulation of the NSW egg industry: a case study**

In July 1989, the NSW Government announced substantial deregulation of the egg industry. The reforms were unusual insofar as compensation of \$61 million was paid to quota-holders to enable reform to be implemented immediately rather than to be phased in over time — the latter approach is often promoted by the Industry Commission.

In this case study, the relative merits of these approaches to deregulation are outlined and the effects of the deregulation strategy adopted by NSW discussed. Finally, the implications of a uniform as opposed to a mutual recognition approach to Australia-wide reform of the egg industry are compared .

### **Background**

Throughout the period 1928 to 1989, the NSW egg industry had been subject to various forms of government intervention, including production, quality, marketing and price controls administered by a statutory marketing authority. Following 1965, regulation of the NSW industry ran in conjunction with an Australia-wide egg stabilisation scheme.

Under the *Egg Industry Act 1983*, the NSW Egg Corporation was constituted from a pre-existing marketing board to stabilise egg prices and production, to maintain both farmer incomes and egg quality, and to ensure efficient egg distribution and marketing.

To achieve these goals the Corporation set the wholesale price of whole shell eggs and egg product and specified the grading, packaging, and health standards of eggs marketed. In addition, a hen quota and an associated levy was administered to limit egg production and maximise returns from the lucrative domestic market.

Under the Corporation's price equalisation scheme, returns from the domestic and exports markets were pooled and an average 'equalised' producer price was paid to farmers for each grade. The Act also compelled the Corporation to purchase all eggs of acceptable grade.

The scheme had unintended effects on the industry's efficiency.

Initially, the equalised price was higher and more stable than the previous producer price. This gave farmers an incentive to increase production. However, because the hen quota precluded producers from increasing flock size, they intensified their use of other inputs — capital including increased flock turn-over, and genetic and feed research — to raise total production. This represented an inefficient use of resources.

Despite the Corporation's objective to maintain product quality, average egg weight declined because technological advances promoting increased bird productivity had an adverse impact on the average egg grade. Farmers had little incentive to rectify this under the price equalisation scheme.

The consequent periodic overproduction of low-grade eggs resulted in the excess being processed and sold on lower priced markets. In fact, a rise in egg exports between March 1985 and December 1987 caused the quarterly farm-gate price to ease down — from \$1.16 to \$1.07 per dozen.

Continual cuts to the quota ceiling (which was the maximum hen quota per producer) initially had little impact on output or the producer price. Producer price rises were eventually achieved in mid-1988 due to a seasonal decline in production and the removal of approximately 15 to 20 per cent of shed capacity from production. By July 1989, the quota ceiling had fallen by 27 per cent from 100 000 to 73 000 birds per producer. This represented a potential loss of farm size economies.

However, the difference between the equalised price and the domestic retail price prevailed, prompting the illegal production and sale of shell eggs by some farmers in the late 1980s. These farmers realised that greater returns could be made by filling their empty cage capacity and selling all their output on the higher priced domestic shell egg market. To police such activity, a levy of 3 cents per dozen sold domestically was charged to legal producers. Unintentionally, this levy widened the price gap and further encouraged the illegal production and sale of eggs in NSW.

The marketing arrangements imposed considerable costs on society in terms of industry inefficiency. In 1988–89 NSW consumers paid an additional 32 cents per dozen on retailed eggs to subsidise policing costs and losses on exports.

The seasonal shortages, illegal production and adverse technical developments between 1983 and July 1989 all conflicted with the original aims of the Egg Industry Act. The time was ripe for change.

Deregulation of the market appeared to offer efficient farmers the opportunity to expand output and reduce costs, while consumers would benefit from a fall in egg prices.

### **Reform options**

One approach to deregulation is to provide the industry with a phase-in or transition period during which specific aspects of the existing regulations are discontinued and assistance is wound back.

This approach is intended to give the industry time to adjust to the market environment and contains an element of welfare for the producers concerned, insofar as they may continue to benefit (to a lessening degree) from the existing regulations during the transition period.

Although a clear announcement to deregulate will stimulate adjustment pressure, postponing some elements of reform may exacerbate prevailing inefficiencies. In the case of eggs, prolonging reform may have further worsened product quality and problems associated with the illegal production and sale of eggs.

Further, those producers in favour of maintaining existing regulation may take advantage of this apparent transition confusion and lobby to postpone the final

implementation of the reform. If successful, such political lobbying, or 'rent-maintaining' behaviour, represents a continuing and avoidable waste of society's resources in the sense that these resources could have been employed elsewhere.

An alternative approach to deregulation is immediate or overnight reform.

Under this approach, market participants are compelled to adjust to the new system quickly. This reduces the time and therefore scope to mount political attacks on government to slow or reverse reform.

Overnight deregulation also proffers more immediate efficiency gains by allowing consumers and producers within the sector to determine the pace of structural change, rather than forcing them to work within the specified constraints of a transition period.

The NSW Government opted for overnight reform.

### **Compensation issues**

Where overnight reform is preferred to a transition approach to deregulation, the question of whether compensation should be paid to the affected producers becomes more relevant.

One of the principal concerns in the NSW egg industry when the deregulation option was being considered by government was the distributional impact on the wealth of egg producers (Strong et al 1990, p. 2).

Rausser and Irwin (1987) argue that regulatory arrangements can be viewed as a contractual agreement between the government and certain parts of society, and that compensation may therefore be due to those adversely affected by deregulation — that is for 'breach of contract'. However, in circumstances where the benefits of regulation are received by a minority group at greater expense to the rest of society, with whom the government also has a moral and political contract, the obligation of compensation is weakened.

Compensation may correct the rate and direction of market adjustment by affording the recipient an effective opportunity to undertake alternative investment. Efficient producers would usually maintain current investments while the less efficient may undertake new practices.

If compensation is not paid, those adversely affected by a reform may undertake lobbying activity, particularly if their losses are substantial as may occur with overnight deregulation. In this sense, compensation can be viewed as an investment in improving economic efficiency.

On the other hand, if compensation is paid, a precedent is set for other parties to make claims on government. The expected returns in other regulated industries are therefore likely to increase. This would be reflected in the price of the industry-specific assets such as quotas. This process implies that the cost of future compensation pay-outs to governments may increase.

Lastly, if compensation is thought to be justified, the question as to whether monetary remuneration is the best form of compensation also arises. If financial compensation encourages resources to remain in the egg industry despite production inefficiencies, then the gains from deregulation are reduced. In the case of eggs, possible alternative forms of assistance included re-training schemes and public research into egg production and/or its alternatives and increased regional assistance to the areas most affected by reform. However, these options typically have higher administration costs, are indirect means of compensating producers and limit the producers' freedom of choice.

Four factors appear to have convinced the NSW Government to pay a lump-sum compensation to farmers from consolidated revenue.

Firstly, the Government considered that those most disadvantaged by the previous regulations — the producers who had obeyed the law and consumers — should be the ones who actually gained from the change.

Secondly, a significant proportion of farmers had obtained loans to upgrade their production facilities or purchase additional licences. In many instances, the value of their issued quota had been used to secure the loan. The impact of deregulating the industry would have been felt extensively by those producers who had the largest outstanding debt.

Thirdly, considering the hostility exhibited by producer interest groups in the 1980s, the political cost of attempting to enforce overnight reform without compensation may have been substantial.

Finally, the decision to pay a once-off compensation out of consolidated revenue was believed to have the lowest administrative costs and, hence, have less unfavourable effects than other welfare alternatives.

### **Effects of deregulation**

The legislation deregulating the NSW egg industry contained the following key elements:

- the immediate removal of the quota system and hen levy;
- the immediate removal of both purchase and sale price restrictions;
- the immediate corporatisation and eventual sale of the NSW Egg Corporation;
- the eventual termination of the NSW Egg Corporation's marketing monopoly;
- the immediate removal of all handling, grading and packaging restrictions; and
- compensation of \$15 per quota to licensees, not payable to lessees.

**Table A7.1**  
**Egg costs, prices, output and exports**

	<i>Average<sup>a</sup> farm costs</i>	<i>Average farm price</i>	<i>Average<sup>b</sup> retail price</i>	<i>Output</i>	<i>Exports</i>
	<i>\$ per dozen</i>	<i>\$ per dozen</i>	<i>\$ per dozen</i>	<i>million dozen</i>	<i>million dozen</i>
1988–89	1.20	1.45	2.04	73	3.8
1989–90	1.04	1.16	1.66	75	–
1990–91	1.01	0.89	1.54	70 <sup>c</sup>	–

a Based on a survey of 24 farms with average flock of 20 000 hens.

b Survey of 55 gram egg prices.

c Preliminary estimate.

Source: NSW Agriculture & Fisheries (1991).

### **Prices changes**

Data provided by NSW Agriculture & Fisheries indicate that, following deregulation, the retail price of 55 gram shell eggs fell overnight from \$2.00 to \$1.68 per dozen and, for 1989–90, fluctuated around an average price of \$1.66 per dozen (see table A7.1).<sup>3</sup> As a result, domestic sales of shell eggs increased by about 10 per cent. The Commission estimates that consumers gained at least \$26.6 million from these changes in 1989–90. In 1990–91, the retail price fell further to an average of \$1.54 per dozen. As a result, consumers gained \$35 million compared with the last year of regulation.<sup>4</sup>

Changes to prices paid by commercial users have been more complex. Before deregulation, the wholesale prices and resulting producer price for each egg grade were set so high that the Corporation often faced an excess stock. As a result, commercial users could bargain lower prices for the excess high-grade stock. When consumer demand for high-grade shell eggs rose in reaction to the overnight price fall, the price paid for shell egg by commercial users increased by 8.3 per cent. On the other hand, the average domestic wholesale price of processed eggs fell by 34 per cent in 1989–90 (Webb 1990).

3 Industry-wide price estimates derived from this data are subject to error because the proportion of total egg production accounted for by 55 gram eggs has fluctuated between 1989 and 1991. The data used in this appendix also differ slightly from that used by the Commission in its report on statutory marketing arrangements (1991, p. 57).

4 Consumer gains were estimated assuming constant domestic sales of 70 million dozen in each year. Thus, the gain in 1989–90 was derived by  $((\$2.04 - \$1.66) \times 70m) = \$26.6m$  and for 1990–91 by  $((\$2.04 - \$1.54) \times 70m) = \$35m$ . As 70 million dozen is the lower consumption bound, this method is likely to underestimate the gain to consumers.

### *Changes to wholesale and retail margins*

Since deregulation, approximately six independent marketing groups have emerged. The voluntary Egg Producers' Co-operative — which the Government helped establish — is by far the largest in terms of member numbers and accounts for around 40 to 50 per cent of total production.

In its report on statutory marketing arrangements for primary products, the Commission discussed the possibility that deregulation of certain rural industries could result in higher profits for wholesalers or retailers if they were able to wield market power in particular markets (IC 1991).

But there is little evidence of this in relation to eggs.

The difference between the farm-gate and retail shell egg price before deregulation is estimated to have been 59 cents per dozen. This margin was used to pay for grading, packaging, transport and storage, and any processing of eggs which may have been necessary.

In 1989–90, this margin fell to 51 cents, but increased in the following year to 65 cents per dozen.<sup>5</sup> This suggests that wholesalers and retailers may now have increased their profitability slightly. On the other hand, the higher returns may reflect the added costs of an increase in marketing effort following deregulation.

### *Changes to the farm sector*

Farm revenues from egg production fell by about 20 per cent in the year following deregulation. The producer price fell from an average of \$1.45 per dozen in 1988–89 to \$1.16 per dozen in 1989–90.

However, the number of operators, amount of land, and number of sheds and cages in the industry remained remarkably stable following deregulation, for five main reasons.

Firstly, the compensation payment allowed farmers with outstanding loans — obtained because of their expected income under the previous regulatory system — to repay their debt and remain in business.

Secondly, various price equalisation schemes had insulated farmers from market forces and thus adversely affected marketing, technological and entrepreneurial development for more than 60 years. This may have delayed producers' reactions to the changed circumstances ensuing from deregulation.

Thirdly, the monopoly controls in each State had created an incentive for the various marketing boards to illegally sell excess produce in another State rather than sell in the lower priced export markets. Since deregulation, lower prices in NSW have

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5 Part of the increase in estimated margins for middlemen may be due to data deficiencies. The retail price is estimated for 55 gram eggs, but the producer price is estimated for average weight eggs. The decline in average egg weight following deregulation is therefore likely to exaggerate the estimated increase in the margin to middlemen.

reduced the threat of such activity. This means that any expansion in demand for eggs in NSW, in response to the lower prices, would almost certainly be met by incumbent producers, slowing the pace of exiting by farmers.

Fourthly, despite the changing environment in favour of more efficient vertically integrated operations — pursuing most aspects of production such as packaging, hatching, feed milling, transportation and storage and marketing — the Government facilitated the continued operation of smaller farms. By maintaining the NSW Egg Corporation until November 1989 and subsequently by assisting in the establishment of the Egg Producers' Co-operative, the producer price decline was eased and industry output of low grade eggs remained high.

Fifthly, because of the specific nature of the capital assets (sheds and cages) used in egg production, many farmers remained in business despite the falling producer return. The lower returns to egg production saw commensurate falls in the market value of egg farming assets, making continued egg production still their most commercially attractive use.

Deregulation bought about a change in the use of variable inputs — flock size, bird age, feed and the like. More farmers chose to age their flock rather than purchase younger birds. Farmers also expanded output by filling empty cages.

Farm revenues fell further in 1990–91. Optimistic producer expectations had led to overproduction and fierce competition in the low-grade egg market. The retail price of low-grade shell eggs fell as low as \$0.80 per dozen. This fall, in turn, was reflected in lower prices for higher grade eggs. Consequently, the average producer price fell to \$0.89 per dozen, suggesting that returns to growers remaining on small farms may be negative and that there will be rationalisation.

### *Long-term impact of NSW reform*

In the long run, the reform measures are likely to provide a more market-oriented industry structure. The number of producers may decline as inefficient growers exit the industry. Average farm size is likely to increase as producers exploit economies associated with the vertical integration of operations. More specialised marketing agents may also come into being in the new market environment, with potential improvements in off-farm efficiency.

As the technical biases in favour of small-size high-output production methods created under the quota system dissipate, the average grade of eggs produced will probably rise in reaction to consumer demand. Wider quality choice may attract new buyers — for example, low-income families and quality-conscious consumers who chose not to consume commercially produced eggs before deregulation.

While it is too soon to definitively judge the likely extent of the ongoing benefit to society, the Commission expects that benefits to consumers will continue albeit at a slightly lesser rate, while the losses currently being experienced by some in the farm sector will be alleviated by improved efficiency, higher farm-gate prices and/or a reallocation of resources to alternative production.

## **Approaches to Australia-wide deregulation**

In most States other than NSW, egg production, distribution, pricing and quality are subject to substantial regulation.

However, pressure for deregulation in other States is increasing. Indeed, the South Australian Government recently announced its intentions to deregulate its egg industry from 1 January 1992, following moves by NSW marketers to ignore cross-border sales restrictions and substantially undercut the regulated egg prices in the South Australian market (Arnold 1991).

Using the example of NSW, deregulation of the egg industry in all States could generate significant efficiency gains. For example, competitive pressures on all Australian producers could reduce technical biases in egg production and lead to a more efficient use of rural resources. Competition may also shift marketing, handling, packaging, and storage standards more in line with consumer demand.

Australian egg consumers are likely to gain from these improvements in production and marketing, by having greater choice and lower egg prices.

Deregulation which promoted interstate trade would also eliminate costs which have arisen under the State marketing arrangements. For example, consumers located close to the poultry region of another State could purchase eggs transported a shorter distance and thus gain from improved egg quality and lower prices. And the incentive for farmers to 'dump' produce in other States would also be removed under deregulation.

Under nationwide deregulation, the trend towards higher average farm size would be expected to continue, and the number of poultry farms in Australia would probably decline (Burgan and Thomson 1989). This structural adjustment would allow resources to shift out of egg production into more efficient industries.

A *national* deregulation policy requires more than just the termination of quota restrictions and price controls. Over and above these controls, inconsistent regulations on the grading, handling and packing of eggs — administered ostensibly to establish product reputation — also impose additional costs to consumers and barriers to interstate trade.

### ***Uniform approach to deregulation***

The National Standing Committee on Agriculture is currently seeking the removal of unnecessary and outdated quality and labelling requirements and a standardised system of licensing for eggs packed for interstate trade.

The uniform approach endorsed by the Standing Committee requires agreement between governments with regard to 'if' and 'at what level' individual standards should be set.

Unfortunately, agreement on aspects of production regulation may take some time to achieve, if ever, implying the continuation of the existing arrangements.

Further, the 'interventionist' nature of this process of negotiation places upward pressure on the minimum standard agreed upon. A compounded standard — often the result of vote bargaining by the States with the most to gain from disparities in regulation — is typically achieved politically.

That the losses to society from intervening almost always outweigh the gains is rarely a factor in the debate. Since each consumer loses a relatively small amount, the political process can overlook them. Conversely, producer interests are often overstated by lobbying. Nevertheless, since the cost of regulations are almost always borne more heavily by consumers as a whole, they too have a real economic interest in the regulatory outcome.

More importantly, any uniform Australia-wide standard for egg production and sales, involving minimum packaging, grading and labelling requirements, would necessarily imply a degree of re-regulation of the NSW egg industry.

### *The mutual recognition alternative*

Mutual recognition of different State standards by governments offers a middle ground between immediate and bargained uniform deregulation.

The mutual recognition approach introduces various pressures to review the role of government in the market and, where intervention is justified, to regulate at minimum cost. Under this approach:

- governments are exposed to a changing economic and political environment, which aids the removal of outdated technical specifications which act as barriers to interstate trade;
- the threat of domestic operators relocating to the most efficiently regulated State, together with increased trade competition from within that State, prompts each government to more evenly balance the demands of consumers and producers in their own jurisdictions;
- downward pressure is placed on the policy formulation process by increasing the transparency of regulatory costs to all relevant parties; and
- political, market and legal forces promoting a more efficient nationwide industry structure are expedited and the pace of regulation reform relies more directly on market forces.

Mutual recognition does not necessarily imply the end of State controlled marketing arrangements, although it does expose them to increased market competition. While current restrictions which effectively prohibit the sale of interstate eggs could not be maintained, monopolies would still be feasible within different regional and quality markets. It is possible that producers, protected by natural transport barriers, could still operate voluntary marketing cartels, although the gains accruing to the producer groups would be limited. The degree of inter-regional competition would depend largely on the relative value of each market and the costs incurred by each producer to sell on these markets. Hence, Tasmania, Western Australia and South Australia may

be naturally protected by the small size of their markets and the distance between themselves and other States.

There may be significant 'first-mover' advantages which have already accrued to marketing organisations and producer groups in NSW. The existing capacity of already vertically integrated NSW producer organisations may lessen the prospective profits of new entrants after deregulation in other States. These circumstances may lead to anti-deregulation lobbying by producers in these States. On the other hand, the lessons from NSW may prove extremely useful to the private interests in the currently regulated markets, in helping them to establish similar operations. But irrespective of whether the marketing organisations in NSW expanded their operations nationwide, more Australian consumers and producers are likely to benefit from their experience and size.

While immediate reform with compensation has been effective in NSW, there is no clear evidence suggesting these results could be generalised. If a share of the expected gains from deregulation can be allocated to each of the affected parties, political opposition to reform could be subdued. Mutual recognition is one way of ensuring that all parties receive part of the benefits of reform. Nonetheless, the process of reform under mutual recognition might imply greater losses for producers in some States compared to others. If so, financial compensation may be justified on both political and economic equity grounds.

While mutual recognition may stop short of a 'perfectly competitive' national market, it would nevertheless represent a considerable improvement on the current regulatory system.

## **Appendix 8**

### **Budgetary assistance**

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Various Commonwealth Government budgetary measures assist industry. Direct financial assistance from the budget is provided in the form of bounties and subsidies, contributions to research, export grants, industry adjustment schemes, and other payments to (or which benefit) industry. Apart from these direct outlays, assistance is provided through special provisions in the taxation system whereby the Government forgoes the collection of revenue from particular sectors or activities. Some departments and government agencies also provide services to industry either free of charge or at prices which do not fully recover the costs involved.

This appendix provides details of Commonwealth Government budget outlays on industry assistance for the period 1989–90 to 1991–92 (tables A8.1 to A8.4). Some details of the major tax expenditure measures which provide assistance to industry are also reported. In addition, the appendix summarises the main changes to budgetary assistance measures announced in the 1991–92 budget, together with other changes introduced during 1990–91 including those contained in the March 1991 Statement. The appendix does not, however, cover budgetary assistance provided by State Governments.

It is a relatively straightforward exercise to quantify the assistance provided by some direct budgetary measures such as production bounties. But the assistance component of other budgetary measures is often less clear. It has generally been possible to derive estimates of net government expenditure (that is, net of industry contributions). However, for those measures which are of wider benefit than to individual industries, it has not been possible to adjust for the 'spillover' effects on other activities or on the community generally. Nor has it always been possible to apportion budget outlays among sectors. In addition, no account has been taken of any economic justification there may be for government funding of particular activities or of the capital nature of certain measures (such as research funding).

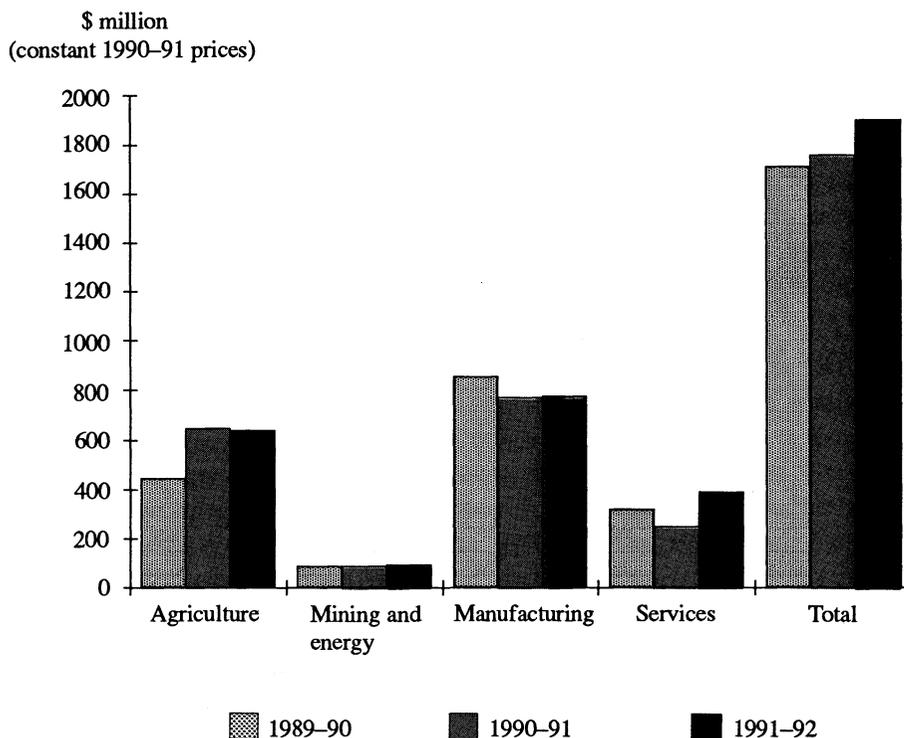
The approach adopted in compiling the estimates of budgetary assistance presented in this appendix, and the allocation of that assistance among sectors, was discussed in more detail in last year's annual report (IC 1990c, app 13). Certain categories of expenditure are not covered, for example, health and education.

### **Trends in budgetary assistance**

#### **Agriculture**

Budget outlays on assistance to agriculture, forestry and fishing increased considerably in both nominal and real terms in 1990–91, primarily as a result of payments to the wool industry (figure A8.1 and table A8.1). Budget estimates indicate little change in aggregate outlays on the sector in 1991–92, with a decline in support

**Figure A8.1**  
**Assistance from Commonwealth budget outlays, by sector: 1989–90 to 1991–92**



Source: Tables A8.1 to A8.4 converted to 1990–91 values using the GDP implicit price deflator.

for the wool industry being offset mainly by increased funding under the Rural Adjustment Scheme.

Budget outlays continue to be an important component of total assistance to the agricultural sector. In 1989–90 budget outlays on assistance to agriculture, forestry and fishing were estimated at \$434 million, compared with assistance derived from domestic pricing arrangements of \$502 million (appendix 10).

Income tax averaging for primary producers is the major taxation concession applying to agricultural industries. It is estimated to have cost \$262 million in 1988–89 and \$288 million in 1989–90.<sup>1</sup> Estimates of the assistance provided by other special taxation arrangements applying to primary producers are not available.

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1 The tax expenditure estimates are for the year in which the impact on revenue occurs. Previous estimates of tax expenditures provided by the Treasury were made on the basis of the income year in which use of the provision was made (Treasury 1990, p. 1).

## **Mining and energy**

Compared with the agricultural and manufacturing sectors, the mining and energy industries receive little assistance in the form of direct budget outlays (figure A8.1 and table A8.2). Those outlays have remained at much the same level in real terms over the period 1989–90 to 1991–92.

Various special taxation provisions have applied to mining activities.<sup>2</sup> The income tax exemption for gold mining, which terminated at the end of 1990, was estimated to have cost \$390 million in 1988–89 and \$280 million in 1989–90.

## **Manufacturing**

Budget outlays on assistance to the manufacturing sector declined in both nominal and real terms between 1989–90 and 1990–91, principally due to lower payments under the textile yarns bounty and the textile bounty capitalisation grants scheme (figure A8.1 and table A8.3). Real outlays on the manufacturing sector are estimated to remain at 1990–91 levels in 1991–92.

Budgetary assistance to manufacturing remains a relatively small proportion of total assistance to that sector. The net subsidy equivalent of all measured forms of assistance to manufacturing industries (including tariffs and quantitative restrictions) was over \$6 500 million in 1990–91, compared with budget outlays on manufacturing of \$772 million (appendix 10).

The taxation concession for research and development (R&D) is the major tax concession applying to manufacturing activities. Revenue forgone under the R&D tax concession was estimated at \$195 million in 1988–89 and \$215 million in 1989–90 (appendix 6). The Management and Investment Companies (MIC) program, which provided for a 100 per cent taxation deduction for investments in licensed MICs, was estimated to have cost \$20 million in 1988–89 and \$7 million in 1989–90. The program terminated on 30 June 1991.

## **Services**

In the services sector, the film industry, tourism, and the shipping and waterfront industries are the major beneficiaries of Commonwealth budget outlays. Outlays on the sector declined in both nominal and real terms between 1989–90 and 1990–91, but are estimated to increase substantially in 1991–92 (figure A8.1 and table A8.4). This reflects the one-off nature of the waiver of aviation charges in 1989–90 during the pilots' dispute, and a slower than expected rate of outlays under the waterfront reform program resulting in a substantial carry forward of funds from 1990–91 to 1991–92.

The shipping industry also benefits from accelerated depreciation arrangements on certain Australian trading ships. This concession was estimated to have cost \$2 million in 1988–89 and \$11 million in 1989–90.

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<sup>2</sup> For a discussion of the taxation provisions applying to the mining sector, see IC (1991b, vol 3, chap 13).

## **Recent changes in budgetary assistance**

This section summarises the main changes to budgetary assistance measures announced in the 1991–92 budget, together with other changes introduced during 1990–91 including those contained in the March 1991 Statement. As indicated, further details on some of these changes are included in other appendixes.

### **Agriculture**

#### ***Promotion, underwriting and market support***

After suspension of the reserve price scheme in the *wool industry* in February 1991, the Government introduced the *Supplementary Payments Scheme* to help offset an expected reduction in prices achieved by growers selling their wool in the remainder of the 1990–91 season. The Government contributed \$255.8 million to the scheme in 1990–91, with a further \$44.2 million to be paid in 1991–92. The Government will also provide a grant of \$22.5 million in each of 1991–92 and 1992–93 to cover interest payable on loans taken out by the *Australian Wool Realisation Commission* which is responsible for managing the wool stockpile and paying out the industry's debt (appendix 5).

The balance of the Government's *underwriting liability in respect of the 1986–87 wheat pool* (\$6 million) is expected to be paid in 1991–92. The Government will also make a compensation payment to the *wheat industry* of up to \$31.2 million in 1991–92 for *trade sanctions against Iraq*. Up to \$4 million will be paid to *other grains industries* for the same purpose.

The Government underwrites average export returns for certain dairy products at 85 per cent of the long term trend. The *underwriting provision for dairy products* was triggered for the 1990–91 season, resulting in expected payments of \$22.5 million in 1991–92. The Government expects underwriting to be triggered again for the 1991–92 season.

In 1990–91, in response to the downturn in the citrus industry, the Government decided to provide the Australian Horticultural Corporation with additional *citrus marketing* funds of \$2 million over three years, including \$1 million in 1991–92.

Export underwriting arrangements for apples and pears terminated at the end of 1990.

#### ***Quarantine and inspection services***

From 1 January 1991 one hundred per cent cost recovery has applied to quarantine and inspection services that can be attributed to industry users (previously 60 per cent of costs were recovered).

### ***Rural adjustment and rural services***

The Government provides assistance in the form of interest subsidies, loans and/or grants under the *Rural Adjustment Scheme (RAS)* to farmers experiencing financial difficulties. The *rural assistance package*, announced in April 1991, provided for funding under the RAS to be increased from \$62.5 million in 1990–91 to \$160 million in 1991–92. The package provided increases in funding for all forms of RAS assistance.<sup>3</sup>

Two new schemes are to be introduced to facilitate rural and regional development: the *Business Advisers for Rural Areas (BARA) Program* and the *Rural Industries Business Extension Service (RIBES)*. Outlays for BARA are estimated at \$1.8 million a year through to 1993–94. After an initial pilot study in 1991–92, outlays of \$2 million a year are anticipated for RIBES in 1992–93 and 1993–94.

### **Mining and energy**

On 7 June 1991 the Government announced that the *exemption from excise for petrol produced from shale oil* would continue until the end of 2005, but only for approved shale oil projects up to a maximum of 600 000 barrels of petroleum per year per plant.

### **Manufacturing**

#### ***Bounties***

Most bounties are due to be phased out or reviewed by 1995. In the March 1991 Statement, the Government announced that, where bounties are renewed, their rates will be set to reduce in line with the reductions in tariffs. It also announced several other significant changes to bounty assistance.

The *bounties on textile yarns, bed sheeting and printed fabrics* are to be phased out by 1 July 1995 (appendix 5).

The *machine tools and robots bounty* has been maintained, and extended to cover equipment used in processing advanced materials (such as ceramics, carbon fibre and composite materials), with effect from 1 July 1991. Duty-free by-law entry is to be extended to imports of these machines on a case by case basis. From 1 July 1991, the bounty no longer applies to equipment produced for in-house use and only those firms achieving annual in-house value added in bountiable production of at least \$200 000 (indexed to the CPI) are eligible. The bounty rate is to phase down from 24 per cent of in-house value added for advanced equipment, and 20 per cent for standard equipment, on 1 July 1991 to a common rate of 5 per cent on 1 July 1996.

The *computer bounty* has been extended to cover printed circuit boards (replacing the tariff which previously applied to these products) and the scheduled bounty rates have been adjusted downwards by one percentage point. The bounty rate is now to phase

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3 Details of RAS funding reported in table A8.1 are net of repayments under the scheme.

down from 14 per cent of value added on 1 July 1991 to 8 per cent on 1 July 1994, with the bounty scheduled to continue until 31 December 1995.

The Government also introduced a *bounty on the production of citric acid by way of fermentation*. Total payments over the life of the bounty are to be up to \$7.2 million, with the bounty to terminate on 1 January 1996 (see appendix 5).

In addition, from 1 July 1991, *minimum payments provisions* have applied to several bounties:

- textile yarns (\$10 000);
- printed fabrics (\$10 000);
- computers (\$10 000); and
- bed sheeting (\$100 000).

Bounty payments will no longer be made for claims under these thresholds.

### *Industry development programs*

In its March 1991 Statement, the Government announced the permanent retention of the *taxation concession for research and development* at the rate of 125 per cent beyond 1 July 1993 (R&D is currently deductible at the rate of 150 per cent). Previously, the rate of deduction was to have been reduced to 100 per cent from 1 July 1995.

A new grants-based scheme, the *Advanced Manufacturing Technology Development Program*, has been introduced to support research, development, trialling and demonstration of innovative Australian advanced manufacturing technology (AMT) products and services (see appendix 6). The Government has committed \$20 million to the program over seven years.

Under the Government's *Cooperative Research Centres (CRC)* program, the first 15 CRCs were selected in 1990–91. However, due to technical difficulties in finalising the contractual arrangements, program funds (\$4 million) were not allocated in 1990–91. These funds have been added to the proposed program allocation for 1991–92, bringing it to \$19.5 million.

The *Vendor Qualification Scheme (VQS)* has been extended for a further three years to 1993–94. The scheme assists firms in the information industries to gain international standards accreditation. The scope of the scheme has been broadened to cover software and a wider range of inputs, and other initiatives in the area of standards are to be introduced.

The Government has decided to continue its support for the *Multi-Function Polis (MFP)*. Funding of \$2.8 million is to be provided in 1991–92, with a further \$3.2 million over the following two years.

A *Small and Medium Enterprise (SME) Development Program* has been introduced, with a budget of \$14 million over three years, to promote the development and growth of small to medium sized firms. The program includes: a new export development

program for SMEs, to be administered by the Australian Chamber of Manufactures, offering assistance to enter export markets to around 100 firms a year; a national business referral system which will provide small business with easy access to sources of business advice and support; a broadening of the *National Industry Extension Service (NIES)* to encompass firms in the services sector; the NIES Enterprise Network Program to assist cooperative marketing by SMEs; small business training; and the provision of information on franchising and licensing (appendix 6).

In the March 1991 Statement, the Government re-stated its commitment to make available up to \$120 million for the *Textiles, Clothing and Footwear Industries Development Strategy* over the period to 30 June 1995 (appendix 5).

The Government is also to provide \$2 million for promotion of the *Australian Made Campaign* in 1991–92.

### *Export assistance*

A modified *Export Market Development Grants (EMDG) Scheme* has operated since 1 July 1990 together with a new *International Trade Enhancement Program* (appendix 6).

In 1991–92 the *Export Finance and Insurance Corporation (EFIC)* is to be re-established as an independent statutory corporation, separate from Austrade, and offering an expanded range of services for exporters. A new \$50 million facility is to be created to cover bonding requirements (where performance and other bonding requirements are demanded by overseas buyers) for firms with a proven record of performance but which are unable to meet the requirements of private bonders. The Government has also provided \$200 million in callable capital to supplement EFIC's reserves.

Funding for the *Development Import Finance Facility (DIFF)* has been increased from \$83.8 million in 1990–91 to \$93 million in 1991–92. The scheme assists Australian exporters of capital goods and services to compete for development projects by allowing aid funds in grant form to be combined with loans provided through the EFIC.

### *Other measures*

The Government's March 1991 Statement included a number of changes to other budgetary measures which are not treated as assistance to industry, such as the general depreciation provisions and exemptions from sales tax on business inputs. Details of the changes are provided below.

The *exemptions from wholesale sales taxes for business inputs* used by manufacturers, miners and primary producers (that is, goods producers) have been simplified and extended. The extensions also apply to sub-contractors to goods producers, and to certain freight handling facilities at seaports and international airports. The changes represent the first part of the simplification review of the *wholesale sales tax system* that was announced in the 1990–91 budget. The new exemptions are estimated to cost \$200 million in 1991–92 and \$375 million in 1992–93.

Several changes to the *general depreciation provisions* have been announced, with effect from 1 July 1991: 'effective life' has been redefined to take full account of technological obsolescence; the number of depreciation rate classes has been reduced from 18 to seven (at a cost of about \$20 million a year from 1992–93); and items of plant with lives of less than three years or costing up to \$300 are immediately deductible (at a cost to revenue of \$80 million in 1992–93, \$60 million in 1993–94, declining to an ongoing annual cost of \$15 million).

A review of the tax treatment of capital expenditures incurred in relation to the environment was announced in the 1990–91 budget. As part of that review, in the March 1991 Statement the Government announced a taxation deduction for *capital expenditures incurred primarily in undertaking an environmental impact study*. Expenditures incurred after 12 March 1991, other than on plant and equipment, are deductible over a period of the lesser of the life of the project or ten years. Plant and equipment are subject to the general depreciation provisions. The cost of the measure was expected to be nil in 1990–91, less than \$500 000 in 1991–92, \$3 million in 1992–93, and rising to \$45 million after 10 years.

## Services

### *Tourism*

Funding for the *Australian Tourist Commission (ATC)*, which promotes overseas awareness of Australia as a tourist destination, has been increased by \$23 million a year from 1990–91 relative to previous allocations. The increased funding has been offset by a doubling of the departure tax to \$20 from August 1991.

### *Broadcasting and television*

*Regional television licensees participating in the equalisation program* are to be allowed rebates of 100 per cent of their licence fees, up to a maximum of \$1.6 million per licensee a year, for six years. The rebates are intended to assist the licensees to meet the cost of extending their services to larger service areas. The cost to revenue is estimated at \$67 million over ten years, including \$3 million in 1991–92 and \$6 million in 1992–93.<sup>4</sup>

### *Transport*

A slower than expected rate of negotiation of the enterprise based agreements on the waterfront has resulted in a carry forward of \$66.8 million from 1990–91 to 1991–92 under the *waterfront industry reform program* (see appendix 1).

In the 1990–91 budget, the Government announced its intention to phase in full cost recovery for *safety and regulatory services* performed by the Civil Aviation Authority (with the exception of search and rescue) from 1 November 1991. The phase-in has been delayed, and is now to commence on 1 July 1992.

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4 For a discussion of the licence fee waiver see Rose (1991).

**Table A8.1**  
**Budget outlays on assistance to agriculture, forestry and fishing<sup>a</sup>: 1989–90 to 1991–92**  
 (\$ million)

	1989–90	1990–91	1991–92 <sup>b</sup>
<b>Agriculture</b>			
<i>Livestock, poultry, etc.</i>			
Australian Animal Health Laboratory	5.5	5.4	5.5
Bovine brucellosis & tuberculosis eradication campaign	8.3	11.0	9.2
CSIRO Institute of Animal Production and Processing	55.5	69.0	75.2
Dairy products underwriting	—	—	22.5
Exotic disease preparedness programs	0.2	1.6	1.7
Research			
• chicken meat	0.5	0.5	0.2
• dairy	2.2	3.2	5.0
• eggs	0.4	0.6	0.7
• honey	0.1	0.2	0.2
• meat and livestock	13.8	13.6	20.7
• pigs	1.8	1.6	2.7
• wool	20.8	11.7	13.6
Wool — interest subsidy	—	—	22.5
— international promotion	25.0	22.9	30.0
— supplementary payments scheme	—	255.8	44.2
<i>Crops</i>			
Australian Horticultural Corporation	0.4	1.0	2.3
Australian Plague Locust Commission	0.4	0.8	1.1
CSIRO Institute of Plant Production and Processing	73.3	84.1	88.6
Research			
• barley	2.0	0.1	—
• cotton	1.5	1.6	2.8
• dried fruits	0.4	0.5	0.7
• grain legumes	1.2	0.6	—
• grains (non-wheat)	—	1.9	5.7
• grapes & wine	0.9	1.1	1.3
• horticulture	1.2	3.1	5.0
• oilseeds	0.7	0.4	—
• sugar	1.5	1.8	1.8
• tobacco	0.8	0.6	0.4
• wheat	9.5	11.5	11.7
Sugar industry adjustment assistance	3.0	0.6	—

	1989-90	1990-91	1991-92 <sup>b</sup>
<b>Trade sanctions compensation</b>			
• wheat	—	—	31.2
• other grains	—	—	4.0
Wheat underwriting <sup>c</sup>	33.8	—	6.0
<i>General agricultural activities</i>			
Australian special rural research fund	5.0	—	—
Business advisers for rural areas program	—	—	1.8
Farm management advisory skills program	0.1	0.2	—
Innovative agricultural marketing program	2.5	4.1	8.4
Land and Water Resources Research and Development Corporation	—	8.7	10.8
National soil conservation program	24.1	22.0	24.8
Primary industries marketing skills program	1.3	1.8	1.0
Quarantine & export inspection services	37.2	26.0	—
Rural adjustment scheme	44.7	52.1	151.7
Rural counselling program	0.9	1.2	2.5
Rural Industries Research and Development Corporation	—	6.1	8.5
Water resources — assessment and research grants	7.4	2.7	0.3
<b>Forestry</b>			
National afforestation program	7.5	0.7	0.8
Northeast Queensland rainforests package	11.6	2.2	na
NSW southeast forests package	1.7	0.4	4.2
Tasmanian forest industry package	17.2	—	10.0
Victorian forest industry package	—	3.9	5.1
<b>Fisheries</b>			
Research and development	7.9	9.3	9.3
Resources research	—	—	2.7
Surveys and development	0.2	0.2	—
	<b>434.0</b>	<b>648.4</b>	<b>658.4</b>

— Nil.

na Figures are not available.

a Commonwealth Government expenditure net of any industry contributions.

b Budget estimates.

c Residual payments in respect of the 1986-87 wheat pool.

Source: Budget Papers (various years).

**Table A8.2**  
**Budget outlays on assistance to the mining and energy industries<sup>a</sup>: 1989-90 to 1991-92**  
 (\$ million)

	1989-90	1990-91	1991-92 <sup>b</sup>
Coal freight rate efficiency scheme for NSW producers	10.0	—	—
CSIRO Institute of Minerals, Energy and Construction	56.9	64.4	72.2
Energy management programs	1.0	4.2	5.8
Energy Research and Development Corporation	—	12.3	11.8
National energy research development & demonstration program	10.6	—	—
Renewable energy research	0.9	—	—
Rehabilitation of former uranium mine sites	1.0	1.5	1.1
Office of the Supervising Scientist of the Alligator Rivers Region Research Institute <sup>c</sup>	1.8	1.6	1.8
Joint Coal Board — Commonwealth contribution	2.3	2.4	2.5
	<b>84.5</b>	<b>86.4</b>	<b>95.2</b>

— Nil.

a Commonwealth Government expenditure net of any industry contributions.

b Budget estimates.

c A levy on uranium exports is intended to cover three quarters of the cost of the supervising scientist. One quarter of the cost has been recorded here.

Source: Budget Papers (various years).

**Table A8.3**  
**Budget outlays on assistance to the manufacturing sector<sup>a</sup>: 1989–90 to**  
**1991–92**  
 (\$ million)

	1989–90	1990–91	1991–92 <sup>b</sup>
<b>Bounties and subsidies</b>			
Bed sheeting	1.7	2.9	2.6
Books	24.0	24.2	24.7
Citric acid	–	–	1.1
Computers	45.0	51.3	53.8
Cultivation machinery	3.3	–	–
Grain harvesters	2.0	–	–
Injection moulding equipment	0.1	–	–
Metal working machine tools & robots	12.2	15.2	14.1
Printed fabrics	1.8	1.7	1.4
Sensitised photographic film	6.0	12.0	12.0
Ships	45.1	37.4	31.5
Ship repair	0.3	–	–
Steel mill products	0.1	–	–
Textile yarns	90.6	77.2	54.9
Textile bounty capitalisation grants scheme	59.3	28.1	–
<b>Industry specific programs</b>			
Advanced manufacturing technology development program	–	–	2.3
CSIRO pulp mill research	0.5	1.4	1.9
Heavy engineering adjustment and development program	9.7	3.7	3.1
Information industries strategy	2.1	–	–
Information industries — vendor qualification scheme	2.1	1.2	1.3
Malaria Joint Venture	0.8	2.3	9.3
Metals-based engineering program	2.2	5.1	5.7
Motor vehicles and components development grants scheme	8.3	4.7	2.8
Multi-Function Polis	1.0	1.1	2.8
National space program	2.4	5.2	6.4
TCF industries development strategy	5.4	4.9	16.4

	1989-90	1990-91	1991-92 <sup>b</sup>
<b>General industry development programs</b>			
Australian made campaign	—	—	2.0
Cooperative research centres	—	—	19.5
CSIRO Institute of Industrial Technologies	57.1	64.7	62.4
Grants for industry research and development	32.4	29.6	32.2
Investment promotion strategy	3.5	5.5	8.0
National industry extension service	18.8	19.7	21.1
National procurement development program	5.6	4.2	9.3
Science innovation programs	0.6	0.4	—
Small and medium enterprise development program	—	—	3.4
Technology development programs (including national teaching company scheme)	1.9	3.0	3.1
<b>Export assistance</b>			
Austrade — export and trade promotion	106.0	106.8	105.0
Development import finance facility	93.3	83.8	93.0
Export market development grants scheme	162.0	162.0	134.0
Interest subsidy for financing eligible export transactions — EFIC	21.5	7.9	14.7
International business development scheme	1.6	—	—
International trade enhancement program	—	4.5	43.9
	<b>830.3</b>	<b>771.7</b>	<b>799.7</b>

— Nil.

a Commonwealth Government expenditure net of any industry contributions.

b Budget estimates.

Source: Budget Papers (various years).

**Table A8.4**  
**Budget outlays on assistance to the services sector<sup>a</sup>: 1989-90 to 1991-92**  
 (\$ million)

	1989-90	1990-91	1991-92 <sup>b</sup>
<b>Communications</b>			
CSIRO Institute of Information Science and Engineering	36.6	34.4	44.9
<b>Construction</b>			
Building research	0.3	0.3	0.3
<b>Film industry</b>			
Australian Film Commission	11.8	11.1	11.6
Australian Film Finance Corporation and Film Australia Pty Limited	60.9	72.8	76.0
<b>Tourism</b>			
Australian Tourist Commission	55.2	61.5	63.4
Tourism recovery package	12.8	—	—
<b>Transport</b>			
Domestic airlines — waiver of charges during pilots' dispute	67.6	—	—
Remote air services subsidy	1.0	1.1	1.1
Shipping industry reform	7.5	6.6	14.9
Shipping — grants for purchase of new or second hand trading ships (contingent on lower crewing levels)	7.2	7.6	18.0
Tasmanian freight equalisation scheme	36.5	32.8	34.5
Tasmanian wheat freight subsidy	3.0	3.3	3.2
Towage industry reform	2.2	0.3	8.5
Waterfront industry reform	8.2	17.2	124.5
	<b>310.8</b>	<b>249.0</b>	<b>400.9</b>

— Nil.

a Commonwealth Government expenditure net of any industry contributions.

b Budget estimates.

Source: Budget Papers (various years).

## **Appendix 9**

### **Anti-dumping activity**

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The Government announced further trade liberalisation in March 1991. However, at the same time, it strengthened anti-dumping procedures, stating that it would 'not allow Australian industry to be seriously damaged by imports at dumped prices'.

The anti-dumping system has the objective of discouraging 'unfair' trade. Anti-dumping measures are permitted under the General Agreement on Tariffs and Trade (GATT) in certain circumstances. Unless the system is appropriately designed, however, it can be abused by industries to seek additional protection in order to resist adjustment to changes in international prices. In this way, anti-dumping action can undermine the Government's efforts to reduce protection and internationalise the Australian economy. While the system benefits a select few, as with other forms of protection it imposes costs on other Australian industries and consumers.

The Government is undertaking a review of anti-dumping procedures and the operations of the Anti-Dumping Authority (ADA). The review is to be finalised by the end of 1991. It comes at a time when there is pressure from some sectors of industry for increased access to protection from 'dumped' imports. The pressure has intensified following a report in June 1991 by the Senate Standing Committee on Industry, Science and Technology. The committee recommended changes designed to make anti-dumping action 'quicker, cheaper and easier' for industry to obtain.

This appendix reports on anti-dumping activity in 1990–91. It also briefly discusses the basis for anti-dumping action, and examines the anti-competitive nature of such action and its potential for conflict with other initiatives to reduce protection. It concludes with a discussion of the recent and proposed changes to the anti-dumping system.

### **Anti-dumping activity**

In the past, the number of dumping complaints initiated has depended, in part, on the economic conditions facing Australian industry. Dumping complaints last peaked in 1982–83 when 100 cases were formally initiated.

In 1990–91 the number of anti-dumping and countervailing complaints formally initiated rose to 73, considerably more than double the complaints initiated during 1989–90 (table A9.1). This represents a return to the level of complaints that prevailed during 1983–84 and 1984–85.

During 1990–91 there were 12 cases in which duties were imposed or price undertakings were accepted from foreign exporters, compared with 5 cases in 1989–90, and provisional measures were imposed in 40 cases, compared with 11 cases in 1989–90. The number of actions continuing in force rose to 26 at 30 June 1991, with a further 53 cases still under inquiry at that time.

The chemical and petroleum products industries accounted for nearly 60 per cent of the anti-dumping and countervailing cases initiated in 1990–91 (table A9.2). The food and beverages and transport equipment industries accounted for a further 25 per cent of cases.

### **The basis for anti-dumping action**

Australia's anti-dumping legislation is based on the GATT Anti-Dumping Code. Essentially, if imported goods are sold on the Australian market below their 'normal value' in the country of export, they can be assessed as being dumped.<sup>1</sup> If the dumping is found to cause or threaten 'material injury' to an Australian industry, anti-dumping action may be taken against those imports. Though the GATT Code sets out the criteria which must be met before anti-dumping action can be taken, it does not make such action compulsory.

Similar rules to those which apply to anti-dumping action also apply to countervailing action. This covers situations in which a foreign country provides certain kinds of financial assistance for the production, freight or export of goods.

'Dumping' can be an emotive term, but effectively it covers situations in which imports are 'cheap' or 'low cost'. In many circumstances, sales at prices that do not cover all costs are quite consistent with rational business behaviour. This can be the case, for example, in periods of depressed demand and/or over capacity, or where a foreign exporter benefits from protection on its domestic market. If exporters from many countries are exporting for less than their domestic prices, the lower export price may simply be the competitive international market price even though, by definition, the product is dumped. Sales at such prices are likely to be as common a business practice amongst Australian companies, both in their domestic and international sales, as elsewhere.

A concern often raised by industry in support of anti-dumping action is the predatory intent of foreign exporters where a foreign supplier attempts to drive local producers out of the market with a view to raising its prices once the competition has been eliminated. Theoretically, the short term gains to consumers can eventually be outweighed by the losses from higher prices in the long term.

But, for predatory dumping to be of concern, there must be only one foreign supplier (or effective collusion). Otherwise, any attempt to raise prices after cessation of local production will attract other import competition. In Australia, dumping complaints are often laid against exporters from several countries at a time (see below).<sup>2</sup> Moreover, under Australia's legislation — and for that matter, the GATT Code — there is no need to prove predatory intent to succeed in an anti-dumping action.

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1 The 'normal value' is generally defined as the price of like goods on the exporter's home market.

2 For further assessment of the rationale for anti-dumping action, see Banks (1990, pp. 16-20).

## **Anti-competitive effects of anti-dumping action**

There is always the potential that domestic firms can use the anti-dumping system to reduce competitive pressures. This is particularly so where the local industry comprises only one or a few producers and the anti-dumping action is sought against all, or the major sources of, import competition.

Anti-dumping actions establish the 'normal value' — or a lower 'non-injurious free on board' or NIFOB value — as a floor price for imports by levying a duty equivalent to the margin between the export price and the normal value (or NIFOB).<sup>3</sup> Alternatively, exporters may give a formal undertaking not to price goods below the pre-determined floor price.

### **Scope of recent actions**

A review of Australian Customs Service (ACS) dumping and countervailing reports, over the two year period to the end of 1990, shows that complaints were usually initiated by firms which produce all of Australia's production of the relevant good, and that domestic producers commonly sought action against imports from all sources.

In all, 23 reports were examined covering 49 cases.<sup>4</sup> Of the 23 reports, 18 contained specific information on the share of domestic production accounted for by the complainant. Thirteen of the 18 reports were initiated by complainants that accounted for virtually all domestic production of the good in question, and in a further three reports the complainant received support from the remainder of the local industry. Five of these reports led to action being taken (in a total of 11 cases).

In more than half of the reports over the two year period action was sought against imports from more than one country, including three in which action was sought against imports from five or more countries. Information on the share of imports against which action was sought was not always available in the relevant reports. Nevertheless, of the nine reports which included data on the percentage of imports covered by the action, six sought action against 90 per cent of imports or more. These involved a range of products — low voltage aerial bundled cross linked polyethylene cable, outboard motors, brandy, castors, sorbitol 70 per cent solution, and replacement lead-acid automotive batteries. Of these six reports, four resulted in action being taken.

More recently, one of the two Australian producers of low density polyethylene (LDPE), with the support of the other producer, sought anti-dumping action against imports from 16 countries. LDPE is, amongst many uses, converted into packaging film and coatings for board used to make milk and fruit juice cartons. The complaint encompassed 75 importers of the material and imports sourced from 80 overseas companies. Anti-dumping action had previously been in place against imports of LDPE from 1982 to 1988.

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3 The 'non-injurious free-on-board' price, or NIFOB, is the price at which goods could be exported without causing injury to the Australian industry.

4 A case is defined as one commodity by one country.

Preliminary action was successful against imports from 10 of the 16 countries. However, the ADA overturned the negative preliminary findings against the other six countries, stating that it 'cannot at this stage conclude that dumping, of itself, did not cause material injury' (ADA 1991, p. 1). The ADA noted that it would make a fuller examination of the extent of injury and factors contributing to that injury in its separate report covering imports from the other ten countries.

### **Dumping margins**

The dumping cases reviewed also provide an indication of the penalties anti-dumping action imposes on users and consumers. Most of the reports note either the dumping margin (that is, the difference between the normal value and the export price) or the extent to which export prices were below the 'non-injurious' value.

The cases reviewed show that dumping margins were often in the order of 30 to 40 per cent and have been as high as 70 per cent (IC 1990c, p. 218 and ACS 1990, p. 18).<sup>5</sup> With tariffs generally being reduced to a maximum of 5 per cent, anti-dumping action has the potential to reduce competitive pressures and to provide significant additional, and ad hoc, protection to local industry against imports of low priced goods. Even in cases where no action is ultimately taken, the initiation of a complaint can itself be sufficient to deter imports and to deny Australian users access to the lowest cost source of supply.

### **Use of market-based prices**

In his review of the Customs Tariff Anti-Dumping Act, Professor Gruen recommended that, wherever possible, a market determined price be used to establish a normal value (Gruen 1986, p. 48).

Australia's anti-dumping legislation sets out a range of methods by which the normal value of the good in the country of export may be calculated, and the order in which they can be applied. Where the price for which the goods are sold for home consumption in the country of export cannot be used, for example because such sales are not 'at arm's length' or 'in the ordinary course of trade', the prices of exports to a third country may be used. Failing this, the normal value may be 'constructed' by adding up the costs to make the goods and sell them in the country of export. As a last resort, the normal value may be determined by the Minister 'having regard to all relevant information'.

In the cases reviewed, in 1989 over half of the normal value estimates were determined using the constructed cost method or at Ministerial discretion. In 1990 this proportion fell to about one third.

As Gruen recommended, where it is not possible to base the normal value on the domestic price within the country of origin, it would be preferable for it to be based on the export price to a third country rather than resorting to other methods. Despite

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5 Dumping margins will, however, overstate the penalty imposed by anti-dumping action when that action is based on a lower non-injurious value.

the relative decline in the use of the constructed cost method and Ministerial discretion in 1990, the usage of export prices to third countries is surprisingly low. Over the two year period, in only one case was the normal value determined by the export price to a third country. If the export price to third countries is no higher than the export price to Australia, it is arguable whether action should be taken.

### **Changes to the anti-dumping system**

The Government announced several changes to the anti-dumping system as part of its March 1991 Statement. Proposals for further changes have been made in the recent report of the Senate Standing Committee on Industry, Science and Technology. In addition, a Federal Court ruling has widened the scope for countervailing action to be taken.

### **Changes arising from the March 1991 Statement**

As a result of the changes announced in March 1991, where dumping is proved, provisional protection is available 40 days sooner than previously. This has been achieved by reducing the time required to establish whether a prima facie case exists from a maximum of 55 days to 35 days, and by reducing the remainder of the preliminary finding stage from 120 to 100 days. Provisional protection is now based on the full dumping margin rather than, as previously, on the lower margin believed to be just sufficient to avoid injury to the Australian industry. The final anti-dumping duty recommended by the ADA, however, continues to be based on the margin thought just sufficient to prevent injury to domestic producers.

The legislation has also been changed to ensure that the injury suffered by vertically integrated agricultural industries, as a result of the dumping or subsidisation of processed agricultural products, is taken into consideration when determining whether material injury has been caused by the dumping of the processed product. Strict tests apply to vertical integration: the raw agricultural goods of the primary producer must be devoted substantially or completely to the processed agricultural goods and the processed goods must be derived substantially or completely from the raw agricultural goods. As well, there must be a close relationship between movements in the price of the raw agricultural product and the price of the processed good, or the raw agricultural input must constitute a significant proportion of the production cost of the processed good.

In addition, the legislation has been modified to ensure that Australian industry receives protection from injurious dumping of a product for the full three years, unless the action is revoked earlier. Previously, the normal three years application of dumping duties would have been shortened if duties were already in place for the same product from a different source.

## Report of the Senate Standing Committee on Industry, Science and Technology

In November 1990 the Senate referred certain aspects of the operation of the anti-dumping system to the Senate Standing Committee on Industry, Science and Technology. In its report, the committee recommended changes designed to result in 'quicker, cheaper and easier anti-dumping action while still complying with the GATT' (SSC 1991, p. xv).

The committee recommended that:

- the Government continue its efforts in the GATT negotiations to broaden the definition of 'domestic industry' to provide for the producers of raw agricultural products to be considered part of the domestic industry for the purposes of anti-dumping actions involving processed products;
- to help with the assessment of material injury, the ACS together with the Australian Bureau of Agricultural and Resource Economics develop computer-based industry models which incorporate those economic factors unique to the relevant industry;
- legislation be amended to extend the sunset period from three to five years; and
- rather than requiring a complete re-testing of a case once the sunset provision takes effect, a review be conducted before the automatic termination of action, with the review limited to the issue of injury or the threat of injury.

The committee noted that the change announced in the March 1991 Statement to broaden the definition of 'industry' had yet to be clarified as being consistent with GATT rules. The GATT has typically taken a narrow interpretation of the term 'industry'. The committee regarded the amendment to Australia's legislation as 'ensuring that, to the maximum extent possible under the current GATT Codes, injury to Australian primary production caused by imports of dumped or subsidised goods will be considered' (SSC 1991, p. 17).

The committee made a number of other recommendations aimed at streamlining the anti-dumping process, reducing the cost to industry of pursuing an application, and requiring Customs to provide more direct assistance to industry in mounting a case. It favoured establishing a tribunal within the ACS to replace the ADA. It considered that this would reduce duplication and improve the processing of complaints.<sup>6</sup> As well, the committee supported the change requiring provisional measures to be based on the dumping margin rather than a lower non-injurious price. It considered that this would 'provide greater security to the affected industry' during investigation of a complaint (SSC 1991, pp. xvii-xviii).

However, the committee rejected proposals from industry that the onus of proof in dumping cases should be shifted from the complainant industry to the importer, since this would be contrary to Australia's obligations under the GATT. It also considered

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<sup>6</sup> The ACS retained responsibility for the preliminary investigation of dumping complaints when the ADA was set up in 1988.

that existing legislation and administrative practices provided sufficient protection where an industry in a particular region is being disadvantaged by dumped imports.

### **Countervailing action**

Before countervailing action can be taken on goods exported to Australia, one matter which has to be established is that 'there has been paid or granted, directly or indirectly, upon the production, manufacture, carriage or export of those goods a subsidy, bounty, reduction or remission of freight or other financial assistance' (section 269TJ of the *Customs Act 1901*).

A Federal Court decision in 1990 has widened the interpretation of the types of financial assistance covered by countervailing action under the Act. The Court ruled that the assistance does not have to be sector specific — it can also be assistance available to industry generally (ADA 1990, p. 7). Under this interpretation, countervailing action would be available against any goods exported to Australia, from the country concerned, which had benefited from that assistance.<sup>7</sup> If other countries adopted a similar approach, countervailing action would no doubt also be available against a wide range of Australian exports.

In its report following the Federal Court decision, the ADA noted that the Minister might nevertheless decide not to take countervailing action when the case involved assistance to industry generally. It considered that the Minister would presumably take account of the kind or kinds of grants or incentives involved. The ADA maintains that it would not recommend countervailing action in circumstances where such action could lead to 'ridiculous consequences' (ADA 1990, p. 11). The ADA also noted that, given its obligations under the GATT, Australia should not take action in such cases (ADA 1990, p. 6).

### **Anti-dumping action as an alternative form of assistance**

The changes to the anti-dumping system resulting from the March 1991 Statement, and those proposed by the Senate Standing Committee, are aimed at making action more readily available, and at speeding up the process.

However, both sets of changes run counter to the recommendation contained in the Garnaut Report that:

by the beginning of the twenty-first century, Australia should aim to join the small, high wage, internationally-oriented industrial economies of Europe by avoiding all 'anti-dumping' measures and causes of action (Garnaut 1989, p. 223).

By basing protection on the full dumping margin rather than a lower non-injurious price, preliminary dumping duties will, in many cases, be higher than they would have been in the past. The associated costs imposed on user industries and consumers will be correspondingly higher.

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<sup>7</sup> Before action could be taken, it would still have to be established that the Australian industry was suffering material injury as a result of the subsidised exports.

Extension of the sunset clause to five years, and the downgrading of the review required before action could be continued, could represent a return to the situation which prevailed before the Gruen Review where, of the duties in force in December 1985, more than a quarter had been in force for more than five years and more than half had applied for more than three years. Gruen recommended that anti-dumping action should not remain in place beyond two years without a reference to the former Industries Assistance Commission (Gruen 1986, p. 49). He considered that:

Introduction of a sunset clause would signal clearly to industry that the anti-dumping system was seen predominantly as emergency protection from unfair trading and not as an acceptable long-term state of affairs (Gruen 1986, p. v).

Incorporating the functions of the ADA into the ACS would reverse an earlier decision. The ADA has played an important role in improving the transparency of the anti-dumping system. As the Minister noted when setting up the ADA:

The sensitivity of dumping complaints ... requires a body operating at arms length from the day to day administration of industry assistance by the Department of Industry, Technology and Commerce and the Australian Customs Service (Jones 1988, p. 2311).

The recommended introduction of computer modelling represents an attempt to bring some precision to the assessment of injury attributable to dumped imports. However, assessing injury is an inherently imprecise exercise and will always involve an element of discretion. In any case, irrespective of the precision used in assessing injury, since the process focuses on injury to particular domestic producers the interests of the wider community are necessarily excluded.

The review of the anti-dumping system, which is to be finalised by the end of 1991, provides an opportunity for the recent and proposed changes to be examined in light of their impact on the community more broadly.

**Table A9.1**  
**Anti-dumping and countervailing activity: 1985–86 to 1990–91**  
 (number)

	1985 –86	1986 –87	1987 –88	1988 –89	1989 –90	1990 –91 <sup>a</sup>
<i>New cases<sup>b</sup></i>						
Cases under inquiry at 1 July	63	44	44	19	16	19
Complaints formally initiated	57	43	29	21	31	73
Provisional measures imposed	43	19	16	9	11	40
Action taken:						
• gazettal	21	3	6	10	1	12
• undertakings	10	3	2	5	4	–
• termination	45	37	46	9	23	46
Cases under inquiry at 30 June						
• Australian Customs Service	44	44	19	12	10	20
• Anti-Dumping Authority	–	–	–	4	9	33
<i>Review cases<sup>b</sup></i>						
Cases subject to review at 1 July	203	183	128	55	24	21
Gazettals and undertakings	31	6	8	15	5	12
Cases closed by:						
• revocation	43	57	51	33	3	2
• release	8	4	30	13	5	2
• lapse (sunset provisions)	–	–	–	–	–	3
Cases subject to review at 30 June	183	128	55	24	21	26

– Nil.

a Figures do not balance due to cases subject to appeal or court initiated inquiry.

b Cases defined as one commodity by one country.

Source: ACS (1991).

**Table A9.2****Anti-dumping and countervailing cases, complaints formally initiated, by industry: 1985–86 to 1990–91<sup>a</sup>**

<i>ASIC subdivision</i>	<i>1985–86</i>	<i>1986–87</i>	<i>1987–88</i>	<i>1988–89</i>	<i>1989–90</i>	<i>1990–91</i>	<i>6 year total</i>	<i>Share of total</i>
	<i>no.</i>	<i>%</i>						
Food and beverages	4	2	–	3	9	11	29	11.4
Textiles	2	1	–	1	3	–	7	2.8
Paper and paper products	–	–	–	–	–	3	3	1.2
Chemical and petroleum products	21	12	9	5	7	43	97	38.2
Metallic minerals	–	–	–	–	2	–	2	0.8
Non-metallic mineral products	–	–	2	–	1	1	4	1.6
Basic metal products	8	5	8	–	4	–	25	9.8
Fabricated metal products	1	4	–	–	1	–	6	2.4
Transport equipment	2	–	–	–	–	7	9	3.5
Other machinery and equipment	9	17	6	5	3	4	44	17.3
Miscellaneous manufacturing	10	2	4	7	1	4	28	11.0
	<b>57</b>	<b>43</b>	<b>29</b>	<b>21</b>	<b>31</b>	<b>73</b>	<b>254</b>	<b>100.0</b>

– Nil.

<sup>a</sup> Cases defined as one commodity by one country.

Source: ACS (1991).

## **Appendix 10**

### **Assistance to agriculture, mining and manufacturing**

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This appendix reports the most recent Commission estimates of assistance for Australia's agricultural, mining and manufacturing sectors. Key features of the estimates are:

- although assistance to agriculture changed little between 1988–89 and 1989–90, it is likely to have increased in 1990–91;
- the penalty borne by mining activities continues to decline as the tariff reduction program lowers the protection afforded to mining inputs; and
- assistance to the manufacturing sector is to decline substantially over the 1990s.

Assistance methodology, assistance levels and trends and other developments by sector are discussed below.

#### **Assistance to agriculture**

Estimates of assistance to agricultural commodities are presented for the period 1985–86 to 1989–90. The average nominal and effective rates of assistance in 1989–90 were lower than those which prevailed in the mid-1980s. The disparity in assistance levels received by the various agricultural commodities has also declined since the mid-1980s.

The average nominal and effective rates of assistance of 3.6 per cent and 9.2 per cent respectively for 1989–90 indicate that assistance for agriculture changed little from the previous year. For most commodities, assistance was on a par with, or lower than, that which prevailed in 1988–89. The only highly assisted commodity for which assistance increased in 1989–90 was sugar.

Although 1990–91 estimates for agriculture are not yet available, assistance levels are likely to be higher. The decline in export prices and the value of agricultural output in 1990–91 means that domestic pricing arrangements have afforded an increased level of assistance. The full impact of government assistance to the wool industry will also be evident in the estimates for 1990–91. As a means of further assisting farmers during the current rural recession, the Commonwealth Government has significantly increased funding for the rural adjustment scheme, from \$53 million in 1989–90 to \$62 million in 1990–91 and to \$160 million in 1991–92.

#### **Methodology**

Nominal and effective rates of assistance provide a framework for describing the structure of incentives for the production of individual agricultural commodities which result from assistance policies. The major forms of Commonwealth assistance affecting the agricultural sector are included in the Commission's estimates, together

with the State Government statutory marketing arrangements which have significant national effects. Because of measurement difficulties concerned with annual monitoring, State Government budgetary assistance and other assistance, either positive or negative, which arises through government regulation or the provision of infrastructure have not been included.

The estimates of assistance are summarised in the following tables:

- assistance to agriculture, by form (table A10.1);
- price distortions and producer transfers for agricultural commodities (table A10.2); and
- nominal and effective rates of assistance by activity and standard deviations for the sector (table A10.3).

The Commission's estimates of assistance are made, as far as possible, on a consistent basis between agricultural commodities and over time. As data availability differs for mining and manufacturing, care should be exercised when using the agricultural estimates reported here for comparisons with estimates for the other sectors. While an effort has been made to include the assistance effects of the major government interventions which differentially impact on individual activities, data on Government interventions which influence costs and returns differ between sectors and not all forms of assistance have been measured.

Last year the National Farmers' Federation (NFF) publicly expressed concern about the way assistance to agriculture has been measured by the Commission. In particular, it was concerned that some agricultural industries might be shown in a relatively unfavourable light as a result of differences in the measurement of assistance between the agricultural, manufacturing and mining sectors.

The Commission has always stressed that care should be exercised when making comparisons between industries in different sectors as small differences in measured assistance could reflect differences in data availability and the scope of government interventions included rather than real differences in the incentives to use resources in different industries. As has been documented previously, the emphasis in monitoring assistance has been first, to identify the major government interventions that differentially assist industries in each sector and second, to measure the assistance on a consistent basis at the most disaggregated level practicable (IAC 1983, 1985, 1987). In this way valid comparisons can be made of the relative incentive effect of assistance on different industries within a sector and over time. Estimates of assistance for agriculture are based on an approach which has involved recognition of the importance of statutory marketing arrangements to individual commodities, the use of ABS value of farm output data and the detailed revenue and cost data from ABARE farm surveys. For manufacturing, the approach has involved recognition of the importance of the Customs tariff and associated concessional entry and by-law arrangements in providing protection from competitive imports and the use of detailed revenue and cost data from the ABS censuses of manufacturing establishments to provide estimates at the Australian Standard Industrial Classification (ASIC) class level.

However, the NFF's criticisms went further. The Federation sought the inclusion of the costs of inefficiencies in the production of non-traded goods and services in measured effective rates. In principle, effective rate measures would be more comprehensive if the costs to user industries of assistance to non-traded goods and services, such as electricity, transport and water, could be accurately measured and included. The cost to user industries of assistance to non-traded intermediate inputs includes not only the higher prices from the added costs of inefficiencies in their production, but also the lower prices resulting from cross subsidies and under recovery of capital (which are often considerable in rural areas). Unfortunately, insufficient data are available to allow the annual estimation of prices for non-traded goods and services that reflect full-cost recovery and efficient provision. Nevertheless, non-traded goods and services are used by all industries and the user cost effect of assistance to them makes little difference to the relative ranking of tradeable goods and services industries, except where those costs are significant and an industry uses an exceptionally small or large proportion of such non-traded intermediate inputs. For example, the relative ranking of aluminium smelting would be sensitive to any large user cost effects of assistance to electricity generation and transmission as it is an intensive user of electricity. Through its inquiry program and annual reports the Commission has sought to indicate directly and separately the cost of inefficiencies in the production and pricing of non-traded goods and services and the effects of them on the economy (see for example IAC 1989a and IC 1990c, app 1).

As part of an ongoing assessment of its methods, and as part of the inquiries into statutory marketing arrangements, and the dairy and sugar industries, the Commission has reviewed its methods and data sources for measuring assistance to eggs, rice, milk and sugar (IC 1991d, e, l, m). This has resulted in a downward revision of the estimates for rice and an increase in the estimates for milk production. The method used to measure assistance to eggs has been revised following deregulation of the industry in New South Wales. The method of measuring assistance to sugar also has been revised following the removal of the sugar embargo and domestic price control in July 1989.

## **Trends in measured assistance**

### ***The nominal rate of assistance on outputs***

The most important form of output assistance is provided by statutory marketing arrangements to the production of agricultural commodities such as milk, sugar, dried vine fruits, citrus fruits, eggs, rice and tobacco. Assistance for most of these commodities declined during 1989–90.

The only highly assisted agricultural commodity to receive an increase in its nominal rate of assistance was sugar. This was due to an increase in the margin between domestic and net export returns (or domestic price distortion). The average domestic price distortion for sugar rose by 8 percentage points to 46 per cent in 1989–90. This reflected the lower world sugar prices combined with the specific tariff rate of \$115 per tonne which replaced domestic price control over raw sugar and the embargo on sugar imports from 1 July 1989. The specific rate tariff was introduced to provide

a higher rate of assistance during periods of low world sugar prices. Although sugar is an exportable commodity, the Queensland statutory marketing arrangements for sugar enable the industry to price up to import parity and thus take advantage of the tariff and inward freight costs on imports. Accordingly, the nominal rate of assistance for sugar increased by 1 percentage point to 10 per cent during 1989–90. Levels of protection to sugar have since been significantly reduced (see below).

Significant reductions in the nominal rate of assistance occurred for tobacco and dried vine fruits. The nominal rate of assistance for tobacco declined by 13 percentage points to 43 per cent because the controlled price for domestically produced tobacco increased by less than the average price of comparable tobacco imports. Despite the decline in the nominal (and effective) rates of assistance to the tobacco industry, assistance levels still remain relatively high. In the May 1988 Economic Statement, the Government announced that the local content scheme for tobacco leaf would terminate from 1 July 1993 but subsequently the Government announced the extension of the local content scheme to 1 October 1995, after which tariff-only assistance will remain. A tariff of 15 per cent is to apply from 1 July 1992. The delay in replacing the local content scheme with tariff-only assistance has extended the phasing down period of assistance to the tobacco industry.

The nominal rate of assistance for dried vine fruit production declined by 8 percentage points to 18 per cent in 1989–90. The margin between the export price and the controlled domestic price for sultanas declined while the tariff rate on imports of currants and raisins was reduced from 23 per cent to 21 per cent.

Changes in the nominal rate of assistance for milk production incorporate the decrease in output assistance for manufacturing milk and a different methodology for estimating output assistance for market milk. The nominal rate of assistance for manufacturing milk production decreased by 4 percentage points to 17 per cent in 1989–90. The phasing out of supplementary market support payments for dairy products by July 1989 contributed to the decline in export subsidies for dairy products for 1989–90. The rate of export subsidy declined to around 13 per cent for cheese, to 18 per cent for butter and to 16 per cent for wholemilk powder.

The methodology for estimating assistance to market milk production has been revised following information obtained by the Commission during the course of the inquiry into the Australian dairy industry. The benchmark price for assistance estimates for market milk for New South Wales, Queensland and South Australia have been changed from an ex-Victorian manufacturing milk price plus transport costs to an Australian weighted average manufacturing milk price plus an allowance for the cost of assurance of out-of-season supply. This revision means that estimates of assistance for market milk are now made on the same basis for all states. The measured increase in the nominal rate of assistance for market milk production in 1989–90 reflects this change in methodology rather than an actual increase in output assistance (see IC 1991e). Average export prices for dairy products increased by more than 30 per cent in 1989–90. The resulting increase in returns to manufacturing milk production contributed to narrowing the gap between administratively set market milk prices and the manufacturing milk price for all States except South Australia. A decline

in the nominal rate of assistance for market milk would have been observed for 1989–90 if the same methodology had been applied for both 1988–89 and 1989–90.

Assistance to the egg industry provided by statutory marketing arrangements was not estimated for 1988–89 as appropriate data were not available. Because the New South Wales egg market was deregulated from 31 July 1989, average producer returns to New South Wales egg producers have been used as the benchmark for estimating the producer transfer in 1989–90 for the other States. Estimates indicate that the nominal rate of assistance for egg production has declined by nearly 20 percentage points over the latter half of the 1980s to around 8 per cent in 1989–90.

Assistance provided to wheat and cotton by domestic marketing arrangements has been removed. Statutory restrictions on the domestic marketing arrangements for wheat were formally removed from 1 July 1989. The Raw Cotton Marketing Advisory Committee decided in June 1989 that quota arrangements for the marketing of cotton were no longer feasible as a free domestic market had developed.

The revised estimates for rice for 1988–89 and the estimates for 1989–90 reflect the use of more appropriate price data which have been provided by the NSW Ricegrowers' Co-operative.

Some agricultural commodities have recorded a small increase in their nominal rate of assistance for 1989–90 due to increases in export incentive payments. However, these increases reflect an improvement in data collection with the inclusion, for the first time, of assistance provided under the innovative agricultural marketing program.

#### *Assistance to agricultural inputs*

The taxing effect of assistance provided to intermediate inputs used by the agricultural sector was reduced during 1989–90. This was largely due to the reductions in manufacturing sector tariffs on material and capital inputs and the removal of domestic marketing arrangements for wheat which had raised the price of stockfeed wheat used by the intensive livestock industry (table A10.1).

#### *Assistance to value adding factors*

Net assistance to value adding factors (land, labour and capital) is estimated to have declined by around 13 per cent to \$475 million in 1989–90. This was largely due to a decrease of \$85 million in the cost to revenue of income tax averaging for primary producers.

In 1989–90 Commonwealth payments to agriculture under natural disaster relief arrangements were reduced by \$8.5 million to \$1.7 million. Interest rate concessions valued at \$22 million were provided during 1989–90 on outstanding Commonwealth loans made under earlier natural disaster relief arrangements. Drought assistance, formerly provided under natural disaster relief arrangements, was transferred to the rural adjustment scheme in 1989–90. However, no new drought assistance was paid during 1989–90 because of favourable seasonal conditions.

In 1989–90 Commonwealth funding of \$53 million for the rural adjustment scheme was approximately the same as that provided in the previous year. Further adjustment assistance is provided by the Commonwealth through concessional interest rates on loans granted under earlier versions of the rural adjustment scheme. The value of concessions on interest was estimated to be around \$21 million in 1989–90.

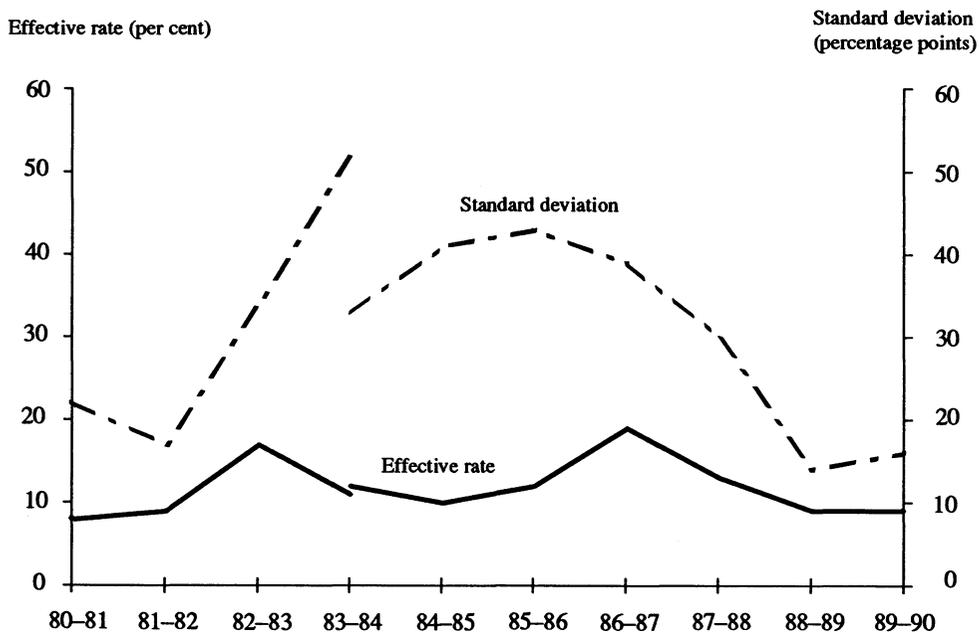
**Effective rates of assistance**

The average effective rate of assistance for agriculture of 9 per cent in 1989–90 was the same as the rate recorded for the previous year. An important feature of an assistance structure is the disparity in levels of assistance between commodities (see the discussion on disparities on pages 227–8). This disparity as measured by the standard deviation rose slightly, largely reflecting the increase in the effective rate of assistance to sugar (figure A10.1).

**Recent changes in assistance policies**

The Australian wool industry has received a significant increase in assistance from the Commonwealth Government following the collapse of the Australian wool market. The Australian Wool Corporation (AWC) had attempted, through the

**Figure A10.1**  
**Effective rates of assistance and disparities in assistance to agriculture<sup>a</sup>:**  
**1980–81 to 1989–90**



<sup>a</sup> The discontinuities represent a rebasing of the estimates using updated sales and cost data (IAC 1987).

Source: Commission estimates.

minimum reserve price scheme, to maintain wool prices at record levels despite unfavourable demand conditions and a significant increase in supplies. In May 1990 the Government announced that it would assist the wool industry by guaranteeing the borrowings of the AWC. This enabled the AWC to obtain loans needed to maintain an increasing stockpile of wool on terms more favourable than would otherwise be available.

Three additional assistance measures have since been announced:

- the introduction of a supplementary payments scheme, valued at \$300 million, to subsidise producers' returns from wool sales for the remainder of 1990–91 following the suspension of the minimum reserve price scheme in February 1991;
- assistance with interest payments amounting to \$22.5 million a year for a loan of up to \$200 million over two years to the Wool Realisation Commission; and
- a government guarantee for the credit facility provided through the Export Finance and Insurance Corporation for credit sales to the USSR.

More details of the changes to the wool marketing arrangements are given in appendix 5.

Before 1989–90 the wool industry received a nominal rate of assistance on outputs of around 1 per cent largely due to assistance provided for wool promotion. There was little change in the estimate for 1989–90 as the loan guarantee for AWC borrowings only came into effect for the last month of the financial year. Estimates based on forecasted 1990–91 values of output and incorporating the additional assistance measures indicate that the nominal rate of assistance for wool is likely to rise to around 10 per cent in 1990–91.

In response to the downturn in rural commodity prices the Commonwealth Government has increased rural adjustment scheme funding — by around \$10 million in 1990–91 to \$62 million and by a further \$98 million in 1991–92 to \$160 million.

In the March 1991 Statement the Government announced a continuation of the tariff reduction program beyond July 1992. Most higher tariffs, including the tariffs on most agricultural products, are to be phased down to 5 per cent by 1 July 1996. Tariffs provide assistance to sugar, citrus, currants, raisins, wine grapes, and tobacco. For sugar, the Government announced the continuation of the specific rate tariff. However, the scheduled rate to apply from 1 July 1991 was reduced from \$95 per tonne to \$76 per tonne and the scheduled rate to apply from 1 July 1992 was reduced from \$70 per tonne to \$55 per tonne.

As part of the March 1991 Statement, the Government also announced that although consideration of assistance for dairy, sugar and tobacco will follow Industry Commission inquiries, it is disposed to reduce assistance for these industries over the longer term in line with assistance for other industries.

**Table A10.1**  
**Assistance to agriculture, by form<sup>a</sup>: 1985–86 to 1989–90**  
(\$ million)

	1985–86	1986–87	1987–88	1988–89	1989–90
<b>Assistance to outputs</b>					
Domestic pricing arrangements <sup>b</sup>	559	669	642	454	502
Export incentives	1	1	18	15	17
Export inspection services	40	48	37	45	39
Local content schemes	15	9	19	23	21
Marketing support	32	36	35	27	29
Underwriting arrangements <sup>c</sup>	17	201	2	–	–
Tariffs	51	56	48	87	68
	715	1 020	801	651	676
<b>Assistance to value-adding factors</b>					
Adjustment assistance	51	65	64	65	71
Agricultural research	101	120	137	155	175
Income taxation concessions <sup>d</sup>	101	180	280	290	205
Natural disaster relief	38	39	31	36	24
	291	404	512	546	475
<b>Assistance to inputs</b>					
Disease control <sup>e</sup>	14	18	14	9	10
Fertiliser subsidies	52	–	–	–	–
Stockfeed <sup>f</sup>	- 34	- 9	..	- 17	–
Tariffs on materials <sup>g</sup>	- 123	- 96	- 112	- 119	- 115
Tariffs on plant and machinery <sup>g</sup>	- 196	- 121	- 145	- 169	- 126
	- 287	- 208	- 243	- 296	- 231

- Nil.
- .. less than \$0.5 million.
- a This table covers total assistance to the agricultural sector. A small amount of assistance provided through general measures (eg income tax concessions) assists activities for which nominal and effective rates have not been estimated.
- b The amount of assistance derived from domestic pricing arrangements for certain products is increased by import restrictions (eg tariffs on dried vine fruits and the embargo on sugar imports until 30 June 1989), which enable the domestic price to exceed the landed duty free price of competing imports.
- c Includes the payment of a second advance of \$33.8 million made in July 1990 to the Australian Wheat Board for the 1986–87 wheat crop. A final payment is expected to be paid in 1991–92.
- d Includes assistance provided to primary producers through the income tax averaging provisions. Estimates of the assistance from the income tax averaging provisions were provided by the Treasury.
- e Covers assistance provided by the bovine tuberculosis and brucellosis eradication campaign.
- f The estimated effects of the domestic pricing arrangements, which ended 30 June 1989, for stockfeed wheat on the pig, poultry and egg activities. These arrangements could either tax or subsidise user industries depending on whether the stockfeed price was above or below the comparable export price.
- g The additional costs incurred by farmers due to assistance measures that raise the prices of manufactured inputs.

*Source:* Commission estimates

**Table A10.2**  
**Price distortions<sup>a</sup> and producer transfers<sup>b</sup> for agricultural commodities: 1985–86 to 1989–90**

Commodity	1985–86		1986–87		1987–88		1988–89		1989–90	
	Price distortion	Producer transfer								
	%	\$m								
<b>Domestic pricing arrangements</b>										
<i>Dairying and other animal products</i>										
Cheese <sup>c</sup>	26	63	55	89	33	79	24	67	13	57
Butter <sup>c</sup>	53	64	89	33	67	28	40	18	18	24
Skim milk powder	4	5	37	18	38	25	19	19	19	19
Wholemilk powder	4	3	42	8	25	8	17	6	16	7
Casein	2	..	41	1	33	1	19	1	19	1
Market milk <sup>d</sup>	75	226	56	205	48	192	24	121	36	176
Eggs <sup>e</sup>	39	55	52	62	25	23	e	e	8	21
Honey	1	..	1	..	1	..	1	..	1	..
<i>Fruits and vegetables</i>										
<i>Dried vine fruits<sup>f</sup></i>										
Sultanas	42	13	27	10	52	16	45	13	28	10
Currants	13	1	12	1	15	1	20	1	18	1
Raisins	14	1	15	1	15	..	20	1	18	1
Deciduous canning fruits <sup>g</sup>	43	4	51	4	g	g	–	–	–	–

Commodity	1985-86		1986-87		1987-88		1988-89		1989-90	
	Price distortion	Producer transfer								
	%	\$m								
<b>Grains</b>										
Rice <sup>h</sup>	36	8	44	12	49	14	20	6	18	5
<b>Wheat</b>										
Human use	17	35	13	26	2	5	2	6	-	-
Stockfeed	6	2	2	..	..	..	3	1	-	-
Industrial	3	2	-2	-1	-2	-1	1	..	-	-
<b>Other crops</b>										
Sugar <sup>i</sup>	80	73	53	66	57	72	38	62	46	83
Cotton <sup>j</sup>	10	3	53	16	20	9	27	9	-	-
<b>Tariffs</b>										
Wine grapes	16	15	16	17	18	27	21	53	19	38
Citrus	18	19	19	18	10	12	25	34	21	30
Potatoes	8	13	8	17	4	7	-	-	-	-
Onions	1	..	1	1	1	..	-	-	-	-
Tomatoes	1	1	1	1	1	1	-	-	-	-
Other vegetables <sup>k</sup>	1	2	1	2	1	1	-	-	-	-
<b>Local content schemes</b>										
Tobacco <sup>l</sup>	29	15	14	8	34	19	43	23	36	21

- Nil.
- .. Producer transfer less than \$0.5 million or price distortion between - 0.5 per cent and 0.5 per cent.
- a The price distortion is the proportional difference between the domestic price of a commodity and the price that would prevail without assistance. For export-competing commodities, it is the proportional difference between the domestic and comparable export prices. For import competing commodities, it is the proportional difference between the domestic and import (landed duty free) prices. In the case of tariff assistance, the price distortion is the tariff rate applying to imports expressed as a percentage of the landed duty free price.
- b Producer transfers represent the income transfer to farmers from domestic consumers and users due to domestic prices being maintained above export or import parity prices. A negative transfer indicates a transfer from farmers to domestic consumers and users. The transfers are derived for export industries either by multiplying the difference between the domestic and comparable export price by domestic sales or by multiplying the difference between the average prices received by farmers and comparable export prices, by production. With the exception of sugar and deciduous canning fruits, it is assumed that all the transfer accrues to the farming activity.
- c The methodology for estimating the producer transfers for butter and cheese have been revised to exclude the levies charged on domestic sales of butter and cheese which were used to fund the supplementary support payments. The domestic price distortion includes the added costs of the levies to consumers and users of butter and cheese.
- d For the years 1985–86 through to 1988–89 the producer transfers were estimated for each State by multiplying the difference between the State market milk price and a notional deregulated price, by market milk sales in the State. For NSW, Qld and SA, the deregulated price was assumed to be the Vic manufacturing milk price plus freight from Vic to the respective States. For WA and Tas, the deregulated price was assumed to be the local manufacturing milk price, plus winter incentive payments. The 1989–90 estimates are based on a revised methodology. The producer transfer for 1989–90 was estimated by multiplying the difference between the State market milk price and the local manufacturing milk price plus an allowance of 20 per cent of the average Australian manufacturing milk price to represent the cost of assurance of out-of-season supply.
- e Estimates of assistance to egg production for 1986–87 and 1987–88 were estimated by obtaining a price differential on the domestic market due to domestic marketing arrangements by comparing the domestic wholesale prices in each State with average export prices for NSW shell and pulp eggs. NSW was the major exporting state. The price distortion and producer transfer were not estimated for 1988–89 due to the difficulty in obtaining appropriate data for NSW following the deregulation of the NSW egg market and the sale of the NSW Egg Corporation's assets. Producer transfers for 1989–90 were estimated for each State by multiplying the difference between the average price received by farmers and the NSW deregulated price by the quantity produced in each State. The price distortion for 1989–90 is the producer transfer expressed as a proportion of the unassisted value of egg production based on the assumption that minimal quantities of eggs are exported.
- f It is assumed that, in the absence of the industry's marketing arrangements, only sultanas would be an export-competing commodity. Thus export parity prices were used to measure the price distortions and producer transfers for sultanas, whereas import parity prices were used for currants and raisins.
- g Producer transfers estimated at 20 per cent to 30 per cent of the total transfer based on respective value added shares between the growing and canning activities. The price distortion and producer transfer have not been calculated for 1987–88. Price data were not available following the winding up of the Australian Canned Fruits Corporation on 31 December 1988.

- h Estimates have been derived by comparing domestic and export prices for medium and long grain rice. As separate domestic and export prices for short and long grain rice were not available for 1987–88, it was necessary to estimate these prices from the average price supplied by the NSW Ricegrowers' Co-operative Limited. The price distortion for rice grown in Qld is based on the difference between the average domestic and comparable export prices for rice grown in NSW. The estimates for 1988–89 have been revised on the basis of more appropriate data provided by the Ricegrowers' Co-operative. The 1989–90 estimates are based on data comparable to that used for the revised 1988–89 estimates.
- i Producer transfers were estimated in accordance with the industry formula used for dividing raw sugar returns between millers and growers. The import embargo on sugar was replaced by a specific tariff rate on sugar imports from 1 July 1989.
- j The domestic marketing arrangements ceased in June 1989.
- k Includes beans, cabbages, brussels sprouts, carrots, cauliflowers, lettuces, peas and pumpkins.
- l Transfers were derived by applying the price differential between Australian-grown green leaf and the notional import price of non-USA green leaf to the domestic sales of Australian-grown leaf.

*Source:* Commission estimates

Table A10.3

Nominal and effective rates of assistance by activity and standard deviations for the agricultural sector: 1985-86 to 1989-90<sup>a</sup>  
(per cent)

Activity/commodity description	Nominal rate of assistance on outputs <sup>b</sup>					Effective rate of assistance <sup>c</sup>				
	1985-86	1986-87	1987-88	1988-89	1989-90	1985-86	1986-87	1987-88	1988-89	1989-90
<b>Horticulture</b>										
Apples and pears	0.5	0.4	1.4	0.4	1.5	-1.5	0.9	3.4	1.1	3.6
Dried vine fruits	18	17	25	26	18	33	38	57	57	39
Wine grapes	16	16	18	21	19	33	42	39	48	42
Citrus	18	19	10	25	21	32	37	20	50	42
Deciduous canning fruits <sup>d</sup>	23	28	0.9	0.8	-	59	77	9.2	6.9	5.2
Bananas	0.5	-	0.6	0.3	0.4	-0.5	0.5	1.8	0.9	1.5
Tobacco	38	16	37	56	43	63	24	68	110	80
Potatoes	8.0	8.0	3.1	0.1	0.1	15	21	6.1	-3.1	-2.4
Onions	1.4	1.4	3.5	1.3	1.5	-0.8	1.2	5.9	1.7	2.4
Tomatoes	1.4	1.4	0.7	-	0.1	-1.8	0.6	0.3	-1.2	-0.8
Other vegetables <sup>e</sup>	1.7	1.4	2.5	0.8	0.8	-1.1	0.9	3.9	0.5	0.8
<b>Average</b>	<b>8.9</b>	<b>7.3</b>	<b>7.4</b>	<b>8.2</b>	<b>6.6</b>	<b>14</b>	<b>14</b>	<b>15</b>	<b>17</b>	<b>14</b>
<b>Extensive cropping</b>										
Wheat	2.0	14	0.7	0.6	0.3	3.8	35	3.5	1.4	1.9
Barley	-	-	0.2	0.1	0.1	0.3	2.6	2.3	0.6	1.3
Oats	-	-	0.3	0.3	0.2	1.8	3.5	1.8	0.2	0.9
Maize	-	-	-	0.1	0.1	-2.1	0.1	-0.2	-1.3	-0.6
Sorghum	-	-	0.2	0.2	0.1	0.7	1.5	1.6	..	0.6
Oilseeds	-	-	0.2	0.1	-	-1.9	-1.2	3.3	3.3	3.7
<b>Average</b>	<b>1.5</b>	<b>10</b>	<b>0.5</b>	<b>0.5</b>	<b>0.2</b>	<b>2.7</b>	<b>24</b>	<b>3.0</b>	<b>1.2</b>	<b>1.7</b>

Activity/commodity description	Nominal rate of assistance on outputs <sup>b</sup>					Effective rate of assistance <sup>c</sup>				
	1985 -86	1986 -87	1987 -88	1988 -89	1989 -90	1985 -86	1986 -87	1987 -88	1988 -89	1989 -90
<b>Extensive irrigation and high-rainfall crops</b>										
Sugar	21	13	13	9.0	10	63	33	32	20	25
Cotton <sup>f</sup>	1.0	4.5	2.1	1.7	-	0.9	6.6	6.2	5.6	2.7
Rice <sup>g</sup>	11	19	17	4.9	4.0	26	59	50	11	9.7
<i>Average</i>	12	10	9.1	5.7	5.7	24	20	19	12	12
<b>Extensive grazing</b>										
Beef	1.3	1.3	0.9	1.2	0.9	5.7	7.7	8.5	9.3	6.1
Wool	1.3	1.2	0.7	0.5	0.5	2.4	4.2	2.8	2.4	2.7
Sheepmeat	1.9	1.5	0.9	1.2	1.6	3.0	4.3	3.1	3.6	4.8
<i>Average</i>	1.3	1.2	0.8	0.8	0.7	3.9	5.7	4.7	4.7	4.1
<b>Intensive livestock</b>										
Pigs	-	0.1	0.1	0.1	0.1	-11	0.7	4.1	-2.2	4.4
Poultry	-	-	0.1	0.1	0.1	-4.1	-0.2	6.0	3.2	5.0
Eggs <sup>h</sup>	29	35	10	h	8.4	51	71	22	h	18
Milk production	49	54	49	22	24	159	213	171	55	61
Manufacturing milk <sup>i</sup>	31	50	45	21	17	80	181	150	51	40
Market milk <sup>j</sup>	76	60	54	24	37	>250	>250	205	61	107
Honey	1.3	1.1	2.5	2.7	5.2	1.1	0.9	6.7	7.5	12
<i>Average</i>	22	23	18	11	11	54	71	58	29	32
<b>Total agriculture</b>										
Average	6.1	8	5.0	3.6	3.6	12	19	13	9.1	9.2
Standard deviation <sup>k</sup>	(14)	(13)	(12)	(7)	(8)	(43)	(39)	(30)	(14)	(16)

- Nil.
- .. Between - 0.05 per cent and 0.05 per cent.
- a Due to the increasing number of activities in receipt of low levels of assistance the Commission has reported rates of less than 10 per cent rounded to one decimal point. Estimates of 10 per cent or greater continue to be rounded to whole numbers. The presentation of some estimates to one decimal point should not be interpreted as implying any greater degree of precision than previous estimates. The new form of presentation simply enables the detection of small movements in rates that would otherwise be hidden in estimates presented as whole numbers.
- b Average nominal rates on outputs are weighted by the unassisted value of output of each activity.
- c Average effective rates are weighted by the unassisted value added of each activity.
- d The required price data were not available for 1987–88 following the winding up of the Australian Canned Fruits Corporation on 31 December 1988, hence the producer transfer is not included in the 1987–88 estimate.
- e Includes beans, cabbages, brussels sprouts, carrots, cauliflowers, lettuces, peas and pumpkins.
- f The domestic marketing arrangements for cotton ceased in June 1989.
- g Estimates have been derived by comparing domestic and export prices for medium and long grain rice. As separate domestic and export prices for short and long grain rice were not available for 1987–88, it was necessary to estimate these prices from the average prices supplied by the NSW Ricegrowers' Co-operative limited. The price distortion for rice grown in Qld is based on the difference between average domestic and comparable export prices for rice grown in NSW. The estimates for 1988–89 have been revised on the basis of more appropriate data provided by the Ricegrowers' Co-operative. The 1989–90 estimates are based on data comparable to that used for the revised 1988–89 estimates.
- h Assistance to egg production for 1986–87 and 1987–88 was estimated by obtaining a price differential on the domestic market due to domestic marketing arrangements by comparing the domestic wholesale prices in each State with average export prices for NSW shell and pulp eggs. NSW is the major exporting state. The price distortion and producer transfer were not estimated for 1988–89 due to the difficulty in obtaining appropriate data for NSW following the deregulation of the NSW egg market and the sale of the NSW Egg Corporation's assets and nominal and effective rates have not been reported for this year. Producer transfers for 1989–90 were estimated for each state by multiplying the difference between the average price received by farmers and the NSW deregulated price by the quantity produced in each State. The price distortion for 1989–90 is the producer transfer expressed as a proportion of the unassisted value of egg production.
- i The methodology for estimating the producer transfers for butter and cheese have been revised to exclude the levies charged on domestic sales of butter and cheese which were used to fund the supplementary support payments. The domestic price distortion includes the added costs of the levies to consumers and users of butter and cheese.
- j For the years 1985–86 through to 1988–89 the producer transfers were estimated for each State by multiplying the difference between the State market milk price and a notional deregulated price, by market milk sales in the State. For NSW, Qld and SA, the deregulated price was assumed to be the Vic manufacturing milk price plus freight from Vic to the respective States. For WA and Tas, the deregulated price was assumed to be the local manufacturing milk price, plus winter incentive payments. The 1989–90 estimates are based on a revised methodology. The producer transfer for 1989–90 was estimated by multiplying the difference between the State market milk price and the local manufacturing milk price plus an allowance of 20 per cent of the average Australian manufacturing milk price to represent the cost of assurance of out-of-season supply.
- k The standard deviation in percentage points measures how far from the average items in a frequency distribution are located, thereby measuring the extent of variation or dispersion in the distribution. The larger the variability amongst individual activities' nominal and effective rates, the larger the standard deviation.

*Source:* Commission estimates

## **Assistance to mining**

The Commission has updated estimates of nominal and effective rates of assistance for mining to 1989–90. For comparison, assistance estimates are presented for 1983–84 and 1988–89, and for projections of the levels of assistance that will apply when the May 1988 Economic Statement and the March 1991 Statement changes are fully implemented.

The estimates for 1989–90 indicate that assistance to inputs going into mining has continued to decline, reducing the magnitude of the negative effective rate of assistance to mining. For 1989–90, the nominal rate of assistance to inputs and effective rates of assistance were estimated to be 2.2 and minus 3.0 per cent, respectively. The reduction in the penalties borne by mining is likely to continue with the phasing in of the May 1988 and March 1991 changes.

## **Methodology**

ABS input-output data and supplementary material have been used to derive cost structures for the mining industries. With the derived cost structures, it was possible to estimate the effects of assistance on tradeable capital inputs as well as material inputs.<sup>1</sup>

A special feature of mining is the importance of naturally occurring mineral deposits as a value adding factor. Some of the returns to mineral deposits are appropriated directly as royalties and those payments are reflected in industry output and value added estimates. Other mineral returns (quasi royalties), however, are appropriated beyond the mine site — for example, as acknowledged to be the case for some rail charges for black coal. To provide estimates of output and value added for mining more comparable to those for manufacturing and agriculture, an attempt has been made to identify and measure such mineral returns and to adjust ex mine and value added data accordingly. The assistance estimates in this appendix were derived by assuming royalties and quasi royalties reflect the true value of mineral deposits.

Previously published estimates were based on 1980–81 cost structures and industry shares. However, all assistance measures in this appendix are based on 1980–81 cost structures and 1986–87 industry shares to reflect changes in the relative importance of individual mining industries. Thus, assistance rates in this appendix are not strictly comparable with previous estimates. Further details of the methodology were provided in IC (1991*b*, vol 2).

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1 Tradeable capital inputs refers here to items of machinery and equipment. The manufacturing assistance measurement system does not provide estimates of the effects of assistance to those inputs.

## Border assistance estimates

Estimates of nominal rates of assistance to mining industries' output and inputs, and effective rates of assistance to value adding factors of production for 1989–90 are presented in table A10.4.<sup>2</sup> For comparison, estimates of assistance to inputs and value adding factors are provided in tables A10.5 and A10.6, for 1983–84, 1988–89, 1989–90 and for the May 1988 and March 1991 programs. Between 1983–84 and 1989–90, the average nominal rate of assistance to mining inputs has fallen from 2.9 per cent to 2.2 per cent. During that same period, the average effective rate of assistance changed from minus 3.5 per cent to minus 3.0 per cent.

### *Nominal rates of assistance*

Mining industries do not receive any border assistance on their output, except the small assistance afforded some minerals in the Other minerals industry. However, border intervention increases the costs of materials and capital inputs for all mining industries.

As indicated in table A10.4, border intervention raised the average cost of material inputs to the sector by 1.9 per cent and the average cost of capital inputs by 2.7 per cent in 1989–90. The average increase in the combined cost of material and capital inputs is estimated to be 2.2 per cent. With the program of phased tariff cuts announced in the May 1988 Economic Statement, this figure is projected to decline slightly to 1.8 per cent (table A10.5). Further tariff reductions announced in the March 1991 Statement are projected to reduce the additional cost of material and capital inputs to below 1 per cent.

### *Effective rates of assistance*

The net effect of negligible assistance to outputs and higher costs on inputs is reflected in negative assistance to value added. As presented in tables A10.4 and A10.6, returns to value adding factors employed in mining industries are estimated to have been lower, on average, by 3 per cent in 1989–90 due to border intervention. This figure is estimated to fall slightly when the tariff reduction program announced in the May 1988 Economic Statement phases out. A further reduction in the magnitude of negative effective assistance is projected with the tariff reduction program announced in the March 1991 Statement. When the program is complete, effective rates for most mining industries will be around minus 1 per cent.

Disparities in effective assistance between industries indicate a potential efficiency loss from distortions in resource use. The disparity in assistance levels among mining industries is small compared with that of manufacturing and agriculture. For instance, in 1989–90 effective rates of assistance for manufacturing industries ranged from minus 10 per cent to 244 per cent whilst in agriculture they ranged from minus 2.4 per cent to 107 per cent. The corresponding figure for mining varied from minus 7.8 per

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2 Value adding factors include labour, land, working capital and natural resources.

cent to minus 1.4 per cent. However, whilst variations in assistance within the mining sector are small, efficiency losses are likely from disparities in assistance *across* sectors.

### **Other forms of assistance**

The exemption from taxation of income from gold mines was — until it ceased in January 1991 — a major form of assistance to value adding factors employed in mining. Inclusion of the exemption in the estimates would raise the effective assistance to the Gold ores industry significantly; its impact on the sectoral average would be to reduce the magnitude of the negative effective assistance slightly.

In addition, governments at all levels — Commonwealth, State and Local — influence the activities of mining industries. Governments, as owners of mineral resources, exercise direct control over mineral developments. The Commonwealth Government also influences mining activities indirectly through interventions in mineral trade and foreign investment regulation. In its report on mining and minerals processing industries the Commission found these interventions impose substantial costs, delays and uncertainty on mining activities (IC 1991*b*, vol 3). A number of taxation arrangements were also found to affect the mining industry, although it was not possible to determine, on balance, what their net effect was. These other interventions are difficult to measure and are not incorporated in assistance estimates.

**Table A10.4**  
**Average nominal and effective rates of border assistance by mining industry:**  
**1989-90**  
 (per cent)

ASIC codes	Industry	Nominal rates			Effective rates <sup>a</sup>	
		Output	Material and tradeable capital inputs			
			Material	Capital	Combined	
	<b>Ferrous metal ores</b>					
1111, 2	Ferrous metal ores	–	2.4	3.9	3.0	- 4.6
	<b>Non-ferrous metal ores</b>					
1121	Bauxite	–	2.9	2.5	2.6	- 3.0
1122	Copper ores	–	3.0	2.4	2.8	- 4.4
1123	Gold ores	–	2.5	2.6	2.5	- 3.3
1124	Mineral sands	–	2.7	2.5	2.6	- 4.0
1125	Nickel ores	–	1.5	2.3	1.8	- 2.7
1126	Silver-lead-zinc ores	–	3.0	2.4	2.7	- 3.5
1127	Tin ores	–	2.9	2.3	2.6	- 3.8
1128	Uranium ores	–	2.5	2.5	2.5	- 4.1
1129	Non-ferrous metal ores nec	–	3.0	2.2	2.6	- 3.6
	<b>Coal, oil and gas</b>					
1201	Black coal	–	3.0	2.3	2.7	- 2.5
1202	Brown coal	–	1.4	2.3	1.6	- 1.4
1300	Crude oil and natural gas	–	0.9	2.4	1.6	- 2.4
	<b>Other minerals</b>					
1401–1505	Other minerals	0.6	2.7	3.9	3.1	- 3.3
	<b>Services to mining</b>					
1611, 2	Petroleum and mineral exploration (own account)	–	1.7	4.7	1.7	- 7.8
1620	Mining and exploration services nec	–	1.0	3.5	1.1	- 2.6
	<b>Total mining</b>	–	<b>1.9</b>	<b>2.7</b>	<b>2.2</b>	<b>- 3.0</b>

– Nil.

a Derived using material and tradeable capital inputs combined.

Source: Commission estimates.

**Table A10.5**  
**Average nominal rates of border assistance on inputs to mining: 1983–84,**  
**1988–89, 1989–90, and May 1988 and March 1991 programs<sup>a</sup>**  
 (per cent)

<i>ASIC codes</i>	<i>Industry</i>	<i>1983 –84</i>	<i>1988 –89</i>	<i>1989 –90</i>	<i>May 1988 program</i>	<i>March 1991 program</i>
<b>Ferrous metal ores</b>						
1111, 2	Ferrous metal ores	4.3	3.3	3.0	2.5	1.0
<b>Non-ferrous metal ores</b>						
1121	Bauxite	3.5	2.8	2.6	2.1	0.9
1122	Copper ores	3.7	3.1	2.8	2.3	1.0
1123	Gold ores	3.3	2.7	2.5	2.1	0.9
1124	Mineral sands	3.6	2.8	2.6	2.2	0.9
1125	Nickel ores	2.4	1.9	1.8	1.5	0.6
1126	Silver-lead-zinc ores	3.6	2.9	2.7	2.2	0.9
1127	Tin ores	3.6	2.8	2.6	2.2	0.9
1128	Uranium ores	3.4	2.7	2.5	2.0	0.8
1129	Non-ferrous metal ores nec	3.5	2.8	2.6	2.1	0.9
<b>Coal, oil and gas</b>						
1200	Black coal	3.6	2.9	2.7	2.2	0.9
1202	Brown coal	2.1	1.7	1.6	1.3	0.6
1300	Crude oil and natural gas	2.1	1.7	1.6	1.3	0.5
<b>Other minerals</b>						
1401– 1505	Other minerals	4.2	3.3	3.1	2.6	1.1
<b>Services to mining</b>						
1611, 2	Petroleum and mineral exploration (own account)	2.3	1.9	1.7	1.5	0.7
1620	Mining and exploration services nec	1.5	1.2	1.1	0.9	0.4
<b>Total mining</b>		<b>2.9</b>	<b>2.3</b>	<b>2.2</b>	<b>1.8</b>	<b>0.7</b>

a Assistance estimates are derived using material and tradeable capital inputs combined. May 1988 and March 1991 programs show projections for completion of announced assistance reductions.

Source: Commission estimates

**Table A10.6**  
**Average effective rates of border assistance to mining: 1983–84,**  
**1988–89, 1989–90, and May 1988 and March 1991 programs<sup>a</sup>**  
 (per cent)

<i>ASIC codes</i>	<i>Industry</i>	<i>1983 –84</i>	<i>1988 –89</i>	<i>1989 –90</i>	<i>May 1988 program</i>	<i>March 1991 program</i>
<b>Ferrous metal ores</b>						
1111, 2	Ferrous metal ores	- 5.4	-4.9	-4.6	-3.8	-1.6
<b>Non-ferrous metal ores</b>						
1121	Bauxite	-1.3	-3.2	-3.0	-2.4	-1.0
1122	Copper ores	-1.7	-4.7	-4.4	-3.7	-1.6
1123	Gold ores	-4.2	-3.5	-3.3	-2.7	-1.1
1124	Mineral sands	-4.9	-4.3	-4.0	-3.3	-1.4
1125	Nickel ores	-3.6	-2.9	-2.7	-2.3	-1.0
1126	Silver-lead-zinc ores	-4.6	-3.8	-3.5	-2.9	-1.2
1127	Tin ores	-3.0	-4.1	-3.8	-3.2	-1.4
1128	Uranium ores	-5.3	-4.4	-4.1	-3.4	-1.4
1129	Non-ferrous metal ores nec	-2.4	-3.9	-3.6	-3.0	-1.3
<b>Coal, oil and gas</b>						
1201	Black coal	-2.4	-2.7	-2.5	-2.1	-0.9
1202	Brown coal	-1.9	-1.5	-1.4	-1.2	-0.5
1300	Crude oil and natural gases	-3.1	-2.5	-2.4	-1.9	-0.8
<b>Other minerals</b>						
1401– 1505	Other minerals	-4.1	-3.7	-3.3	-2.7	-1.0
<b>Services to mining</b>						
1611, 2	Petroleum and mineral exploration (own account)	-10.1	-8.2	-7.8	-6.6	-3.2
1620	Mining and exploration services nec	-3.5	-2.8	-2.6	-2.2	-1.0
<b>Total mining</b>		<b>-3.5</b>	<b>-3.2</b>	<b>-3.0</b>	<b>-2.5</b>	<b>-1.1</b>

a Assistance estimates are derived using material and tradeable capital inputs combined. May 1988 and March 1991 programs show projections for completion of announced assistance reductions.

Source: Commission estimates

## **Assistance to manufacturing**

Assistance to the manufacturing sector is to decline substantially over the 1990s. Under the changes announced by the Government in March 1991, the program of tariff reductions is to continue, with most higher tariffs to phase down to 5 per cent by 1996. In addition, protection to the textile, clothing and footwear, and passenger motor vehicle industries is to be cut substantially by the year 2000.

Estimates of assistance for manufacturing industries are provided for the period 1987–88 to 1989–90 and preliminary estimates for 1990–91. Projections of assistance levels to apply at the end of the March 1991 program are also provided. These projections were published in an information paper on the assistance reductions that was released in July (IC 1991g).

Based on the preliminary estimates, the average effective rate of assistance for the manufacturing sector declined to 15 per cent in 1990–91. This represents a reduction of 4 percentage points from 1987–88 levels, before commencement of the program of tariff reductions. By the end of the March 1991 program, the effective rate for the sector is projected to fall to 5 per cent.

## **Methodology**

The Commission uses the standard measures of nominal and effective rates of assistance for monitoring the assistance provided to manufacturing industries. These measures apply a consistent methodology to summarise the influence of various forms of assistance on returns to industry output and value added.<sup>3</sup>

The assistance estimates include tariffs on outputs and material inputs, quantitative import restrictions, bounties, export incentives, local content schemes, and the effects of tariff concessions on the cost of materials used by industries. However, the estimates exclude certain forms of assistance which are particularly difficult to quantify. For example, assistance from anti-dumping action, tariff penalties on capital items used by the manufacturing sector, and most of the alternative assistance measures reported in appendix 6 are not incorporated in the estimates. In addition, no allowance has been made for changes in the prices currently paid for government provided services, such as electricity, that might result from a more competitive economic environment.

Some changes have been made to previous estimates of assistance to certain textile, clothing and footwear (TCF) industries:

- Estimates for those TCF industries currently protected by quota have been revised to take account of the change to the period covered by the quota. From March 1989 quota levels have applied for the 12 month period from 1 March to 28 February, rather than on a calendar year basis. For 1989–90, and the preliminary estimates

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3 For an explanation of nominal and effective rates of assistance, and details of the methodology used in their derivation, see IAC (1985, 1987).

for 1990–91, estimates of the assistance afforded by quotas are based on a weighted average of the relevant quota tender premiums.<sup>4</sup>

- Estimates presented in last year's annual report overstated assistance to some textiles industries in receipt of bounty assistance. Revised estimates are presented for 1987–88 to 1989–90.

Estimates of assistance to the milk products industries were revised during the course of the Commission's inquiry into the dairy industry. This appendix includes revised estimates for these industries for 1987–88 to 1989–90.

Details of the methodology used to derive the assistance estimates for the end of the March 1991 program were provided in IC (1991*g*, app B).

The following information on manufacturing industry assistance is presented in this appendix:

- tariff quotas for textiles, clothing and footwear current at 15 August 1991 (table A10.7);
- tender sale premiums for textiles, clothing and footwear import quota entitlements, by quota category (table A10.8);
- assistance to manufacturing, by form (table A10.9);
- average nominal rates of assistance on outputs and materials for manufacturing industries (table A10.10);
- average effective rates of assistance for manufacturing industries (table A10.11);
- standard deviations for nominal and effective rates of assistance for manufacturing subdivisions (table A10.12); and
- subsidy equivalents, tax on materials and consumer tax equivalents for manufacturing subdivisions (table A10.13).

### Changes in assistance

The effective rate of assistance for the manufacturing sector as a whole has declined significantly from its level of 36 per cent in 1968–69, the earliest year for which reasonably consistent estimates have been derived (figure 1, chapter 1). Before the commencement of the tariff reduction program in 1988, the reductions in assistance mainly reflected the 25 per cent across-the-board tariff cut in July 1973, government decisions on manufacturing industry inquiries conducted by the former Industries Assistance Commission, and the impact of structural adjustment reducing the relative contribution of the highly assisted industries to total manufacturing activity.

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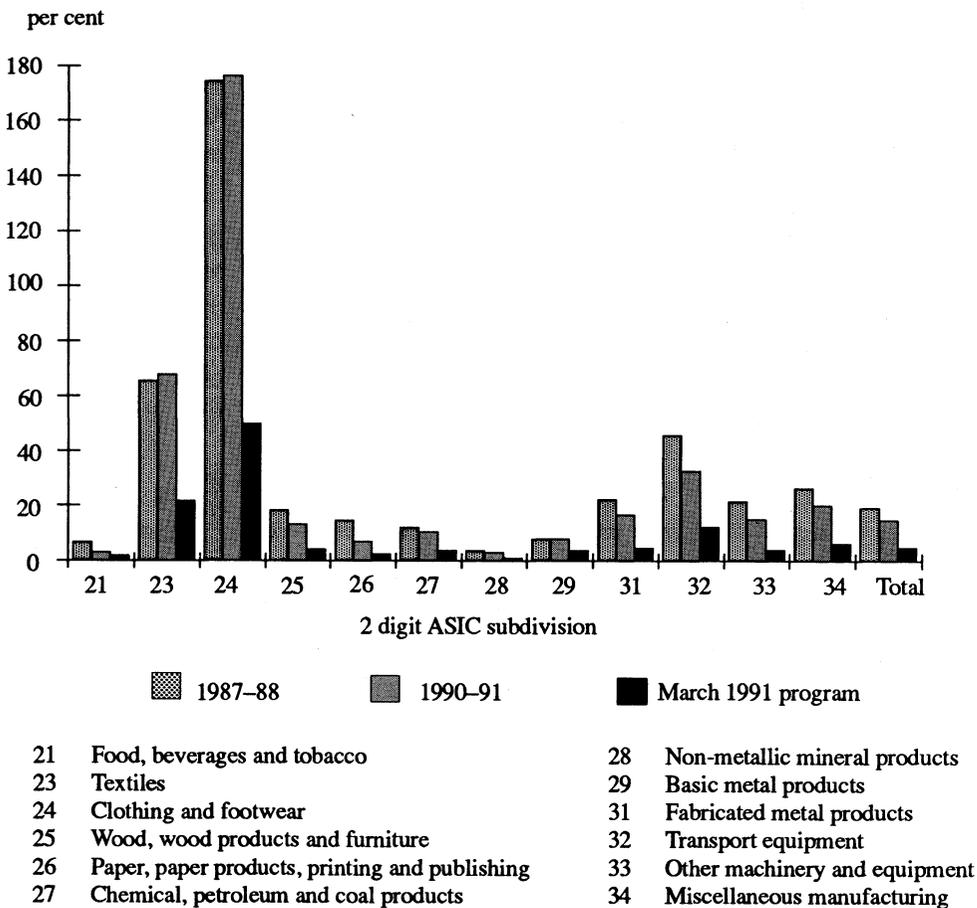
4 For example, for 1989–90 the estimates are based on eight months application of the tender premium for the period March 1989 to February 1990, and four months application of the tender premium for the period March 1990 to February 1991.

**Recent changes**

For the manufacturing sector as a whole, the nominal rate of assistance on outputs and the nominal rate on materials declined slightly from their 1989–90 levels to be just under 9 per cent and 6 per cent respectively in 1990–91. These compare with levels of 11 per cent and 7 per cent respectively in 1987–88, before commencement of the tariff reduction program. The effective rate for the sector declined from 19 per cent in 1987–88 to 16 per cent in 1989–90, declining further to 15 per cent in 1990–91 (figure A10.2).

At the industry subdivision level, with the exception of Clothing and footwear (ASIC 24), nominal rates on outputs and materials declined between 1987–88 and 1990–91 consistent with the tariff phasing arrangements.

**Figure A10.2**  
Average effective rates of assistance, manufacturing subdivisions: 1987–88, 1990–91 and end March 1991 program



Source: Table A10.11.

For most subdivisions there have also been significant reductions in effective rates of assistance since 1987–88 (figure A10.3). The most notable falls have been for:

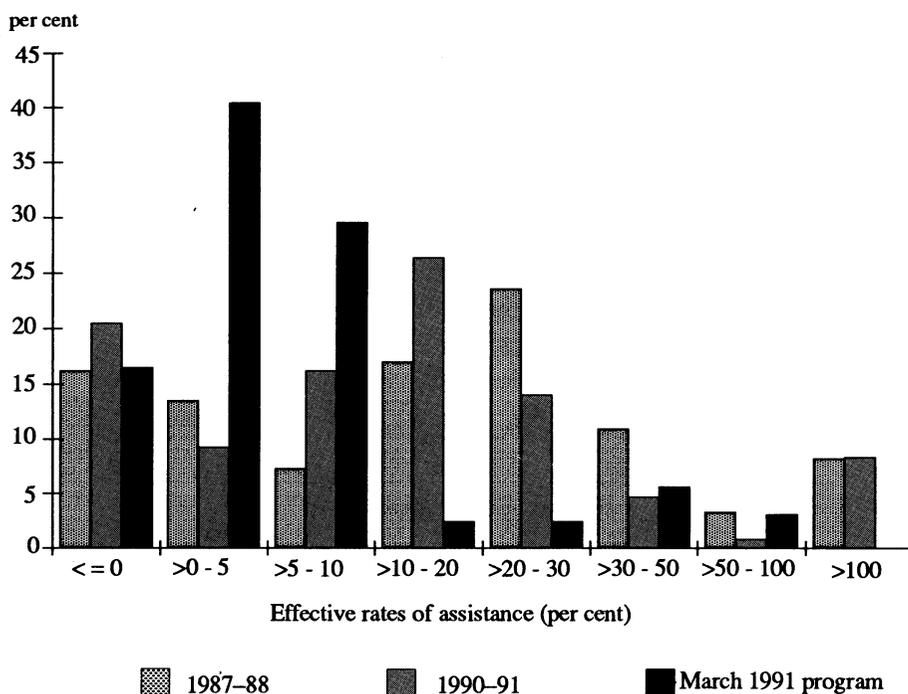
- Transport equipment (ASIC 32), from 46 to 33 per cent;
- Paper, paper products, printing and publishing (ASIC 26), from 15 to 7 per cent;
- Other machinery and equipment (ASIC 33), from 22 to 15 per cent; and
- Miscellaneous manufacturing (ASIC 34), from 26 to 20 per cent.

Between 1989–90 and 1990–91 the most significant changes in effective rates of assistance at the subdivision level were declines of 4 percentage points for Textiles (ASIC 23) and 2 percentage points for Wood, wood products and furniture (ASIC 25), Transport equipment, Other machinery and equipment and Miscellaneous manufacturing.

The tariff reduction program has had the effect of reducing the proportion of value added receiving moderately high levels of effective assistance and increasing the proportion receiving lower levels of assistance. For example, in 1987–88 nearly half

**Figure A10.3**

**Distribution of manufacturing value added<sup>a</sup>, by effective rates of assistance: 1987–88, 1990–91 and end March 1991 program**



a 1986–87 value added measured at prices which include assistance.

Sources: ABS (1989) and Commission estimates.

of manufacturing value added was benefiting from effective assistance higher than 20 per cent. For 1990–91 the equivalent figure was less than one third. The March 1991 program is projected to result in a further substantial reduction in this proportion to around 10 per cent of value added (figure A10.3).

Those industry subdivisions still receiving very high effective assistance in 1990–91 were Clothing and footwear and Textiles with effective rates of assistance of 176 per cent and 68 per cent, respectively. The rates for these subdivisions actually increased slightly between 1987–88 and 1990–91. The only other subdivision with an average effective rate of more than 20 per cent in 1990–91 was Transport equipment with a rate of 33 per cent, less than half the Textiles rate (figure A10.2).

The continuing high assistance levels for some TCF industries are the result of the operation of import quotas under the TCF plan. Assistance estimates for quota protected industries are based on the premiums tendered at auctions for import quota entitlements and the very high base duty rates that apply to these imports. Between 1990 and 1991, tender sale premiums generally decreased, in many cases by a considerable amount (table A10.8). This is only partially reflected in nominal and effective rates of assistance for 1990–91 as estimates are based on a time weighted average of the relevant tender premiums. Because of this, most of the impact of the decline in premiums will be reflected in the nominal and effective rates for 1991–92.

Tender sale premiums for the year 1 March 1992 to 28 February 1993 were determined in August 1991. As expected, premiums for nearly all categories have continued to fall due mainly to the expansion of quota pool sizes and the phased reductions in out-of-quota penalty rates. As announced in the March 1991 Statement, the reduction in out-of-quota penalty rates is to be accelerated so that quota assistance terminates on 1 March 1993 (see appendix 5). The latest tender results will have some effect on assistance estimates for 1991–92 but, because they apply to only the last four months of that financial year, they will have their greatest impact on the assistance estimates for 1992–93. Even when import quotas are abolished in 1993, assistance for many TCF industries will remain very high relative to the rest of manufacturing. Tariff rates applying to these imports will still be several times the rates for manufacturing generally.

Protective measures, such as tariffs, not only increase the price of imported goods but also allow the price of competing domestically produced goods to be raised. In doing so, such measures implicitly tax consumers. In 1990–91 the consumer tax equivalent for the manufacturing sector — a broad measure of the additional amount consumers of final goods pay as a result of assistance to domestic manufacturing industries — was estimated at \$7.1 billion, down from \$7.6 billion in 1989–90 (table A10.13).

### *Disparities in assistance*

An important feature of an assistance structure is the differences (disparities) in levels of assistance between and within industries. The larger the disparities in effective assistance levels, the greater the potential for resources to be used in activities which

do not maximise economic welfare. In addition, wide disparities in nominal rates for similar outputs indicate the potential for losses in consumption efficiency.

The Commission uses the standard deviation as a measure of disparities in assistance. The higher the standard deviation measured, the larger the variability in rates of assistance between industries.

Assistance continues to be highly variable between manufacturing industries. Disparities in nominal rates of assistance for the sector have remained almost constant since 1987–88, falling by only one percentage point, from 12 to 11 percentage points, between 1989–90 and 1990–91. Disparities in effective rates of assistance are higher than for nominal rates. In 1987–88, before the program of tariff reductions commenced, the standard deviation for effective rates was 36 percentage points. By 1989–90, it had declined to 29 percentage points, and remained at that level in 1990–91 (table A10.12).

Disparities in assistance remain particularly high within the Clothing and footwear and Textiles industry subdivisions and to a lesser extent in the Transport equipment subdivision. These subdivisions will still be the outliers when the March 1991 program of tariff reductions has been completed, with standard deviations for effective rates more than double the level of dispersion for the next highest subdivision (table A10.12).

### **The March 1991 program**

The information paper released by the Commission in July 1991 examined the impact of the changes announced in the March 1991 Statement on projected levels of assistance to manufacturing industries and the economy-wide effects of the changes (IC 1991g). The following canvasses the main points from the paper.

#### ***Tariff protection***

The average protective tariff on imports entering Australia was just under 7 per cent in 1989–90. Based on import flows for 1989–90, the average tariff is projected to fall to about 2 per cent by the end of the March 1991 program.

The tariff reduction program also has significant implications for government revenue. Duty collected from imports in 1989–90 was about \$3.5 billion. Based on import data for 1989–90, annual duty collections would be about \$2.4 billion lower by the completion of the tariff phasing. However, this reduction is likely to be partly offset by a general increase in the volume of imports — particularly imports previously subject to high duties.

#### ***Manufacturing industry assistance***

The March 1991 Statement is projected to lower the average nominal rate of assistance on outputs for the manufacturing sector to 3 per cent and the effective rate to 5 per cent. This compares with a nominal rate of 9 per cent and an effective rate of 15 per cent in 1990–91 (tables A10.10 and A10.11).

The industries which will experience the largest reductions in effective assistance as a result of the new program are textiles, clothing and footwear, and passenger motor vehicles. Nevertheless, at the end of the program, these industries will continue to receive much higher assistance than other manufacturing activities (figure A10.2).

The improvements in efficiency likely to result from the assistance reduction program also depend on the extent to which existing differences in assistance levels between industries will be reduced. Once the changes from the March 1991 Statement have been fully implemented, the average standard deviation for nominal rates of assistance on manufacturing output is projected to fall to 4 percentage points (from 11 percentage points in 1990–91). The standard deviation for effective rates is estimated to decline to 9 percentage points (from 29 percentage points in 1990–91) (table A10.12).

### ***Consumer tax effects***

When the March 1991 program is completed, it is estimated that assistance will add an average of about 1.9 per cent to consumer prices. This compares with an average addition to consumer prices of 5.6 per cent as a result of assistance in 1988–89.

As a proportion of household expenditure, the tax effect of assistance is projected to decline to 1.3 per cent by the end of the March 1991 program from 3.8 per cent in 1988–89. The changes will also lead to the tax effect becoming a similar proportion of household expenditure across nearly all income groups.

### ***Economy-wide effects***

Simulations using the ORANI model of the Australian economy suggest that, on their own, the March 1991 Statement manufacturing assistance reforms are likely to lead in the long run to a permanent increase in GDP of 0.4 per cent or some \$1.5 billion each year in 1988–89 prices.

Table A10.7

Tariff quotas for textiles, clothing and footwear current at 15 August 1991<sup>a,b</sup>

Quota category	Description	Annual level of restriction ('000) <sup>c</sup>		Percentage change in 1992 over 1991	Additional duty for out-of-quota imports from 1.3.92 <sup>d</sup>
		1991	1992		
501	Knitted or crocheted coats, jumpers, cardigans, sweaters, and the like, tube tops	20 370.1 garments	21 012.8 garments	+ 3.2	\$1.13 per garment
502	Knitted or crocheted shirts, blouses and other tops	21 863.0 garments	22 737.5 garments	+ 4.0	\$0.55 per garment
503	Woven shirts and blouses	13 231.1 garments	13 703.5 garments	+ 3.6	\$0.85 per garment
504 & 505	Woven coats and jackets, sets of mens garments, including suits	1 957.1 garments	2 041.1 garments	+ 4.3	\$3.75 per garment (504) \$4.98 per garment (505)
506	Leather coats and jackets <sup>e</sup>	64.6 garments	68.1 garments	+ 5.4	17.5% vfd
507	Trousers, jeans and overalls	13 642.9 garments	14 255.4 garments	+ 4.5	\$1.18 per garment
508 & 509	Shorts and male swimwear, women's, girls' and infants' swimwear	8 929.2 garments	9 679.1 garments	+ 8.4	\$0.58 per garment (508) \$1.23 per garment (509)
510	Certain children's wear	25 946.7 garments	26 336.0 garments	+ 1.5	\$0.28 per garment
511 & 512	Dresses, dressing gowns, adult nightdresses and nightshirts and the like, men's woven pyjamas, other outer garments and other sleepwear	22 405.8 garments	23 895.1 garments	+ 6.7	\$1.23 per garment (511) \$0.30 per garment (512a) \$1.05 per garment (512b)

<i>Quota category</i>	<i>Description</i>	<i>Annual level of restriction ('000)<sup>c</sup></i>		<i>Percentage change in 1992 over 1991</i>	<i>Additional duty for out-of-quota imports from 1.3.92<sup>d</sup></i>
		<i>1991</i>	<i>1992</i>		
513 & 514	Other undergarments for boys and panties for women, girls and infants, other undergarments for women, girls and infants	26 195.6 garments	28 572.3 garments	+ 9.1	\$0.13 per garment (513) \$0.55 per garment (514)
515 & 516	Brassieres, corsets, girdles and the like	5 653.1 garments	5 854.3 garments	+ 3.6	\$0.40 per garment (515) \$0.53 per garment (516)
517	Garments of plastic materials, of rubber, or the like <sup>e</sup>	\$10 846.8 vfd	\$11 451.7 vfd	+ 5.6	17.5% vfd
518	Tights and pantyhose less than 4.4 tex	25 985.1 pairs	30 402.5 pairs	+ 17.0	\$0.04 per pair
519	Socks and the like; tights and pantyhose 4.4 tex or more	19 448.6 pairs	21 004.5 pairs	+ 8.0	\$0.10 per pair
520	Footwear with leather uppers	10 991.1 pairs	11 560.5 pairs	+ 5.2	\$2.63 per pair
521	Other footwear	22 041.8 pairs	22 513.3 pairs	+ 2.1	\$1.70 per pair
522	Parts for footwear <sup>e</sup>	\$5 410.6 vfd	\$6 352.9 vfd	+ 17.4	17.5% vfd
523	Terry towelling, towels, babies' napkins and the like	7 695.5 sq m	8 067.9 sq m	+ 4.8	\$0.43 per sq m

Quota category	Description	Annual level of restriction ('000) <sup>c</sup>		Percentage change in 1992 over 1991	Additional duty for out-of-quota imports from 1.3.92 <sup>d</sup>
		1991	1992		
524	Bed linen, including quilt covers and ruffles <sup>e</sup>	\$28 495.6 vfd	\$32 054.1 vfd	+ 12.5	12.5% vfd
525	Fabrics suitable for use as bed sheeting, or in making up of bed linen	30 974.1 sq m	30 974.0 sq m	—	\$0.25 per sq m
526	Woven fabric of man-made fibres	21 887.0 sq m	21 887.0 sq m	—	\$0.28 per sq m

— Nil.

vfd Value for duty.

a Quota levels apply for the 12 month period from 1 March to 28 February.

b Imports of footwear and clothing from New Zealand are not subject to quota.

c The annual level of restriction is increased each year under the TCF plan by an expansion factor to take account of estimated market growth.

d Under the changes to the TCF plan announced in the March 1991 Statement, import quotas are to be terminated on 1 March 1993. This is to be achieved in two steps by halving the previously programmed out-of-quota penalty duties on 1 March 1992 and reducing them to zero on 1 March 1993.

e These quotas are defined in value terms. The real value of the quota allocation is maintained by annual adjustments based on anticipated exchange rate movements and changes in the appropriate division of the Australian Bureau of Statistics' import price index. In addition to these adjustments, quota allocations are increased annually for estimated market growth. However, for footwear where a \$1.70 a pair priceline determines whether an item is subject to quota, or not, special allocations of quota may be made as relatively small changes in the exchange rate determine whether items are subject to quota. The exchange rates to be used for the 1992 quota year are published in Australian Customs Notice 91/119.

Sources: Australian Customs Notices, various.

Department of Industry, Technology and Commerce, News Releases, various.

**Table A10.8**

**Tender sale premiums for textiles, clothing and footwear import quota entitlements: 1987 to 1992<sup>a</sup>**

(per cent)

<i>Tender categories</i>			<i>Base categories</i>		<i>Base duty rates<sup>b</sup></i>			<i>Tender sale premiums</i>					
<i>Current</i> <i>(1989</i> <i>-1993)</i>	<i>Previous</i> <i>(1982</i> <i>-1989)</i>	<i>Description</i>	<i>Current</i> <i>(1989</i> <i>-1992)<sup>c</sup></i>	<i>Previous</i> <i>(1982</i> <i>-1989)</i>	<i>(1989</i> <i>(1982</i> <i>1992 -1991) -1989)</i>		1987	1988 <sup>d</sup>	1989	1990	1991	1992 <sup>e</sup>	
601	201		Knitted or crocheted coats, jumpers cardigans, sweaters and the like, tube tops	501	101	51							55
602	202	Shirts and blouses and knitted or crocheted tops <sup>f</sup>	502 503	102 103	51	55	50	97	na	na	na	na	na
604	203	Woven coats and jackets; sets of men's garments, including suits	504 505	104 106	51	55	50	20	30	44	21	0 <sup>g</sup>	8
606	204	Trousers, jeans and overalls	507	107	51	55	50	5	12	20	33	20	13
607	205	Shorts and male swimwear	508	108	51	55	50	0 <sup>g</sup>	0 <sup>g</sup>	22	50	20	17
605	206	Leather coats and jackets	506	105	51	55	50	0 <sup>g</sup>	17	31 <sup>e</sup>	40	8	9
608	207	Women's, girls' and infants' swimwear	509	109	51	55	50	20	0 <sup>g</sup>	0 <sup>g</sup>	0 <sup>g</sup>	0 <sup>g</sup>	0 <sup>g</sup>
612	208	Brassieres, corsets, girdles and the like <sup>h</sup>	515 516	116 117	51	55	50	81	0 <sup>g</sup>	31	36	29	10

<i>Tender categories</i>			<i>Base categories</i>		<i>Base duty rates<sup>b</sup></i>			<i>Tender sale premiums</i>					
<i>Current (1989 -1993)</i>	<i>Previous (1982 -1989)</i>	<i>Description</i>	<i>Current (1989 -1992)<sup>c</sup></i>	<i>Previous (1982 -1989)</i>	<i>1992</i>	<i>(1989 -1991)</i>	<i>(1982 -1989)</i>	<i>1987</i>	<i>1988<sup>d</sup></i>	<i>1989</i>	<i>1990</i>	<i>1991</i>	<i>1992<sup>e</sup></i>
610	209	Men's woven pyjamas <sup>f</sup>	512	112	na	na	50	100	na	na	na	na	na
609	210	Certain children's wear	510	111	51	55	50	0 <sup>g</sup>	1	2	15	15	3
613	211	Garments of plastic material, of rubber, or the like <sup>i</sup>	517	118	51	55	50	2	5	0 <sup>g</sup>	0 <sup>g</sup>	0 <sup>g</sup>	0 <sup>g</sup>
614	212A	Tights and pantyhose less than 4.4 tex	518	119	51	55	50	60	76	77	0 <sup>g</sup>	0 <sup>g</sup>	0 <sup>g</sup>
615	212B	Socks and the like; tights and pantyhose 4.4 tex or more	519	120	51	55	50	6	0 <sup>g</sup>	0 <sup>g</sup>	20	17	8
610	213	Dresses, dressing gowns, adult nightdresses and nightshirts; other outer garments and other sleepwear <sup>f</sup>	511 512	110 113	na	na	50	0 <sup>g</sup>	na	na	na	na	na
611	214	Other undergarments for men and boys; other undergarments for women, girls, and infants	513 514	114 115	51	55	50	65	37	31	35	31	19
616	215	Footwear with leather uppers <sup>j</sup>	520	121	41	45	40	31	23	45	50	23	9
617	216	Other footwear <sup>j,k</sup>	521	122	41	45	40	30	25	20	40	36	1
618	217	Parts for footwear <sup>l</sup>	522	123	32	35	40	51	23	13	26	15	0 <sup>g</sup>

<i>Tender categories</i>			<i>Base categories</i>		<i>Base duty rates<sup>b</sup></i>			<i>Tender sale premiums</i>					
<i>Current</i> <i>(1989</i> <i>-1993)</i>	<i>Previous</i> <i>(1982</i> <i>-1989)</i>	<i>Description</i>	<i>Current</i> <i>(1989</i> <i>-1992)<sup>c</sup></i>	<i>Previous</i> <i>(1982</i> <i>-1989)</i>	<i>1992</i>	<i>(1989</i> <i>-1991</i>	<i>(1982</i> <i>-1989)</i>	<i>1987</i>	<i>1988<sup>d</sup></i>	<i>1989</i>	<i>1990</i>	<i>1991</i>	<i>1992<sup>e</sup></i>
619	218	Terry towelling, towels, babies' napkins and the like	523	124	51	55	50	30	3	25	29	20	10
620	219	Bed linen, including quilt covers and bed ruffles	524	125	51	55	40	20	16	22	25	20	1
621	222	Fabric suitable for use as bed sheeting and the like, or in the making up of bed linen	525	128	37	40	0-40 <sup>m</sup>	20	3	20	18	0 <sup>g</sup>	2
622	223	Woven fabric of man-made fibres	526	129	37	40	40	23	32	40	40	7	8
602	224 <sup>f</sup>	Knitted shirts and blouses	502	102	51	55	50	na	155	62	80	20	23
603	225 <sup>f</sup>	Woven shirts and blouses	503	103	51	55	50	na	72	70	70	28	15
610	226 <sup>f</sup>	Dresses, other outerwear, pyjamas	511 512 512	110 112 113	51	55	50	na	1	12	21	9 <sup>e</sup>	11

na Not applicable.

a Imports of footwear from New Zealand were removed from quota from 1 March 1989. Imports from New Zealand of clothing under categories 601 to 615 were removed from quota from 1 July 1989. Other TCF imports from New Zealand have been free of quota since 1 March 1990.

b Base duty rate applying to non-handicraft entries only. Handicraft entries attract a zero base duty rate.

c Under the current TCF plan, 1991 is the last year in which base quota was allocated. From 1992 all quota will be subject to tender.

- d In order to facilitate a changeover in the quota year from the calendar year basis used under the previous plan, to a year commencing 1 March under the current plan, 1988 tender quota entitlements for textile, clothing and footwear imports were extended from 1 January 1988 to 28 February 1989.
- e The tender sale premiums published for the latest given year are provisional. These premiums may be reduced if the successful tenderers subsequently fail to lodge their security deposits with the Australian Customs Service. Such failures resulted in declines for tender category 605 in 1989 (from 35 to 31 per cent), and 610 in 1991 (from 10 to 9 per cent).
- f From 1 January 1988, tender category 202 (Shirts and blouses) was replaced by two separate categories: 224 (Knitted shirts and blouses) and 225 (Woven shirts and blouses). Also from that date the existing tender categories 209 (Men's woven pyjamas) and 213 (Dresses, dressing gowns, etc) were combined into one category, 226 (Dresses, other outerwear, pyjamas).
- g The first auction of quota entitlements in these categories failed to clear the available tender pool and, as a result, there was no tender premium. When this has occurred the residual portion of the quota pool has been disposed of by a ballot between successful tenderers with an attached tender premium of zero.
- h Brassiere back replacements of tender category 612, tariff item 6212.90 were removed from quota and are now dutiable under 6212.90.90 at 25 per cent, effective from 1 March 1989.
- i Anti-radiation suits, anti-contamination suits, and similar protective garments of tender category 613, tariff items 3926.20.20, 4015.90.20, 6113.00.90, 6210.40.90 and 6210.50.90 were removed from quota and new classifications 3926.20.21, 4015.90.21, 6113.00.20, 6210.40.30 and 6210.50.30 introduced which are dutiable at a rate of 15 per cent, effective from 1 March 1989.
- j The customs value criteria which determine whether particular footwear products are subject to quota (and the category within which they fall) are adjusted periodically to ensure that the basic character of the product mix covered by each quota category is maintained over time. From 1 March 1989 category 215 incorporates all footwear items with leather uppers having a customs value of \$1.50 or more per pair. This will be increased to \$1.70 from 1 March 1992. From 1 March 1989 category 216 consists of non-leather footwear items. The description was formerly 'Footwear with leather uppers, or having a customs value of not less than \$11.00 per pair'. Because of the change in description, from 1 March 1989 the figures are not strictly comparable.
- k Tariff item 6404.11.00 of tender category 617 was split to remove imports of ski-boots and cross-country ski footwear from quota. Such ski footwear is free of duty, effective from 1 March 1989.
- l Tariff item 6406.99.90 of tender category 618 has been split to remove metal parts of footwear from quota which are now dutiable at 15 per cent, effective from 1 March 1989.
- m Under the previous TCF plan base quota category 128 covered three tariff classifications in the Customs Tariff each with different base duty rates: 55.09.611 had a duty rate of 22.5 per cent; 55.09.612 had a duty rate of 40 per cent or, if lower, \$0.25 per sq. metre; and 55.09.613 had a zero base duty rate.

*Sources:* Various Australian Customs Notices and information supplied by the Australian Customs Service.

**Table A10.9**  
**Assistance to manufacturing, by form: 1987–88 to 1990–91 and end March**  
**1991 program<sup>a</sup>**  
(\$ million)

	1987–88	1988–89	1989–90	1990–91 <sup>b</sup>	March 1991 program
<i>Assistance to outputs</i>					
Tariffs <sup>c</sup>	11 284	10 679	10 521	10 245	3 842
Quantitative import restrictions <sup>d</sup>	764	515	551	545	–
Bounties <sup>e</sup>	198	150	139	143	6
Export incentives <sup>e</sup>	159	177	190	171	162
<i>Assistance to materials</i>					
Tariffs <sup>f</sup>	4 467	4 306	4 429	4 374	1 769
Quantitative import restrictions <sup>d</sup>	292	193	131	102	–
Excise taxes	111	102	105	104	104

– Nil.

a Figures are in current prices with March 1991 program estimates being based on 1989–90 prices. Some estimates for 1987–88 to 1989–90 have been revised since they were published in the IC 1989–90 Annual Report. The figures for assistance to outputs and materials are, respectively, the sum of the gross subsidy equivalents and the tax on materials for individual industries, classified according to form of assistance. The summation of these amounts across industries will exceed the actual total for the sector due to some of the outputs of industries being used as intermediate inputs by other industries within the sector.

b Preliminary estimates.

c Includes relatively minor amounts of assistance from domestic pricing arrangements for certain agricultural commodities and discriminatory sales taxes in some years.

d The estimates for 1987–88 to 1988–89 include assistance provided to producers of motor vehicle components by the local content provisions of the PMV plan. The PMV local content requirement was abolished on 1 January 1989.

e The estimates presented in this table do not represent the actual bounty and export incentive payments in each year. The estimates measure the assistance afforded by the current rates of bounty and export incentives in each year using fixed 1983–84 production patterns.

f Includes relatively minor amounts of assistance from domestic pricing arrangements for certain agricultural commodities. Figures are net of the savings from concessional entry of imported materials under certain policy by-laws, commercial tariff concession orders, duty drawback and by-law for exports.

Source: Commission estimates.

Table A10.10

Average nominal rates of assistance<sup>a</sup>, manufacturing industries: 1987–88 to 1990–91 and end March 1991 program<sup>b</sup>  
(per cent)

Industry <sup>c</sup>		Average nominal rate					Average nominal rate				
		on outputs <sup>d</sup>					on materials <sup>e</sup>				
ASIC code	Description	1987–88 <sup>f</sup>	1988–89	1989–90	1990–91 <sup>g</sup>	March 1991 program	1987–88 <sup>f</sup>	1988–89	1989–90	1990–91 <sup>g</sup>	March 1991 program
<b>FOOD, BEVERAGES AND TOBACCO</b>											
2115	Meat (except smallgoods or poultry)	0.2	0.1	0.1	0.1	..	0.6	0.3	0.3	0.3	..
2116	Poultry <sup>h</sup>	0.5	0.5	0.5	0.5	..	0.7	0.8	0.4	0.3	..
2117	Bacon, ham and smallgoods nec	4.9	4.2	4.1	4.2	2	1.3	0.9	0.8	0.7	..
<b>211</b>	<b>Meat products<sup>h</sup></b>	<b>0.7</b>	<b>0.6</b>	<b>0.6</b>	<b>0.6</b>	<b>..</b>	<b>0.7</b>	<b>0.4</b>	<b>0.3</b>	<b>0.3</b>	<b>..</b>
2121	Liquid milk and cream <sup>h</sup>	16	9.0	11	11	4	23	14	16	16	5
2122	Butter <sup>h</sup>	30	18	17	17	6	35	21	19	19	6
2123	Cheese <sup>h</sup>	18	13	9.1	9.0	3	26	20	14	14	5
2124	Ice cream and frozen confections <sup>h</sup>	8.1	5.2	4.2	4.2	1	39	27	22	21	9
2125	Milk products nec <sup>h</sup>	20	12	11	11	5	40	21	18	18	11
<b>212</b>	<b>Milk products<sup>h</sup></b>	<b>18</b>	<b>11</b>	<b>11</b>	<b>11</b>	<b>4</b>	<b>28</b>	<b>18</b>	<b>17</b>	<b>17</b>	<b>6</b>
2131	Fruit products <sup>h</sup>	12	11	9.7	9.7	3	10	12	11	10	3
2132	Vegetable products <sup>h</sup>	6.2	6.7	6.6	6.5	4	7.1	5.9	6.0	5.7	3
<b>213</b>	<b>Fruit and vegetable products<sup>h</sup></b>	<b>8.6</b>	<b>8.5</b>	<b>7.9</b>	<b>7.8</b>	<b>3</b>	<b>8.4</b>	<b>8.8</b>	<b>8.1</b>	<b>7.8</b>	<b>3</b>
<b>214</b>	<b>Margarine and oils and fats nec</b>	<b>6.5</b>	<b>6.1</b>	<b>6.3</b>	<b>6.4</b>	<b>3</b>	<b>4.4</b>	<b>3.5</b>	<b>3.3</b>	<b>3.2</b>	<b>2</b>
2151	Flour mill products <sup>h</sup>	1.4	0.3	0.1	0.1	–	2.9	2.6	0.4	0.3	..
2152	Starch, gluten and starch sugars	4.6	4.0	3.3	2.8	1	1.9	0.5	0.5	0.4	..
2153	Cereal foods and baking mixes <sup>h</sup>	12	13	7.8	7.4	5	23	23	11	11	8
<b>215</b>	<b>Flour mill and cereal food products<sup>h</sup></b>	<b>6.4</b>	<b>6.2</b>	<b>3.9</b>	<b>3.7</b>	<b>3</b>	<b>10</b>	<b>10</b>	<b>4.6</b>	<b>4.5</b>	<b>3</b>

<i>Industry<sup>c</sup></i>		<i>Average nominal rate</i>					<i>on materials<sup>e</sup></i>				
		<i>on outputs<sup>d</sup></i>									
<i>ASIC code</i>	<i>Description</i>	<i>1987-88<sup>f</sup></i>	<i>1988-89</i>	<i>1989-90</i>	<i>1990-91<sup>g</sup></i>	<i>March 1991 program</i>	<i>1987-88<sup>f</sup></i>	<i>1988-89</i>	<i>1989-90</i>	<i>1990-91<sup>g</sup></i>	<i>March 1991 program</i>
2161	Bread <sup>h</sup>	0.1	0.1	0.1	0.1	..	4.5	3.4	2.9	2.8	1
2162	Cakes and pastries <sup>h</sup>	0.3	0.3	0.3	0.2	..	9.7	7.6	6.5	6.5	3
2163	Biscuits <sup>h</sup>	5.2	8.5	8.5	6.7	4	11	8.2	8.9	8.6	4
<b>216</b>	<b>Bread, cakes and biscuits<sup>h</sup></b>	<b>1.4</b>	<b>2.1</b>	<b>2.1</b>	<b>1.7</b>	<b>1</b>	<b>7.2</b>	<b>5.5</b>	<b>5.1</b>	<b>5.0</b>	<b>2</b>
2171	Raw sugar )	11	8.4	11	10	7	18	14	15	15	9
2176	Food products nec ) <sup>hi</sup>										
2173	Confectionery and cocoa products <sup>h</sup>	17	17	16	15	5	11	8.2	9.5	9.2	5
2174	Processed seafoods	0.8	0.7	0.7	0.6	1	0.9	0.6	0.6	0.5	..
2175	Prepared animal and bird foods <sup>h</sup>	0.7	1.8	0.1	0.1	..	1.9	2.0	1.0	0.9	..
<b>217</b>	<b>Other food products<sup>h</sup></b>	<b>8.3</b>	<b>7.1</b>	<b>7.7</b>	<b>7.6</b>	<b>4</b>	<b>10</b>	<b>8.1</b>	<b>8.2</b>	<b>8.1</b>	<b>5</b>
2185	Soft drinks, cordials and syrups <sup>h</sup>	11	11	10	9.7	4	12	10	11	11	6
2186	Beer <sup>h</sup>	36	6.0	1.8	1.6	2	5.7	4.4	4.5	4.3	2
2187	Malt	0.6	0.7	0.7	0.6	1	1.1	0.2	0.2	0.2	..
2188	Wine and brandy <sup>h</sup>	18	16	16	13	5	13	15	11	9.0	3
2189	Alcoholic beverages nec <sup>h</sup>	8.5	8.5	9.2	8.0	4	18	6.2	5.1	4.8	7
<b>218</b>	<b>Beverages and malt<sup>h</sup></b>	<b>21</b>	<b>9.3</b>	<b>7.2</b>	<b>6.5</b>	<b>3</b>	<b>8.6</b>	<b>7.7</b>	<b>7.5</b>	<b>7.0</b>	<b>3</b>
<b>219</b>	<b>Tobacco products<sup>h</sup></b>	<b>7.4</b>	<b>7.6</b>	<b>6.7</b>	<b>7.0</b>	<b>4</b>	<b>11</b>	<b>20</b>	<b>17</b>	<b>18</b>	<b>4</b>
<b>21</b>	<b>FOOD, BEVERAGES AND TOBACCO<sup>h</sup></b>	<b>7.7</b>	<b>5.3</b>	<b>5.0</b>	<b>4.8</b>	<b>2</b>	<b>8.2</b>	<b>6.3</b>	<b>5.8</b>	<b>5.7</b>	<b>3</b>

<i>Industry<sup>c</sup></i>		<i>Average nominal rate</i>					<i>on materials<sup>e</sup></i>				
		<i>on outputs<sup>d</sup></i>									
<i>ASIC code</i>	<i>Description</i>	<i>1987 -88<sup>f</sup></i>	<i>1988 -89</i>	<i>1989 -90</i>	<i>1990 -91<sup>g</sup></i>	<i>March 1991 program</i>	<i>1987 -88<sup>f</sup></i>	<i>1988 -89</i>	<i>1989 -90</i>	<i>1990 -91<sup>g</sup></i>	<i>March 1991 program</i>
<b>TEXTILES</b>											
2341	Cotton ginning <sup>h</sup>	5.1	7.7	-	-	-	5.9	8.5	..	..	..
2342	Wool scouring and top making	-	-	-	-	-	-	-	-	-	-
2343	Man-made fibres and yarns	27	29	27	25	5	6.3	3.7	3.5	3.5	2
2344	Man-made fibre broadwoven fabrics	52	60	60	54	15	6.1	5.2	4.6	4.2	4
2345	Cotton yarns and broadwoven fabrics	36	40	39	38	11	9.7	12	6.8	6.7	3
2346	Worsted yarns and broadwoven fabrics	12	16	15	14	6	2.7	1.0	0.9	0.9	2
2347	Woollen yarns and broadwoven fabrics	9.7	12	12	11	7	2.9	0.9	0.6	0.4	1
2348	Narrow woven and elastic textiles	25	24	23	23	9	4.9	2.9	2.6	2.1	4
2349	Textile finishing	43	51	50	45	13	17	17	16	15	5
<b>234</b>	<b>Textile fibres, yarns and woven fabrics<sup>h</sup></b>	<b>19</b>	<b>22</b>	<b>21</b>	<b>19</b>	<b>6</b>	<b>5.3</b>	<b>5.4</b>	<b>3.3</b>	<b>3.1</b>	<b>2</b>
2351	Household textiles	34	42	43	43	15	22	26	25	21	5
2352	Textile floor coverings	35	35	33	31	13	9.4	11	11	11	4
2353	Felt and felt products	16	16	15	15	6	3.8	1.9	1.1	0.6	2
2354	Canvas and associated products nec	22	21	21	21	8	26	29	28	26	7
2355	Rope, cordage and twine	19	19	19	20	8	8.2	9.5	9.4	9.5	3
2356	Textile products nec	16	13	12	11	4	10	11	9.7	8.1	2
<b>235</b>	<b>Other textile products</b>	<b>27</b>	<b>27</b>	<b>26</b>	<b>25</b>	<b>10</b>	<b>13</b>	<b>15</b>	<b>14</b>	<b>13</b>	<b>4</b>
<b>23</b>	<b>TEXTILES<sup>h</sup></b>	<b>22</b>	<b>24</b>	<b>23</b>	<b>21</b>	<b>7</b>	<b>7.4</b>	<b>8.1</b>	<b>6.4</b>	<b>5.9</b>	<b>2</b>

<i>Industry<sup>c</sup></i>		<i>Average nominal rate</i>					<i>on materials<sup>e</sup></i>				
		<i>on outputs<sup>d</sup></i>									
<i>ASIC code</i>	<i>Description</i>	<i>1987 -88<sup>f</sup></i>	<i>1988 -89</i>	<i>1989 -90</i>	<i>1990 -91<sup>g</sup></i>	<i>March 1991 program</i>	<i>1987 -88<sup>f</sup></i>	<i>1988 -89</i>	<i>1989 -90</i>	<i>1990 -91<sup>g</sup></i>	<i>March 1991 program</i>
<b>CLOTHING AND FOOTWEAR</b>											
2441	Hosiery	79	76	64	58	22	6.8	9.1	8.7	8.2	4
2442	Cardigans and pullovers	66	68	69	67	23	8.1	8.7	8.4	8.1	5
2443	Knitted goods nec	57	48	49	48	16	8.4	9.3	9.0	8.8	5
<b>244</b>	<b>Knitting mills</b>	<b>65</b>	<b>60</b>	<b>58</b>	<b>55</b>	<b>19</b>	<b>8.0</b>	<b>9.1</b>	<b>8.8</b>	<b>8.5</b>	<b>5</b>
2451	Mens trousers and shorts; work clothing	57	73	74	78	23	29	35	33	30	9
2452	Mens suits and coats; waterproof clothing	54	67	62	53	18	17	21	21	17	4
2453	Womens outerwear nec	71	66	67	68	21	25	30	29	25	6
2454	Foundation garments	45	68	69	70	20	11	25	15	14	5
2455	Underwear and infants clothing nec	95	84	86	83	22	21	24	23	21	7
2456	Headwear and clothing nec	33	31	31	31	11	20	22	20	19	7
<b>245</b>	<b>Clothing</b>	<b>67</b>	<b>67</b>	<b>68</b>	<b>68</b>	<b>20</b>	<b>23</b>	<b>28</b>	<b>26</b>	<b>23</b>	<b>7</b>
<b>246</b>	<b>Footwear</b>	<b>55</b>	<b>63</b>	<b>68</b>	<b>69</b>	<b>12</b>	<b>20</b>	<b>13</b>	<b>17</b>	<b>17</b>	<b>5</b>
<b>24</b>	<b>CLOTHING AND FOOTWEAR</b>	<b>64</b>	<b>65</b>	<b>65</b>	<b>65</b>	<b>19</b>	<b>19</b>	<b>21</b>	<b>21</b>	<b>19</b>	<b>6</b>

<i>Industry<sup>c</sup></i>		<i>Average nominal rate</i>					<i>on materials<sup>e</sup></i>				
		<i>on outputs<sup>d</sup></i>									
<i>ASIC</i>	<i>Description</i>	<i>1987</i>	<i>1988</i>	<i>1989</i>	<i>1990</i>	<i>March 1991</i>	<i>1987</i>	<i>1988</i>	<i>1989</i>	<i>1990</i>	<i>March 1991</i>
<i>code</i>		<i>-88<sup>f</sup></i>	<i>-89</i>	<i>-90</i>	<i>-91<sup>g</sup></i>	<i>program</i>	<i>-88<sup>f</sup></i>	<i>-89</i>	<i>-90</i>	<i>-91<sup>g</sup></i>	<i>program</i>
<b>WOOD, WOOD PRODUCTS AND FURNITURE</b>											
2531	Log sawmilling	3.3	3.0	3.2	3.1	3	2.1	1.7	1.7	1.6	1
2532	Resawn and dressed timber	9.1	8.5	8.1	7.4	4	2.7	2.3	2.3	2.3	2
2533	Veneers and manufactured boards of wood	16	15	13	13	4	8.4	7.6	7.0	6.6	3
2534	Wooden doors	13	13	12	11	4	11	10	9.3	8.7	3
2535	Wooden structural fittings and joinery nec	12	11	11	9.7	4	8.4	7.8	7.3	6.9	3
2536	Wooden containers	6.2	5.7	5.3	5.1	2	3.7	3.2	3.2	3.1	2
2537	Hardwood woodchips	-	-	-	-	-	0.3	0.2	0.2	0.2	..
2538	Wood products nec	14	13	12	11	5	6.0	5.3	5.0	4.8	3
<b>253</b>	<b>Wood and wood products</b>	<b>9.3</b>	<b>8.7</b>	<b>8.1</b>	<b>7.6</b>	<b>3</b>	<b>5.8</b>	<b>5.2</b>	<b>4.9</b>	<b>4.7</b>	<b>2</b>
2541	Furniture (except sheet metal)	25	23	20	18	4	14	14	13	12	4
2542	Mattresses (except rubber)	6.9	5.8	5.8	5.6	2	15	14	14	13	4
<b>254</b>	<b>Furniture and mattresses</b>	<b>22</b>	<b>20</b>	<b>18</b>	<b>16</b>	<b>4</b>	<b>14</b>	<b>14</b>	<b>13</b>	<b>12</b>	<b>4</b>
<b>25</b>	<b>WOOD, WOOD PRODUCTS AND FURNITURE</b>	<b>14</b>	<b>12</b>	<b>11</b>	<b>10</b>	<b>4</b>	<b>8.7</b>	<b>8.1</b>	<b>7.7</b>	<b>7.3</b>	<b>3</b>

Industry <sup>c</sup>		Average nominal rate									
		on outputs <sup>d</sup>					on materials <sup>e</sup>				
ASIC code	Description	1987 -88 <sup>f</sup>	1988 -89	1989 -90	1990 -91 <sup>g</sup>	March 1991 program	1987 -88 <sup>f</sup>	1988 -89	1989 -90	1990 -91 <sup>g</sup>	March 1991 program
<b>PAPER, PAPER PRODUCTS, PRINTING AND PUBLISHING</b>											
2631	Pulp, paper and paperboard	9.3	8.1	6.7	6.2	2	3.1	1.6	1.3	1.3	1
2632	Paper bags (including textile bags)	21	20	16	13	5	14	12	10	10	3
2633	Solid fibreboard containers	20	19	15	13	4	7.6	6.8	6.5	6.1	3
2634	Corrugated fibreboard containers	21	19	15	12	4	13	11	9.5	9.4	3
2635	Paper products nec	20	17	14	12	4	8.7	6.8	5.8	5.7	3
<b>263</b>	<b>Paper and paper products</b>	<b>16</b>	<b>14</b>	<b>11</b>	<b>9.8</b>	<b>3</b>	<b>7.5</b>	<b>6.0</b>	<b>5.2</b>	<b>5.1</b>	<b>2</b>
2641	Publishing	0.2	0.2	0.2	0.1	..	0.6	0.7	1.1	1.0	..
2642	Printing and publishing	0.5	0.3	0.3	0.2	..	1.7	1.5	1.3	1.2	..
2643	Paper stationery	22	19	15	13	4	12	9.9	8.4	8.2	3
2644	Printing and bookbinding	17	11	8.9	7.4	2	10	8.7	7.5	7.3	3
2645	Printing trade services nec	2.3	0.3	0.2	0.2	..	9.1	8.0	7.8	7.4	3
<b>264</b>	<b>Printing and allied industries</b>	<b>8.6</b>	<b>6.2</b>	<b>4.9</b>	<b>4.1</b>	<b>1</b>	<b>7.2</b>	<b>6.2</b>	<b>5.4</b>	<b>5.2</b>	<b>2</b>
<b>26</b>	<b>PAPER, PAPER PRODUCTS, PRINTING AND PUBLISHING</b>	<b>11</b>	<b>9.0</b>	<b>7.2</b>	<b>6.1</b>	<b>2</b>	<b>7.4</b>	<b>6.1</b>	<b>5.3</b>	<b>5.2</b>	<b>2</b>

Industry <sup>c</sup>		Average nominal rate					on materials <sup>e</sup>				
		on outputs <sup>d</sup>									
ASIC code	Description	1987 -88 <sup>f</sup>	1988 -89	1989 -90	1990 -91 <sup>g</sup>	March 1991 program	1987 -88 <sup>f</sup>	1988 -89	1989 -90	1990 -91 <sup>g</sup>	March 1991 program
<b>CHEMICAL, PETROLEUM AND COAL PRODUCTS</b>											
2751	Chemical fertilisers	5.2	0.7	0.7	0.7	..	1.1	0.6	0.5	0.5	..
2752	Industrial gases )										
2754	Organic industrial chemicals nec ) <sup>i</sup>	4.1	3.5	3.4	3.0	1	2.8	2.5	1.7	1.6	1
2753	Synthetic resins and rubber	17	15	12	11	4	8.4	6.5	5.6	5.1	2
2755	Inorganic industrial chemicals nec	11	9.8	8.0	7.0	2	3.1	2.4	1.9	1.7	1
<b>275</b>	<b>Basic chemicals</b>	<b>9.6</b>	<b>7.6</b>	<b>6.5</b>	<b>5.9</b>	<b>2</b>	<b>4.3</b>	<b>3.3</b>	<b>2.7</b>	<b>2.5</b>	<b>1</b>
2761	Ammunition, explosives and fireworks	8.1	10	10	9.7	5	4.1	4.8	4.8	4.7	2
2762	Paints	14	13	13	13	5	12	10	9.1	8.4	3
2763	Pharmaceutical and veterinary products	2.9	1.8	1.7	1.6	1	3.9	2.1	1.9	1.6	1
2764	Pesticides	18	17	15	14	5	9.0	5.9	5.1	4.3	2
2765	Soap and other detergents	9.8	13	13	13	5	10	9.4	8.2	7.3	3
2766	Cosmetics and toilet preparations	18	17	15	14	5	14	12	11	9.8	8
2767	Inks	20	17	15	13	4	16	13	11	10	4
2768	Chemical products nec	13	14	13	12	5	8.8	7.4	6.5	6.0	2
<b>276</b>	<b>Other chemical products</b>	<b>10</b>	<b>11</b>	<b>9.9</b>	<b>9.4</b>	<b>4</b>	<b>9.0</b>	<b>7.2</b>	<b>6.3</b>	<b>5.7</b>	<b>3</b>
<b>277</b>	<b>Petroleum refining</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>278</b>	<b>Petroleum and coal products nec</b>	<b>12</b>	<b>10</b>	<b>9.4</b>	<b>7.9</b>	<b>4</b>	<b>2.0</b>	<b>1.8</b>	<b>1.9</b>	<b>1.5</b>	<b>1</b>
<b>27</b>	<b>CHEMICAL, PETROLEUM AND COAL PRODUCTS</b>	<b>4.1</b>	<b>3.8</b>	<b>3.4</b>	<b>3.2</b>	<b>1</b>	<b>2.1</b>	<b>1.6</b>	<b>1.4</b>	<b>1.3</b>	<b>1</b>

Industry <sup>c</sup>		Average nominal rate									
		on outputs <sup>d</sup>					on materials <sup>e</sup>				
ASIC code	Description	1987 -88 <sup>f</sup>	1988 -89	1989 -90	1990 -91 <sup>g</sup>	March 1991 program	1987 -88 <sup>f</sup>	1988 -89	1989 -90	1990 -91 <sup>g</sup>	March 1991 program
<b>NON-METALLIC MINERAL PRODUCTS</b>											
285	Glass and glass products	6.0	4.6	4.3	4.0	2	7.4	6.9	5.5	5.0	2
2861	Clay bricks	0.1	0.1	0.1	..	..	1.5	1.3	1.2	1.2	1
2862	Refractories	6.7	6.4	6.2	5.8	2	2.5	1.5	1.2	1.2	1
2863	Ceramic tiles and pipes	8.9	8.7	8.2	7.6	4	3.5	3.3	3.2	3.1	1
2864	Ceramic goods nec	19	18	17	15	5	8.0	8.0	6.9	6.0	2
286	Clay products and refractories	4.0	3.9	3.6	3.3	1	2.5	2.1	2.0	1.9	1
2871	Cement	1.2	0.1	0.1	..	..	0.8	0.5	0.4	0.4	..
2872	Ready-mixed concrete )										
2873	Concrete pipes and box culverts) <sup>i</sup>	..	..	..	..	..	1.3	0.4	0.3	0.3	..
2874	Concrete products nec	1.8	1.9	1.7	1.7	1	3.6	2.8	2.5	2.5	1
287	Cement and concrete products	0.8	0.5	0.5	0.5	..	1.6	0.9	0.8	0.8	1
2881	Plaster products and expanded minerals)	12	10	9.9	8.9	4	6.4	5.1	4.6	4.5	2
2882	Stone products ) <sup>i</sup>										
2883	Glass wool and mineral wool products	11	10	9.3	9.1	4	6.4	5.2	4.5	4.1	1
2884	Non-metallic mineral products nec	6.6	5.1	4.6	4.8	2	5.3	4.4	3.9	3.7	2
288	Other non-metallic mineral products	9.4	8.1	7.6	7.3	3	5.9	4.8	4.3	4.1	2
28	NON-METALLIC MINERAL PRODUCTS	3.3	2.7	2.5	2.4	1	2.9	2.2	1.9	1.8	1

<i>Industry</i> <sup>c</sup>		<i>Average nominal rate</i>					<i>on materials</i> <sup>e</sup>				
		<i>on outputs</i> <sup>d</sup>									
<i>ASIC code</i>	<i>Description</i>	<i>1987-88</i> <sup>f</sup>	<i>1988-89</i>	<i>1989-90</i>	<i>1990-91</i> <sup>g</sup>	<i>March 1991 program</i>	<i>1987-88</i> <sup>f</sup>	<i>1988-89</i>	<i>1989-90</i>	<i>1990-91</i> <sup>g</sup>	<i>March 1991 program</i>
<b>BASIC METAL PRODUCTS</b>											
2941	Iron and steel basic products	7.2	6.6	6.4	6.2	4	6.1	5.5	5.5	5.2	3
2942	Iron casting	15	13	13	12	5	3.9	3.7	3.6	3.5	2
2943	Steel casting	19	17	16	15	5	3.7	3.5	3.3	3.1	1
2944	Iron and steel forging	15	17	16	15	4	7.0	6.6	6.4	6.2	4
2945	Steel pipes and tubes	14	13	11	11	4	9.4	9.0	8.6	8.3	4
<b>294</b>	<b>Basic iron and steel</b>	<b>8.4</b>	<b>7.8</b>	<b>7.4</b>	<b>7.1</b>	<b>4</b>	<b>6.3</b>	<b>5.7</b>	<b>5.6</b>	<b>5.3</b>	<b>3</b>
2951	Copper smelting, refining )	1.2	1.2	1.2	1.1	1	2.9	1.3	1.2	1.2	1
2955	Nickel smelting, refining ) <sup>i</sup>										
2952	Silver, lead, zinc smelting, refining	-	-	-	-	-	0.1	0.1	0.1	0.1	..
2953	Alumina	0.1	..	..	..	..	6.4	4.7	4.2	3.8	3
2954	Aluminium smelting	-	-	-	-	-	1.8	1.3	1.0	0.7	1
2956	Non-ferrous metals nec, smelting, refining	1.7	0.4	0.4	0.3	..	1.6	0.1	0.1	0.1	..
2957	Secondary recovery and alloying of non-ferrous metals nec	1.9	0.4	0.4	0.4	..	1.7	0.1	0.1	..	..
<b>295</b>	<b>Basic non-ferrous metals</b>	<b>0.4</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<b>..</b>	<b>3.1</b>	<b>2.0</b>	<b>1.8</b>	<b>1.6</b>	<b>1</b>
2961	Aluminium rolling, drawing, extruding	12	11	10	9.6	4	1.8	0.1	0.1	0.1	-
2962	Non-ferrous metals nec, rolling, drawing, extruding	7.0	7.0	7.0	7.0	4	1.8	0.1	0.1	0.1	..
2963	Non-ferrous metal casting	9.0	7.3	6.7	6.2	2	2.1	0.4	0.4	0.4	..
<b>296</b>	<b>Non-ferrous metal basic products</b>	<b>10</b>	<b>9.5</b>	<b>9.0</b>	<b>8.5</b>	<b>4</b>	<b>1.9</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>..</b>
<b>29</b>	<b>BASIC METAL PRODUCTS</b>	<b>5.4</b>	<b>4.9</b>	<b>4.7</b>	<b>4.5</b>	<b>2</b>	<b>4.4</b>	<b>3.4</b>	<b>3.3</b>	<b>3.1</b>	<b>2</b>

<i>Industry<sup>c</sup></i>		<i>Average nominal rate</i>					<i>on materials<sup>e</sup></i>				
		<i>on outputs<sup>d</sup></i>									
<i>ASIC code</i>	<i>Description</i>	<i>1987-88<sup>f</sup></i>	<i>1988-89</i>	<i>1989-90</i>	<i>1990-91<sup>g</sup></i>	<i>March 1991 program</i>	<i>1987-88<sup>f</sup></i>	<i>1988-89</i>	<i>1989-90</i>	<i>1990-91<sup>g</sup></i>	<i>March 1991 program</i>
<b>FABRICATED METAL PRODUCTS</b>											
3141	Fabricated structural steel	11	9.4	8.7	8.1	4	9.5	9.3	8.9	8.4	4
3142	Architectural aluminium products	17	17	16	15	5	13	13	12	11	4
3143	Architectural metal products nec	15	14	13	12	5	9.0	8.5	8.3	8.0	4
<b>314</b>	<b>Structural metal products</b>	<b>13</b>	<b>12</b>	<b>11</b>	<b>10</b>	<b>4</b>	<b>11</b>	<b>10</b>	<b>9.7</b>	<b>9.1</b>	<b>4</b>
3151	Metal containers	15	13	12	11	4	11	10	9.8	9.4	4
3152	Sheet metal furniture	22	20	18	15	5	8.3	7.9	7.8	7.4	3
3153	Sheet metal products nec	16	16	15	14	4	10	9.7	9.5	9.1	4
<b>315</b>	<b>Sheet metal products</b>	<b>16</b>	<b>15</b>	<b>14</b>	<b>13</b>	<b>4</b>	<b>10</b>	<b>9.8</b>	<b>9.5</b>	<b>9.1</b>	<b>4</b>
3161	Cutlery and hand tools nec	18	16	16	14	5	9.9	9.3	8.5	7.9	3
3162	Springs and wire products	15	13	12	11	3	8.9	9.1	8.8	8.5	4
3163	Nuts, bolts, screws and rivets	22	20	18	17	5	8.5	8.3	8.0	7.8	4
3164	Metal coating and finishing	16	15	14	13	5	6.1	6.5	6.2	6.0	2
3165	Non-ferrous steam, gas and water fittings	20	18	17	16	4	8.7	8.2	8.0	7.8	3
3166	Boiler and plate work	18	17	16	15	5	10	9.9	9.5	8.9	4
3167	Metal blinds and awnings	19	18	18	17	6	14	14	13	12	4
3168	Fabricated metal products nec	18	17	16	15	4	10	10	9.5	9.0	4
<b>316</b>	<b>Other fabricated metal products</b>	<b>18</b>	<b>16</b>	<b>15</b>	<b>14</b>	<b>4</b>	<b>9.5</b>	<b>9.3</b>	<b>8.9</b>	<b>8.6</b>	<b>4</b>
<b>31</b>	<b>FABRICATED METAL PRODUCTS</b>	<b>15</b>	<b>14</b>	<b>13</b>	<b>12</b>	<b>4</b>	<b>10</b>	<b>9.8</b>	<b>9.4</b>	<b>8.9</b>	<b>4</b>

Industry <sup>c</sup>		Average nominal rate					on materials <sup>e</sup>				
		on outputs <sup>d</sup>									
ASIC code	Description	1987 -88 <sup>f</sup>	1988 -89	1989 -90	1990 -91 <sup>g</sup>	March 1991 program	1987 -88 <sup>f</sup>	1988 -89	1989 -90	1990 -91 <sup>g</sup>	March 1991 program
<b>TRANSPORT EQUIPMENT</b>											
3231	Motor vehicles <sup>j</sup>	33	29	30	28	10	9.0	14	19	18	8
3232	Motor vehicle bodies, trailers, caravans	22	19	19	17	5	14	13	12	11	5
3233	Motor vehicle instruments and electrical equipment nec <sup>j</sup>	15	22	26	24	13	15	14	13	12	4
3234	Motor vehicle parts nec <sup>j</sup>	14	20	24	22	12	14	12	12	11	4
<b>323</b>	<b>Motor vehicles and parts<sup>j</sup></b>	<b>27</b>	<b>26</b>	<b>27</b>	<b>25</b>	<b>10</b>	<b>10</b>	<b>14</b>	<b>17</b>	<b>16</b>	<b>7</b>
3241	Ships	18	16	15	14	3	6.6	6.3	6.3	6.0	2
3242	Boats	18	17	15	14	4	9.8	8.4	7.6	6.7	3
3243	Railway rolling stock and locomotives	18	17	16	15	5	15	13	12	12	4
3244	Aircraft	2.3	1.5	1.4	1.3	..	2.3	0.7	0.6	0.6	..
3245	Transport equipment nec	21	20	18	16	5	9.5	9.0	8.4	8.2	3
<b>324</b>	<b>Other transport equipment</b>	<b>14</b>	<b>13</b>	<b>12</b>	<b>11</b>	<b>3</b>	<b>10</b>	<b>8.8</b>	<b>8.4</b>	<b>7.9</b>	<b>3</b>
<b>32</b>	<b>TRANSPORT EQUIPMENT<sup>j</sup></b>	<b>22</b>	<b>22</b>	<b>22</b>	<b>21</b>	<b>8</b>	<b>10</b>	<b>13</b>	<b>15</b>	<b>14</b>	<b>6</b>
<b>OTHER MACHINERY AND EQUIPMENT</b>											
3341	Photographic and optical goods	6.4	6.0	8.0	9.7	3	7.5	6.8	6.4	5.9	3
3342	Photographic film processing	1.9	-	-	-	-	7.6	7.3	7.6	7.6	3
3343	Measuring, professional and scientific equipment nec	6.9	6.5	5.7	4.8	3	4.4	3.9	3.5	3.6	1
<b>334</b>	<b>Photographic, professional and scientific equipment</b>	<b>4.7</b>	<b>3.8</b>	<b>4.2</b>	<b>4.4</b>	<b>2</b>	<b>6.7</b>	<b>6.1</b>	<b>5.9</b>	<b>5.7</b>	<b>2</b>

<i>Industry<sup>c</sup></i>		<i>Average nominal rate</i>					<i>on materials<sup>e</sup></i>				
		<i>on outputs<sup>d</sup></i>									
<i>ASIC code</i>	<i>Description</i>	<i>1987 -88<sup>f</sup></i>	<i>1988 -89</i>	<i>1989 -90</i>	<i>1990 -91<sup>g</sup></i>	<i>March 1991 program</i>	<i>1987 -88<sup>f</sup></i>	<i>1988 -89</i>	<i>1989 -90</i>	<i>1990 -91<sup>g</sup></i>	<i>March 1991 program</i>
3351	Radio and TV receivers; audio equipment	15	13	12	11	3	6.9	5.6	4.9	4.8	1
3352	Electronic equipment nec	19	18	16	15	4	9.7	8.0	7.4	7.0	2
3353	Refrigerators and household appliances	23	21	19	17	5	15	13	12	11	4
3354	Water heating systems	20	19	17	16	5	3.5	3.4	3.3	3.0	1
3355	Electric and telephone cable and wire	15	14	13	12	4	11	10	9.8	9.5	4
3356	Batteries	30	27	23	20	5	5.3	3.9	3.4	3.3	1
3357	Electrical machinery and equipment nec	17	15	14	13	4	11	10	9.7	9.3	4
<b>335</b>	<b>Appliances and electrical equipment</b>	<b>19</b>	<b>17</b>	<b>16</b>	<b>14</b>	<b>4</b>	<b>11</b>	<b>10</b>	<b>9.2</b>	<b>8.7</b>	<b>3</b>
3361	Agricultural machinery	9.9	8.3	5.0	4.4	2	9.9	9.6	9.3	8.9	4
3362	Construction machinery	17	14	12	11	3	10	9.6	9.1	8.7	4
3363	Materials handling equipment	20	19	17	15	4	11	11	10	9.4	4
3364	Wood and metal working machinery	15	12	11	10	3	11	11	10	9.5	4
3365	Pumps and compressors	18	16	15	13	4	14	13	12	12	4
3366	Commercial space heating and cooling equipment	23	21	19	17	5	11	10	9.9	9.5	3
3367	Dies, saw blades and machine tool accessories	15	14	13	13	4	8.4	8.3	7.9	7.6	3
3368	Food processing machinery	16	14	13	12	5	11	10	9.9	9.5	4
3369	Industrial machinery and equipment nec	11	10	9.5	8.8	3	11	11	10	9.7	4
<b>336</b>	<b>Industrial machinery and equipment</b>	<b>14</b>	<b>12</b>	<b>11</b>	<b>10</b>	<b>3</b>	<b>11</b>	<b>11</b>	<b>10</b>	<b>9.5</b>	<b>4</b>
<b>33</b>	<b>OTHER MACHINERY AND EQUIPMENT</b>	<b>16</b>	<b>14</b>	<b>13</b>	<b>12</b>	<b>4</b>	<b>11</b>	<b>9.9</b>	<b>9.3</b>	<b>8.8</b>	<b>3</b>

Industry <sup>c</sup>		Average nominal rate					on materials <sup>e</sup>				
		on outputs <sup>d</sup>									
ASIC code	Description	1987 -88 <sup>f</sup>	1988 -89	1989 -90	1990 -91 <sup>g</sup>	March 1991 program	1987 -88 <sup>f</sup>	1988 -89	1989 -90	1990 -91 <sup>g</sup>	March 1991 program
<b>MISCELLANEOUS MANUFACTURING</b>											
3451	Leather tanning and fur dressing	6.2	6.4	6.2	6.2	2	0.9	0.3	0.3	0.3	..
3452	Leather and leather substitute goods nec	20	20	19	18	6	11	11	11	11	3
<b>345</b>	<b>Leather and leather products</b>	<b>9.0</b>	<b>9.1</b>	<b>8.7</b>	<b>8.6</b>	<b>3</b>	<b>2.6</b>	<b>2.0</b>	<b>2.0</b>	<b>2.0</b>	<b>1</b>
3461	Rubber tyres, tubes, belts, hose and sheets	20	18	17	15	4	10	9.9	8.9	8.4	3
3462	Rubber products nec	23	21	19	18	6	8.2	8.1	7.2	6.8	2
<b>346</b>	<b>Rubber products</b>	<b>21</b>	<b>19</b>	<b>18</b>	<b>16</b>	<b>5</b>	<b>9.5</b>	<b>9.4</b>	<b>8.4</b>	<b>7.9</b>	<b>3</b>
3471	Flexible packaging and abrasive papers	19	17	15	14	5	16	14	12	11	4
3472	Rigid plastic sheeting )										
3473	Hard surface floor coverings nec ) <sup>i</sup>	16	14	12	11	4	14	13	11	11	4
3474	Plastic products nec	19	16	15	14	5	16	14	12	11	4
<b>347</b>	<b>Plastic and related products</b>	<b>19</b>	<b>16</b>	<b>15</b>	<b>14</b>	<b>5</b>	<b>16</b>	<b>14</b>	<b>12</b>	<b>11</b>	<b>4</b>
3481	Ophthalmic articles	15	14	12	10	4	7.8	7.7	6.9	6.0	2
3482	Jewellery and silverware	22	20	18	17	4	0.8	0.5	0.4	0.4	..
3483	Brooms and brushes	22	20	18	16	4	11	10	9.4	8.6	3
3484	Signs and advertising displays	15	16	15	14	4	8.0	7.6	6.7	6.4	3
3485	Sporting equipment	21	20	18	16	5	5.7	5.8	5.4	5.3	2
3486	Writing and marking equipment	15	14	13	12	5	9.9	8.9	8.1	7.7	3
3487	Manufacturing nec	18	16	14	13	4	13	13	13	12	3
<b>348</b>	<b>Other manufacturing</b>	<b>18</b>	<b>17</b>	<b>16</b>	<b>14</b>	<b>4</b>	<b>7.1</b>	<b>6.8</b>	<b>6.3</b>	<b>5.8</b>	<b>2</b>
<b>34</b>	<b>MISCELLANEOUS MANUFACTURING</b>	<b>18</b>	<b>16</b>	<b>15</b>	<b>14</b>	<b>4</b>	<b>12</b>	<b>11</b>	<b>9.6</b>	<b>8.9</b>	<b>3</b>
<b>21-34</b>	<b>TOTAL MANUFACTURING<sup>k</sup></b>	<b>11(9)</b>	<b>10(8)</b>	<b>9.4(7)</b>	<b>8.9(7)</b>	<b>3(3)</b>	<b>6.9(6)</b>	<b>6.2(5)</b>	<b>6.0(5)</b>	<b>5.7(4)</b>	<b>2(2)</b>

- Nil.
- .. Between - 0.05 per cent and 0.05 per cent except for end March 1991 program projections. Between - 0.5 per cent and 0.5 per cent for the projections.
- a Assistance provided by tariffs and certain non-tariff measures. With the exception of the projections for the end of the March 1991 program, the Commission has reported rates of less than 10 per cent rounded to one decimal point. Estimates of 10 per cent or greater continue to be rounded to whole numbers. The presentation of some rates to one decimal point should not be interpreted as implying any greater degree of precision than previous estimates; it simply enables the detection of small movements in rates that are often hidden when estimates are presented as whole numbers.
- b In addition to presenting preliminary 1990–91 estimates and projections of assistance levels that will apply at the end of the March 1991 program, the Commission has revised some industry rates previously published for 1987–88 to 1989–90. The most notable revisions have been to the treatment of assistance to the milk products industries and quota and bounty assistance for certain TCF industries. These changes are discussed in the appendix. Details of the methodology used to derive the assistance estimates for the end of the March 1991 program are provided in the information paper (IC 1991g, app B).
- c Industry subdivision, group and class from the Australian Standard Industrial Classification (ASIC) 1983 Edition.
- d The nominal rate of assistance on outputs of an industry is an average of the nominal rates on products made by that industry, weighted by the unassisted value of output for each product.
- e The nominal rate of assistance on materials used by an industry is an average of the nominal rates on materials used by that industry, weighted by the unassisted value of each material used.
- f Following the introduction of the Harmonized Tariff System on 1 January 1988, it was necessary to construct new concordances between the Harmonized tariff items and the outputs produced by and materials used in each manufacturing industry. The estimates for 1987–88 thus represent an average of the rates that applied in the last half of 1987, as derived using the previous concordances, and the first half of 1988, as derived using the Harmonized concordances.
- g Preliminary estimates.
- h Because reliable data on price distortions for agricultural commodities in 1990–91 were not available, estimates for 1990–91 have been calculated on the assumption that price distortions for agricultural commodities remained at 1989–90 levels. For a discussion of the treatment of agricultural commodities for the March 1991 program estimates see IC (1991g, app B).
- i Assistance estimates were not calculated separately because production data are confidential.
- j The estimates for 1987–88 and the first half of 1988–89 are based on an average price disadvantage of 10 per cent on components used as original equipment under the local content plan. To the extent that this understates the average penalty incurred by motor vehicle assemblers on original equipment, the effective rate estimates for Motor vehicles will be overstated, while the estimates for Motor vehicle instruments and electrical equipment nec and Motor vehicle parts nec will be understated. The PMV local content requirement was abolished on 1 January 1989. From the second half of 1988–89 onwards the nominal rate on components is equal to the operative tariff rate on plan components deflated by the relevant value for duty/landed duty free ratio.
- k The figures in brackets are the medians of the nominal rates of assistance for 4-digit ASIC industries using the weights specified for the averages to determine the 50th percentile.

*Source:* Commission estimates.

**Table A10.11**

**Average effective rates of assistance<sup>a</sup>, manufacturing industries:  
1987-88 to 1990-91 and end March 1991 program<sup>b</sup>**  
(per cent)

<i>Industry<sup>c</sup></i>						
<i>ASIC code</i>	<i>Description</i>	<i>1987 -88<sup>d</sup></i>	<i>1988 -89</i>	<i>1989 -90</i>	<i>1990 -91<sup>e</sup></i>	<i>March 1991 program</i>
<b>FOOD, BEVERAGES AND TOBACCO</b>						
2115	Meat (except smallgoods or poultry)	-1.7	-0.6	-0.5	-0.6	..
2116	Poultry <sup>f</sup>	-0.1	-0.3	0.7	0.9	1
2117	Bacon, ham and smallgoods nec	14	13	13	13	7
<b>211</b>	<b>Meat products<sup>f</sup></b>	<b>1.1</b>	<b>1.6</b>	<b>1.8</b>	<b>1.9</b>	<b>1</b>
2121	Liquid milk and cream <sup>f</sup>	-2.9	-3.0	-3.2	-3.2	-1
2122	Butter <sup>f</sup>	1.0	1.4	1.6	1.5	2
2123	Cheese <sup>f</sup>	-1.2	-1.6	-1.6	-1.7	-1
2124	Ice cream and frozen confections <sup>f</sup>	-17	-13	-10	-9.8	-5
2125	Milk products nec <sup>f</sup>	-16	-4.0	-3.1	-3.5	-5
<b>212</b>	<b>Milk products<sup>f</sup></b>	<b>-6.1</b>	<b>-4.3</b>	<b>-3.7</b>	<b>-3.7</b>	<b>-2</b>
2131	Fruit products <sup>f</sup>	16	8.5	8.1	8.5	3
2132	Vegetable products <sup>f</sup>	4.9	7.8	7.4	7.6	5
<b>213</b>	<b>Fruit and vegetable products<sup>f</sup></b>	<b>8.8</b>	<b>8.0</b>	<b>7.6</b>	<b>7.9</b>	<b>4</b>
<b>214</b>	<b>Margarine and oils and fats nec</b>	<b>11</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>6</b>
2151	Flour mill products <sup>f</sup>	-0.6	-2.7	-0.3	-0.2	..
2152	Starch, gluten and starch sugars	14	15	13	11	6
2153	Cereal foods and baking mixes <sup>f</sup>	1.6	2.6	4.4	4.0	3
<b>215</b>	<b>Flour mill and cereal food products<sup>f</sup></b>	<b>1.5</b>	<b>1.2</b>	<b>3.0</b>	<b>2.7</b>	<b>2</b>
2161	Bread <sup>f</sup>	-3.9	-2.9	-2.4	-2.4	-1
2162	Cakes and pastries <sup>f</sup>	-6.4	-4.8	-4.1	-4.3	-2
2163	Biscuits <sup>f</sup>	1.1	8.7	8.2	5.4	4
<b>216</b>	<b>Bread, cakes and biscuits<sup>f</sup></b>	<b>-3.3</b>	<b>-0.5</b>	<b>-0.3</b>	<b>-1.0</b>	<b>..</b>
2171	Raw sugar )	3.8	2.3	5.9	5.9	4
2176	Food products nec ) <sup>f,g</sup>					
2173	Confectionery and cocoa products <sup>f</sup>	23	26	22	21	5
2174	Processed seafoods	0.6	1.0	1.0	1.1	1
2175	Prepared animal and bird foods <sup>f</sup>	-3.1	1.3	-3.0	-2.7	-1
<b>217</b>	<b>Other food products<sup>f</sup></b>	<b>5.7</b>	<b>5.7</b>	<b>7.0</b>	<b>6.8</b>	<b>3</b>

*Industry<sup>c</sup>*

ASIC code	Description	1987 -88 <sup>d</sup>	1988 -89	1989 -90	1990 -91 <sup>e</sup>	March 1991 program
2185	Soft drinks, cordials and syrups <sup>f</sup>	10	13	8.9	8.2	2
2186	Beer <sup>f</sup>	87	8.8	-2.6	-3.0	1
2187	Malt	-1.0	2.2	2.3	1.9	2
2188	Wine and brandy <sup>f</sup>	25	19	22	19	7
2189	Alcoholic beverages nec <sup>f</sup>	4.8	9.5	11	9.2	3
<b>218</b>	<b>Beverages and malt<sup>f</sup></b>	<b>41</b>	<b>12</b>	<b>6.7</b>	<b>5.7</b>	<b>3</b>
<b>219</b>	<b>Tobacco products<sup>f</sup></b>	<b>3.9</b>	<b>-4.3</b>	<b>-3.7</b>	<b>-3.9</b>	<b>5</b>
<b>21</b>	<b>FOOD, BEVERAGES &amp; TOBACCO<sup>f</sup></b>	<b>6.7</b>	<b>3.4</b>	<b>3.3</b>	<b>3.1</b>	<b>2</b>
<b>TEXTILES</b>						
2341	Cotton ginning <sup>f</sup>	-16	-13	-0.1	-3.2	-4
2342	Wool scouring and top making	-	-	-	-	-
2343	Man-made fibres and yarns	57	66	62	57	8
2344	Man-made fibre broadwoven fabrics	155	181	183	166	39
2345	Cotton yarns and broadwoven fabrics	86	93	100	95	26
2346	Worsted yarns and broadwoven fabrics	29	43	41	38	13
2347	Woollen yarns and broadwoven fabrics	27	40	39	38	20
2348	Narrow woven and elastic textiles	53	54	53	53	16
2349	Textile finishing	133	169	168	152	40
<b>234</b>	<b>Textile fibres, yarns and woven fabrics<sup>f</sup></b>	<b>72</b>	<b>85</b>	<b>86</b>	<b>79</b>	<b>21</b>
2351	Household textiles	90	115	122	139	60
2352	Textile floor coverings	175	163	151	142	63
2353	Felt and felt products	27	27	27	26	10
2354	Canvas and associated products nec	18	14	14	17	9
2355	Rope, cordage and twine	27	26	26	26	10
2356	Textile products nec	24	15	15	15	8
<b>235</b>	<b>Other textile products</b>	<b>56</b>	<b>52</b>	<b>50</b>	<b>50</b>	<b>23</b>
<b>23</b>	<b>TEXTILES<sup>f</sup></b>	<b>65</b>	<b>72</b>	<b>72</b>	<b>68</b>	<b>22</b>
<b>CLOTHING AND FOOTWEAR</b>						
2441	Hosiery	192	180	149	135	48
2442	Cardigans and pullovers	234	239	244	237	73
2443	Knitted goods nec	181	147	149	147	44
<b>244</b>	<b>Knitting mills</b>	<b>197</b>	<b>178</b>	<b>171</b>	<b>164</b>	<b>52</b>

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*Industry<sup>c</sup>*

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ASIC code	Description	1987 -88 <sup>d</sup>	1988 -89	1989 -90	1990 -91 <sup>e</sup>	March 1991 program
2451	Mens trousers and shorts; work clothing	129	173	180	201	58
2452	Mens suits and coats; waterproof clothing	143	179	160	140	53
2453	Womens outerwear nec	196	164	172	187	63
2454	Foundation garments	116	156	181	187	52
2455	Underwear and infants clothing nec	>250	233	242	238	61
2456	Headwear and clothing nec	51	43	44	47	17
<b>245</b>	<b>Clothing</b>	<b>167</b>	<b>159</b>	<b>164</b>	<b>171</b>	<b>52</b>
<b>246</b>	<b>Footwear</b>	<b>164</b>	<b>217</b>	<b>224</b>	<b>231</b>	<b>36</b>
<b>24</b>	<b>CLOTHING AND FOOTWEAR</b>	<b>174</b>	<b>171</b>	<b>173</b>	<b>176</b>	<b>50</b>
<b>WOOD, WOOD PRODUCTS AND FURNITURE</b>						
2531	Log sawmilling	3.9	3.6	3.9	3.8	4
2532	Resawn and dressed timber	17	16	15	14	6
2533	Veneers and manufactured boards of wood	27	26	23	23	6
2534	Wooden doors	16	16	15	13	6
2535	Wooden structural fittings and joinery nec	17	16	14	13	5
2536	Wooden containers	9.9	9.1	8.3	7.9	2
2537	Hardwood woodchips	-0.2	-0.1	-0.1	-0.1	..
2538	Wood products nec	22	20	19	17	8
<b>253</b>	<b>Wood and wood products</b>	<b>13</b>	<b>12</b>	<b>11</b>	<b>10</b>	<b>4</b>
2541	Furniture (except sheet metal)	38	33	29	24	4
2542	Mattresses (except rubber)	-1.2	-2.6	-2.7	-1.9	1
<b>254</b>	<b>Furniture and mattresses</b>	<b>31</b>	<b>27</b>	<b>23</b>	<b>20</b>	<b>4</b>
<b>25</b>	<b>WOOD, WOOD PRODUCTS AND FURNITURE</b>	<b>18</b>	<b>17</b>	<b>15</b>	<b>13</b>	<b>4</b>
<b>PAPER, PAPER PRODUCTS, PRINTING AND PUBLISHING</b>						
2631	Pulp, paper and paperboard	21	20	17	15	6
2632	Paper bags (including textile bags)	32	32	24	19	7
2633	Solid fibreboard containers	43	39	30	24	6
2634	Corrugated fibreboard containers	38	36	26	19	6
2635	Paper products nec	36	33	25	21	6
<b>263</b>	<b>Paper and paper products</b>	<b>31</b>	<b>29</b>	<b>22</b>	<b>18</b>	<b>6</b>

*Industry<sup>c</sup>*

<i>ASIC code</i>	<i>Description</i>	<i>1987 -88<sup>d</sup></i>	<i>1988 -89</i>	<i>1989 -90</i>	<i>1990 -91<sup>e</sup></i>	<i>March 1991 program</i>
2641	Publishing	0.2	0.1	0.1	-	..
2642	Printing and publishing	- 0.2	- 0.3	- 0.3	- 0.3	..
2643	Paper stationery	33	30	23	18	6
2644	Printing and bookbinding	23	13	10	7.6	2
2645	Printing trade services nec	- 0.4	- 2.7	- 2.8	- 2.6	- 1
<b>264</b>	<b>Printing and allied industries</b>	<b>9.5</b>	<b>6.3</b>	<b>4.7</b>	<b>3.5</b>	<b>1</b>
<b>26</b>	<b>PAPER, PAPER PRODUCTS, PRINTING AND PUBLISHING</b>	<b>15</b>	<b>12</b>	<b>8.8</b>	<b>7.0</b>	<b>2</b>
<b>CHEMICAL, PETROLEUM AND COAL PRODUCTS</b>						
2751	Chemical fertilisers	27	1.2	1.7	1.7	2
2752	Industrial gases					
2754	Organic industrial chemicals nec) <sup>g</sup>	7.4	6.3	7.6	6.9	1
2753	Synthetic resins and rubber	38	36	30	27	10
2755	Inorganic industrial chemicals nec	24	23	19	17	5
<b>275</b>	<b>Basic chemicals</b>	<b>25</b>	<b>20</b>	<b>17</b>	<b>16</b>	<b>5</b>
2761	Ammunition, explosives and fireworks	12	15	15	14	6
2762	Paints	16	19	20	21	7
2763	Pharmaceutical and veterinary products	2.1	1.5	1.6	1.6	1
2764	Pesticides	46	51	46	43	15
2765	Soap and other detergents	9.2	18	18	18	7
2766	Cosmetics and toilet preparations	21	21	18	16	2
2767	Inks	29	26	22	20	6
2768	Chemical products nec	19	23	22	20	8
<b>276</b>	<b>Other chemical products</b>	<b>12</b>	<b>14</b>	<b>14</b>	<b>13</b>	<b>5</b>
<b>277</b>	<b>Petroleum refining</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>278</b>	<b>Petroleum and coal products nec</b>	<b>42</b>	<b>37</b>	<b>33</b>	<b>29</b>	<b>14</b>
<b>27</b>	<b>CHEMICAL, PETROLEUM AND COAL PRODUCTS</b>	<b>12</b>	<b>12</b>	<b>11</b>	<b>10</b>	<b>4</b>
<b>NON-METALLIC MINERAL PRODUCTS</b>						
<b>285</b>	<b>Glass and glass products</b>	<b>5.3</b>	<b>3.3</b>	<b>3.6</b>	<b>3.4</b>	<b>1</b>
2861	Clay bricks	- 0.8	- 0.6	- 0.6	- 0.6	..
2862	Refractories	13	14	14	13	5
2863	Ceramic tiles and pipes	13	12	12	11	6
2864	Ceramic goods nec	24	22	21	19	6
<b>286</b>	<b>Clay products and refractories</b>	<b>5.0</b>	<b>5.0</b>	<b>4.7</b>	<b>4.3</b>	<b>2</b>

*Industry<sup>c</sup>*

<i>ASIC code</i>	<i>Description</i>	<i>1987 -88<sup>d</sup></i>	<i>1988 -89</i>	<i>1989 -90</i>	<i>1990 -91<sup>e</sup></i>	<i>March 1991 program</i>
2871	Cement	1.7	-0.4	-0.4	-0.4	..
2872	Ready-mixed concrete )					
2873	Concrete pipes and box culverts) <sup>g</sup>	-3.3	-1.1	-0.8	-0.8	-1
2874	Concrete products nec	0.6	1.3	1.2	1.2	..
<b>287</b>	<b>Cement and concrete products</b>	<b>-0.4</b>	<b>..</b>	<b>0.1</b>	<b>0.1</b>	<b>..</b>
2881	Plaster products and expanded ) minerals ) <sup>g</sup>	17	15	15	13	6
2882	Stone products )					
2883	Glass wool and mineral wool products	14	14	13	12	5
2884	Non-metallic mineral products nec	7.8	5.7	5.2	5.9	2
<b>288</b>	<b>Other non-metallic mineral products</b>	<b>13</b>	<b>11</b>	<b>11</b>	<b>10</b>	<b>4</b>
<b>28</b>	<b>NON-METALLIC MINERAL PRODUCTS</b>	<b>3.7</b>	<b>3.3</b>	<b>3.2</b>	<b>3.0</b>	<b>1</b>
<b>BASIC METAL PRODUCTS</b>						
2941	Iron and steel basic products	9.5	9.0	8.3	8.3	6
2942	Iron casting	25	23	21	19	7
2943	Steel casting	30	28	26	25	7
2944	Iron and steel forging	29	34	32	31	4
2945	Steel pipes and tubes	21	19	16	15	4
<b>294</b>	<b>Basic iron and steel</b>	<b>13</b>	<b>12</b>	<b>11</b>	<b>11</b>	<b>6</b>
2951	Copper smelting, refining )					
2955	Nickel smelting, refining ) <sup>g</sup>	-20	..	1.1	0.7	-6
2952	Silver, lead, zinc smelting, refining	-0.5	-0.4	-0.4	-0.4	..
2953	Alumina	-12	-9.1	-8.1	-7.4	-5
2954	Aluminium smelting	-3.0	-2.2	-1.7	-1.2	-1
2956	Non-ferrous metals nec, smelting, refining	2.0	2.6	2.6	2.1	2
2957	Secondary recovery and alloying of non-ferrous metals nec	2.5	2.0	2.1	2.0	1
<b>295</b>	<b>Basic non-ferrous metals</b>	<b>-7.7</b>	<b>-5.0</b>	<b>-4.3</b>	<b>-3.8</b>	<b>-3</b>
2961	Aluminium rolling, drawing, extruding	47	49	46	42	17
2962	Non-ferrous metals nec, rolling, drawing, extruding	28	36	36	36	18
2963	Non-ferrous metal casting	17	15	14	13	4
<b>296</b>	<b>Non-ferrous metal basic products</b>	<b>37</b>	<b>39</b>	<b>38</b>	<b>35</b>	<b>15</b>
<b>29</b>	<b>BASIC METAL PRODUCTS</b>	<b>7.8</b>	<b>8.6</b>	<b>8.2</b>	<b>7.9</b>	<b>4</b>

*Industry<sup>c</sup>*

<i>ASIC code Description</i>	<i>1987 -88<sup>d</sup></i>	<i>1988 -89</i>	<i>1989 -90</i>	<i>1990 -91<sup>e</sup></i>	<i>March 1991 program</i>
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**FABRICATED METAL PRODUCTS**

3141 Fabricated structural steel	12	9.5	8.3	7.5	3
3142 Architectural aluminium products	24	24	23	21	6
3143 Architectural metal products nec	22	21	19	17	6
<b>314 Structural metal products</b>	<b>16</b>	<b>14</b>	<b>13</b>	<b>12</b>	<b>4</b>

3151 Metal containers	22	19	16	14	4
3152 Sheet metal furniture	41	36	32	26	7
3153 Sheet metal products nec	23	23	21	20	5
<b>315 Sheet metal products</b>	<b>24</b>	<b>23</b>	<b>20</b>	<b>19</b>	<b>5</b>

3161 Cutlery and hand tools nec	22	21	20	18	8
3162 Springs and wire products	24	18	16	15	2
3163 Nuts, bolts, screws and rivets	34	31	28	25	6
3164 Metal coating and finishing	23	22	20	18	7

3165 Non-ferrous steam, gas and water fittings	30	27	25	23	5
3166 Boiler and plate work	27	26	24	23	6
3167 Metal blinds and awnings	26	24	24	23	8
3168 Fabricated metal products nec	25	23	21	20	5

<b>316 Other fabricated metal products</b>	<b>26</b>	<b>23</b>	<b>22</b>	<b>20</b>	<b>5</b>
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<b>31 FABRICATED METAL PRODUCTS</b>	<b>22</b>	<b>20</b>	<b>18</b>	<b>17</b>	<b>5</b>
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**TRANSPORT EQUIPMENT**

3231 Motor vehicles <sup>h</sup>	243	162	119	113	36
3232 Motor vehicles bodies, trailers, caravans	34	29	29	25	4

3233 Motor vehicle instruments and electrical equipment nec <sup>h</sup>	16	38	53	49	31
3234 Motor vehicle parts nec <sup>h</sup>	15	32	43	40	24
<b>323 Motor vehicles and parts<sup>h</sup></b>	<b>88</b>	<b>72</b>	<b>65</b>	<b>60</b>	<b>25</b>

3241 Ships	24	23	20	19	3
3242 Boats	30	29	26	24	5
3243 Railway rolling stock and locomotives	20	19	18	17	5
3244 Aircraft	2.3	1.8	1.7	1.6	1
3245 Transport equipment nec	34	32	29	24	8

<b>324 Other transport equipment</b>	<b>16</b>	<b>15</b>	<b>14</b>	<b>13</b>	<b>3</b>
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<b>32 TRANSPORT EQUIPMENT<sup>h</sup></b>	<b>46</b>	<b>39</b>	<b>35</b>	<b>33</b>	<b>12</b>
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*Industry<sup>c</sup>*

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<i>ASIC code</i>	<i>Description</i>	<i>1987 -88<sup>d</sup></i>	<i>1988 -89</i>	<i>1989 -90</i>	<i>1990 -91<sup>e</sup></i>	<i>March 1991 program</i>
<b>OTHER MACHINERY AND EQUIPMENT</b>						
3341	Photographic and optical goods	4.1	4.3	12	17	2
3342	Photographic film processing	0.1	-2.3	-2.4	-2.4	-1
3343	Measuring, professional and scientific equipment nec	8.5	8.2	7.2	5.6	4
<b>334</b>	<b>Photographic, professional and scientific equipment</b>	<b>3.3</b>	<b>2.0</b>	<b>2.9</b>	<b>3.5</b>	<b>1</b>
3351	Radio and TV receivers; audio equipment	24	21	20	19	6
3352	Electronic equipment nec	30	28	26	23	7
3353	Refrigerators and household appliances	34	31	27	24	6
3354	Water heating systems	40	37	34	32	9
3355	Electric and telephone cable and wire	23	21	20	18	5
3356	Batteries	77	70	61	53	12
3357	Electrical machinery and equipment nec	24	20	18	16	4
<b>335</b>	<b>Appliances and electrical equipment</b>	<b>30</b>	<b>26</b>	<b>24</b>	<b>21</b>	<b>6</b>
3361	Agricultural machinery	9.9	6.7	-0.4	-1.2	..
3362	Construction machinery	31	24	17	15	1
3363	Materials handling equipment	32	30	26	23	5
3364	Wood and metal working machinery	19	14	11	11	2
3365	Pumps and compressors	21	20	17	15	5
3366	Commercial space heating and cooling equipment	39	34	31	27	7
3367	Dies, saw blades and machine tool accessories	18	17	16	16	5
3368	Food processing machinery	20	18	16	14	6
3369	Industrial machinery and equipment nec	12	9.5	8.7	7.9	3
<b>336</b>	<b>Industrial machinery and equipment</b>	<b>17</b>	<b>14</b>	<b>12</b>	<b>10</b>	<b>3</b>
<b>33</b>	<b>OTHER MACHINERY AND EQUIPMENT</b>	<b>22</b>	<b>19</b>	<b>17</b>	<b>15</b>	<b>4</b>
<b>MISCELLANEOUS MANUFACTURING</b>						
3451	Leather tanning and fur dressing	24	27	26	26	9
3452	Leather and leather substitute goods nec	34	34	30	30	10
<b>345</b>	<b>Leather and leather products</b>	<b>27</b>	<b>29</b>	<b>27</b>	<b>27</b>	<b>9</b>
3461	Rubber tyres, tubes, belts, hose and sheets	35	31	28	24	6
3462	Rubber products nec	40	35	32	29	9
<b>346</b>	<b>Rubber products</b>	<b>37</b>	<b>32</b>	<b>30</b>	<b>26</b>	<b>7</b>

*Industry<sup>c</sup>*

<i>ASIC code Description</i>	<i>1987 -88<sup>d</sup></i>	<i>1988 -89</i>	<i>1989 -90</i>	<i>1990 -91<sup>e</sup></i>	<i>March 1991 program</i>
3471 Flexible packaging and abrasive paper	26	22	20	18	6
3472 Rigid plastic sheeting )					
3473 Hard surface floor coverings nec ) <sup>g</sup>	19	16	14	13	4
3474 Plastic products nec	21	19	17	16	6
<b>347 Plastic and related products</b>	<b>22</b>	<b>20</b>	<b>18</b>	<b>17</b>	<b>6</b>
3481 Ophthalmic articles	18	18	15	13	4
3482 Jewellery and silverware	58	54	50	45	12
3483 Brooms and brushes	33	29	27	24	6
3484 Signs and advertising displays	21	22	21	20	6
3485 Sporting equipment	38	34	31	27	9
3486 Writing and marking equipment	20	19	18	17	6
3487 Manufacturing nec	24	19	15	14	4
<b>348 Other manufacturing</b>	<b>30</b>	<b>28</b>	<b>25</b>	<b>23</b>	<b>7</b>
<b>34 MISCELLANEOUS MANUFACTURING</b>	<b>26</b>	<b>24</b>	<b>22</b>	<b>20</b>	<b>6</b>
<b>21-34 TOTAL MANUFACTURING<sup>i</sup></b>	<b>19</b>	<b>17</b>	<b>16</b>	<b>15</b>	<b>5</b>
	<b>(12)</b>	<b>(10)</b>	<b>(9)</b>	<b>(8)</b>	<b>(4)</b>

- Nil.

.. Between - 0.05 per cent and 0.05 per cent except for end March 1991 program projections. Between - 0.5 per cent and 0.5 per cent for the projections.

a Assistance to an activity, net of the effects of tariffs and certain other forms of government intervention which alter the prices of material inputs used by the industry. With the exception of the projections for the end of the March 1991 program, the Commission has reported rates of less than 10 per cent rounded to one decimal point. Estimates of 10 per cent or greater continue to be rounded to whole numbers. The presentation of some rates to one decimal point should not be interpreted as implying any greater degree of precision than previous estimates; it simply enables the detection of small movements in rates that are often hidden when estimates are presented as whole numbers. Effective rate estimates above 250 per cent have not been published because of the sensitivity of extremely high estimates to small changes in the parameters of the effective rate.

b In addition to presenting preliminary 1990-91 estimates and projections of assistance levels that will apply at the end of the March 1991 program, the Commission has revised some industry rates previously published for 1987-88 to 1989-90. The most notable revisions have been to the treatment of assistance to the milk products industries and quota and bounty assistance for certain TCF industries. These changes are discussed in the appendix. Details of the methodology used to derive the assistance estimates for the end of the March 1991 program are provided in the information paper (IC 1991g, app B).

c Industry subdivision, group and class from the Australian Standard Industrial Classification (ASIC) 1983 Edition.

d Following the introduction of the Harmonized Tariff System on 1 January 1988, it was necessary to construct new concordances between Harmonized tariff items and the outputs produced by and materials used in each manufacturing industry. The estimates for 1987-88 thus represent an average

of the rates that applied in the last half of 1987, as derived using the previous concordances, and the first half of 1988, as derived using the Harmonized concordances.

- e Preliminary estimates.
- f Because reliable data on price distortions for agricultural commodities in 1990–91 were not available, estimates for 1990–91 have been calculated on the assumption that price distortions for agricultural commodities remained at 1989–90 levels. For a discussion of the treatment of agricultural commodities for the March 1991 program see IC (1991g, app B).
- g Assistance estimates were not calculated separately because production data are confidential.
- h The estimates for 1987–88 and the first half of 1988–89 are based on an average price disadvantage of 10 per cent on components used as original equipment under the local content plan. To the extent that this understates the average penalty incurred by motor vehicle assemblers on original equipment, the effective rate estimates for motor vehicles will be overstated, while the estimates for motor vehicle instruments and electrical equipment nec and motor vehicle parts nec will be understated. The PMV local content requirement was abolished on 1 January 1989. From the second half of 1988–89 onwards, the nominal rate on components is equal to the operative tariff rate on plan components deflated by the relevant value for duty/landed duty free ratio.
- i The figures in brackets are the medians of the effective rate of assistance for 4-digit ASIC industries using unassisted value-added weights to determine the 50th percentile.

**Table A10.12**  
**Standard deviations<sup>a</sup> for nominal and effective rates of assistance, manufacturing subdivisions<sup>b</sup>: 1987–88<sup>c</sup> to 1990–91 and end**  
**March 1991 program**  
 (percentage points)

<i>Industry<sup>b</sup></i>		<i>Nominal rate on outputs</i>					<i>Effective rates of assistance</i>				
<i>ASIC code</i>	<i>Description</i>	<i>1987 –88<sup>d</sup></i>	<i>1988 –89</i>	<i>1989 –90</i>	<i>1990 –91<sup>e</sup></i>	<i>March 1991 program</i>	<i>1987 –88<sup>d</sup></i>	<i>1988 –89</i>	<i>1989 –90</i>	<i>1990 –91<sup>e</sup></i>	<i>March 1991 program</i>
21	Food, beverages and tobacco <sup>f</sup>	9	6	5	5	2	20	8	7	7	3
23	Textiles <sup>f</sup>	17	19	19	18	6	55	63	62	57	18
24	Clothing and footwear	17	14	14	15	4	64	56	59	60	16
25	Wood, wood products and furniture	8	7	6	6	1	14	12	10	9	2
26	Paper, paper products, printing and publishing	9	7	6	5	2	15	13	10	8	3
27	Chemical, petroleum and coal products	6	6	5	5	2	13	13	11	11	4
28	Non-metallic mineral products	4	4	4	3	1	6	6	5	5	2
29	Basic metal products	5	4	4	4	2	15	14	13	12	6
31	Fabricated metal products	3	3	3	3	1	6	6	6	5	1
32	Transport equipment	10	8	8	8	4	75	48	35	33	13
33	Other machinery and equipment	6	5	5	4	1	12	11	10	9	2
34	Miscellaneous manufacturing	4	3	3	3	1	8	7	7	6	2
<b>21-34</b>	<b>Total manufacturing</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>11</b>	<b>4</b>	<b>36</b>	<b>31</b>	<b>29</b>	<b>29</b>	<b>9</b>

- a Standard deviations calculated between 4-digit ASIC industries within a subdivision. The standard deviation measures how far from the average the items in a frequency distribution are located, thereby measuring the extent of variation or dispersion in the distribution. The larger the variability in rates of assistance between individual industries, the larger the standard deviation.
- b Industry subdivisions from the Australian Standard Industrial Classification (ASIC) 1983 Edition.
- c In addition to presenting preliminary 1990-91 estimates and projections of assistance levels that will apply at the end of the March 1991 program, the Commission has revised some figures previously published for 1987-88 to 1989-90 (see footnote b of table A10.10).
- d Following the introduction of the Harmonized Tariff System on 1 January 1988, it was necessary to construct new concordances between the Harmonized tariff items and the outputs produced by and materials used in each manufacturing industry. The estimates for 1987-88 thus represent an average of the rates that applied in the last half of 1987, as derived using the previous concordances, and the first half of 1988, as derived using the Harmonized concordances.
- e Preliminary estimates.
- f Because reliable data on price distortions for agricultural commodities in 1990-91 were not available, estimates for 1990-91 have been calculated on the assumption that price distortions for agricultural commodities remained at 1989-90 levels. For a discussion of the treatment of agricultural commodities for the March 1991 program estimates see IC (1991g, app B).

*Source:* Commission estimates.

Table A10.13

Subsidy equivalents, tax on materials and consumer tax equivalents,<sup>a</sup> manufacturing subdivisions<sup>b</sup>: 1989-90 and 1990-91<sup>c</sup>  
(\$ million)

Industry		Gross subsidy equivalent <sup>d</sup>		Tax on materials <sup>e</sup>		Net subsidy equivalent <sup>f</sup>		Consumer tax equivalent <sup>g</sup>	
		1989 -90	1990 -91	1989 -90	1990 -91	1989 -90	1990 -91	1989 -90	1990 -91
ASIC code	Description								
21	Food, beverages and tobacco <sup>h</sup>	1 323	1 319	1 041	1 054	282	264	1 215	1 143
23	Textiles <sup>h</sup>	750	708	152	141	598	567	308	287
24	Clothing and footwear	1 543	1 599	341	324	1 202	1 275	2 036	2 063
25	Wood, wood products and furniture	550	525	187	185	363	340	279	253
26	Paper, paper products, printing and publishing	521	464	182	185	339	279	61	54
27	Chemical, petroleum and coal products	713	688	235	221	478	467	192	186
28	Non-metallic mineral products	130	128	48	47	83	81	29	27
29	Basic metal products	788	773	380	369	408	404	91	87
31	Fabricated metal products	977	957	386	389	591	567	228	220
32	Transport equipment	2 097	2 029	959	932	1 138	1 097	1 741	1 583
33	Other machinery and equipment	1 235	1 176	475	467	760	709	1 126	946
34	Miscellaneous manufacturing	775	737	280	267	495	470	268	238
21-34	<b>Total manufacturing</b>	11 401	11 103	4 665	4 581	6 736	6 522	7 574	7 086

- a These measures represent the income transfers throughout the community from assistance and, consequently, should not be used as measures of the economic (or welfare) costs to the community of assistance. Figures are expressed in current year prices using price indexes of articles produced by manufacturing industries. Figures may not add due to rounding.
- b Industry subdivisions from the Australian Standard Industrial Classification (ASIC) 1983 Edition.
- c Preliminary estimates.
- d The gross subsidy equivalent is the change in producers' gross returns from assistance. It is the notional amount of money necessary to provide an industry with a level of assistance equivalent to the nominal rate of assistance on its output. Gross subsidy equivalents for individual industries have been summed to derive totals for industry groups and the sector as a whole. These totals will exceed the actual group and sector totals due to some of the outputs of industries being used as intermediate inputs by other industries in the same group or sector.
- e The tax on materials is the net change in costs to user industries due to government intervention altering the prices paid for intermediate inputs. Taxes on materials for individual industries have been summed to derive totals for industry groups and the sector as a whole. These totals will exceed the actual group and sector totals due to some of the outputs of industries being used as intermediate inputs by other industries in the same group or sector.
- f The net subsidy equivalent is the change in returns to an activity's value added due to assistance. It is the notional amount of money necessary to provide a level of assistance to an activity's value added equivalent to its effective rate of assistance. It is equal to the gross subsidy equivalent plus assistance to value-adding factors, less the tax on materials.
- g The consumer tax equivalent is the transfer from final consumers paying higher prices due to assistance. The exclusion of intermediate usage differs from some previous calculations which included the transfers from both final consumers and intermediate users due to assistance-induced price increases. Consequently, the estimates in this table which cover only transfers from consumers of final goods, cannot be compared with estimates published before 1984–85. Transfers due to intermediate usage of outputs by other industries were excluded using ABS input-output data for 1986–87.
- h Because reliable data on price distortions for agricultural commodities in 1990–91 were not available, estimates for 1990–91 have been calculated on the assumption that price distortions for agricultural commodities remained at 1989–90 levels. For a discussion of the treatment of agricultural commodities for the March 1991 program estimates see IC (1991g, app B).

*Source:* Commission estimates.

## Appendix 11

### Recent industry policy reviews and decisions

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The Industry Commission Act permits the Government to refer any industry matter to the Commission for inquiry and report. However, the Government also refers industry matters for consideration by other independent bodies, bureaus, chairpersons and private consultancies. Further, many government decisions are based on inquiries and/or recommendations from such sources. This appendix reports on some recent Commonwealth decisions and inquiries of this nature which are not examined elsewhere in this report.

The matters reported are:

#### *Rural*

- drought relief

#### *Mining*

- review of the Joint Coal Board

#### *Environment*

- Kakadu conservation zone

#### *Construction*

- major projects approval systems review

#### *Labour market*

- training costs of award restructuring
- workplace bargaining for government business enterprises

#### *Regulation*

- record, tape and compact disc prices
- franchising self regulation

#### *Services*

- tourism promotion
- foreign actors
- cinema admission prices

#### *Parliamentary reviews relating to industry policy*

#### *Other reviews*

## **Drought relief**

On 21 May 1991 the Minister for Primary Industries and Energy announced the Commonwealth's new policy for drought assistance for farmers (Kerin 1991*b*). The new policy is based on the recommendations of the Drought Policy Review Task Force (see IC 1990*c*, app 15). Key elements are:

- A fundamental recognition that drought is a natural, recurring feature of the Australian climate and one of the ongoing commercial risks of rural enterprise.
- Financial assistance to farmers will now be provided through the Rural Adjustment Scheme (RAS). RAS Part A assistance will help farmers prepare for drought through farm improvement, farm build-up, capital reconstruction, and financial measures. During drought periods, emphasis will be on Part B assistance to provide carry-on finance, and Part C assistance in the form of income support and relocation assistance for farmers with no long-term prospects in their current activities.
- The new approach to drought management will also be implemented through other Commonwealth policies and programs with a view to enabling farmers to make more informed and strategic responses to manage drought according to their particular circumstances, for example, including climatic variability assessment in the development and administration of land conservation policies and the landcare program.

## **Review of the Joint Coal Board**

On 2 October 1990 the Commonwealth Minister for Primary Industries and Energy and the New South Wales Minister for Minerals and Energy announced an independent review of the Joint Coal Board, to be completed by the end of February 1991 (Kerin 1990). The review was undertaken by Mr Bryan Kelman, former Chief Executive Officer of CSR Ltd, and all relevant persons, government, industry, union and associated bodies were to be consulted. The review was to assess the powers, functions and activities currently undertaken by the Board and examine whether those functions and activities should be retained, modified, expanded, transferred to some other body or discontinued, and to recommend any organisational, structural or management alterations.

The report, not yet released to the public, is being considered by the relevant Ministers of the Commonwealth and New South Wales.

## **Kakadu conservation zone**

On 2 May 1991 the Resource Assessment Commission submitted its report on the Kakadu Conservation Zone (RAC 1991*a*). Whilst not making a definitive recommendation, significant RAC views included:

- economic sustainability should be considered from an economy-wide and world-wide perspective, rather than focusing unduly on individual industry sectors (for example, by seeking to maintain known gold stocks);

- a single mine of the kind proposed was unlikely to present significant risks to the sustainability of the ecology of Kakadu National Park;
- the proposed mine would be against the wishes of the senior Jawoyn men, who are supported by many Jawoyn people and other senior Aboriginal people in the region, and would adversely affect the ability of Jawoyn people to sustain cultural and religious values, beliefs and practices that are important to them.

The RAC considered the proposed mine to be a special case, rejecting the view that it represented a test case for issues such as mining in national parks and multiple land use. It was stressed, however, that if firm policies were not established as soon as possible the consequences of a decision not to mine would be greater.

On 18 June 1991 the Prime Minister announced that the Zone would be incorporated into Kakadu National Park and that mining would not be allowed at Coronation Hill (Hawke 1991). The Government stressed that it had adopted the RAC's view that this decision represented a special case and the decision did not reflect a change in the Government's general attitude to resource development.

### **Major projects approval systems review**

On 3 April 1991 the Minister for Science and Technology released a report on approval systems for major projects in Australia (Crean 1991*b*). The report was funded jointly by Commonwealth and State Governments and undertaken by consulting engineers, Kinhill Engineers. Over 150 separate approval systems were identified as potentially applying to major projects, with the expectation that environmental concerns are likely to increase the amount of relevant legislation. An examination of approval systems used overseas identified key features contributing to success as being consistency, predictability, transparency and integration of an approval system.

Recommendations for administrative principles included the establishment of clear lines of authority for approval processes; avoidance of duplication; and the appointment of a single facilitator, within the appropriate government department or agency. Political principles recommended included the need for a national focus in major project approval; a partnership approach involving the proponent, government and community; a set of national guidelines and policies for development; and provision for project-specific legislation which consolidates and unifies various approval processes for unusually complex projects such as the Very Fast Train or the Multi-Function Polis.

### **Training costs of award restructuring**

In May 1990 the Conference of Australian Ministers for Labour established an inquiry into the costs of training arising from the restructuring of industrial awards. The inquiry was undertaken by a committee chaired by Mr Ivan Deveson. The Commonwealth, State and Territory Labour Ministers considered that there was a need to enhance Australia's skill base; training cost implications of award restructuring would be substantial; and governments alone could not and should not

be responsible for meeting all the costs involved. The committee was asked to estimate the training resources which would be required, and to propose options for securing additional resources.

The committee found unmet demand for technical and further education to be high, with more than 100 000 Australians failing to gain entry to the courses of their choice in 1990 (Training Costs Review Committee 1990). Demand is expected to increase further with award restructuring and the development of a training 'culture'.

The committee found a need for governments to enable and encourage industry provided training. Proposed measures included TAFE provision of services to industry, generally on a cost recovery basis. Whilst not in favour of more substantive TAFE fees, the committee recognised the existence of various charges and fees, and recommended their rationalisation.

### **Workplace bargaining for government business enterprises**

On 30 May 1991 the Minister for Industrial Relations announced that Cabinet had approved a package of guidelines for workplace bargaining in government business enterprises (Cook 1991). It was stated that measurable and demonstrable productivity changes are to be a feature of future wage setting in the Australian Public Service (APS). A task force composed of APS heads, chaired by Mr G Glenn, Secretary, Department of Industrial Relations, was also announced. The task force was to report by the end of August 1991 on options for measuring productivity change and the various options available for workplace bargaining in the APS. The Minister will then detail the Government's preferred approach to achieving ongoing productivity improvement in the APS.

### **Record, tape and compact disc prices**

In February 1990 the Minister for Consumer Affairs announced that the Prices Surveillance Authority (PSA) would undertake an inquiry into prices charged for sound recordings in Australia.

A final report was released in December 1990. It found that prices were excessive because of import restrictions, the prevailing legal and regulatory framework, and the lack of effective competition between sellers. It recommended legal recognition of performers' copyright, strengthening of laws prohibiting piracy and the imposition of a levy on sales to fund Australian talent through the establishment of a Music Industry Council. It also recommended the removal of import restrictions and the 10 per cent tariff on the industry's major input, polycarbonate (PSA 1990c). The PSA said that implementation of these reforms, after a delay of 12 months to allow industry time to implement necessary changes, could lead to reductions in prices of 20 to 30 per cent.

## **Franchising self regulation**

In December 1990 the Minister for Small Business and Customs announced the establishment of a franchising task force to develop a code of self regulation (Beddall 1990b). This sector accounts for almost 25 per cent of all retailing in Australia, generates revenue of \$13 billion a year and has an annual growth rate of 20 per cent.

In March 1991 the Minister announced terms of reference which require the franchising task force to investigate and examine mechanisms for reducing barriers and impediments to the efficiency and growth of the franchising sector (Beddall 1991). It was also to examine the potential for self regulatory codes and recommend measures to enhance its efficiency and growth. A progress report was to be presented by 30 June and a final report is expected by 15 November 1991.

## **Tourism promotion**

On 5 June 1991 the Minister for Tourism released a report evaluating the Australian Tourist Commission's marketing impact (Simmons 1991a). The study, undertaken by the Australian Tourist Commission (ATC), Department of Finance, and the Department of Arts, Sport, Environment, Tourism and Territories, concluded that the work carried out by the ATC has contributed positively to the flow of tourists to Australia, and that continued government funding of international tourism promotion was justified. An appropriate level of funding for promotional activity was not suggested in the report, which said that further emphasis should be placed on increasing involvement of the private sector in cooperative marketing activities.

## **Foreign actors**

On 7 June 1991 the Minister for Arts announced changes to migration regulations which set new criteria for the use of foreign actors in Australian films (Simmons 1991b). Applications by foreign actors under the Migration Act were premised on an agreement between the producers and unions. The Minister stated that failure of the Actors' Equity and the Screen Production Association of Australia to agree had made the migration regulations ineffective, prompting the imposed compromise.

The new rules allow slightly more foreign actors to be used in Australian films, and give a role to the Department of Arts, Sport, Environment, Tourism and Territories in certifying that cultural criteria are met. Under the amendments to the migration guidelines, entry of foreign entertainers will be approved subject to sponsorship, provided that entry is only sought for leading and major supporting roles or exceptional cases involving special characteristic, ethnic or cameo role requirements. For productions receiving government subsidies, the Department must certify that Australian content criteria have been met. Among other things, those criteria tie foreign actor entitlements to the production budget and the degree of overseas finance. For productions not receiving government subsidies, the Department must certify that reasonable opportunity has been given to local entertainers, and that foreign investment exceeds the amount spent on foreign actors.

## **Cinema admission prices**

On 8 May 1991 the Minister Assisting the Treasurer approved a Prices Surveillance Authority inquiry into cinema admission prices (Crean 1991c). The inquiry was in response to complaints received, and a concern by the PSA, that price competition is limited. It will examine the basis for establishing cinema admission prices, and the commercial relationship between motion picture distributors and cinema exhibitors as they effect cinema admission prices. The report is to be submitted in November 1991.

## **Parliamentary reviews**

### *Senate reviews*

- market dominance provisions of Trade Practices Act
- termination of the airlines agreement
- hospital costs and health insurance
- the Very Fast Train

### *House of Representatives reviews*

- tourism in the Indian Ocean territories
- philatelic services
- literacy in the workplace
- information society
- business migration
- Telecom's handling of customer complaints
- Australian industry participation in the North West Shelf Project
- the effect of competition on banking

## **Other reviews**

Other reviews undertaken during the year include:

### *Australian Bureau of Agricultural and Resource Economics*

- resource rent in fisheries
- pricing and allocation of logs in Australia
- taxation and individual forestry investment
- dairy industry policy and free trade with New Zealand
- the intertemporal allocation of Australia's natural resources
- wool: outlook and options for the future

*Bureau of Industry Economics*

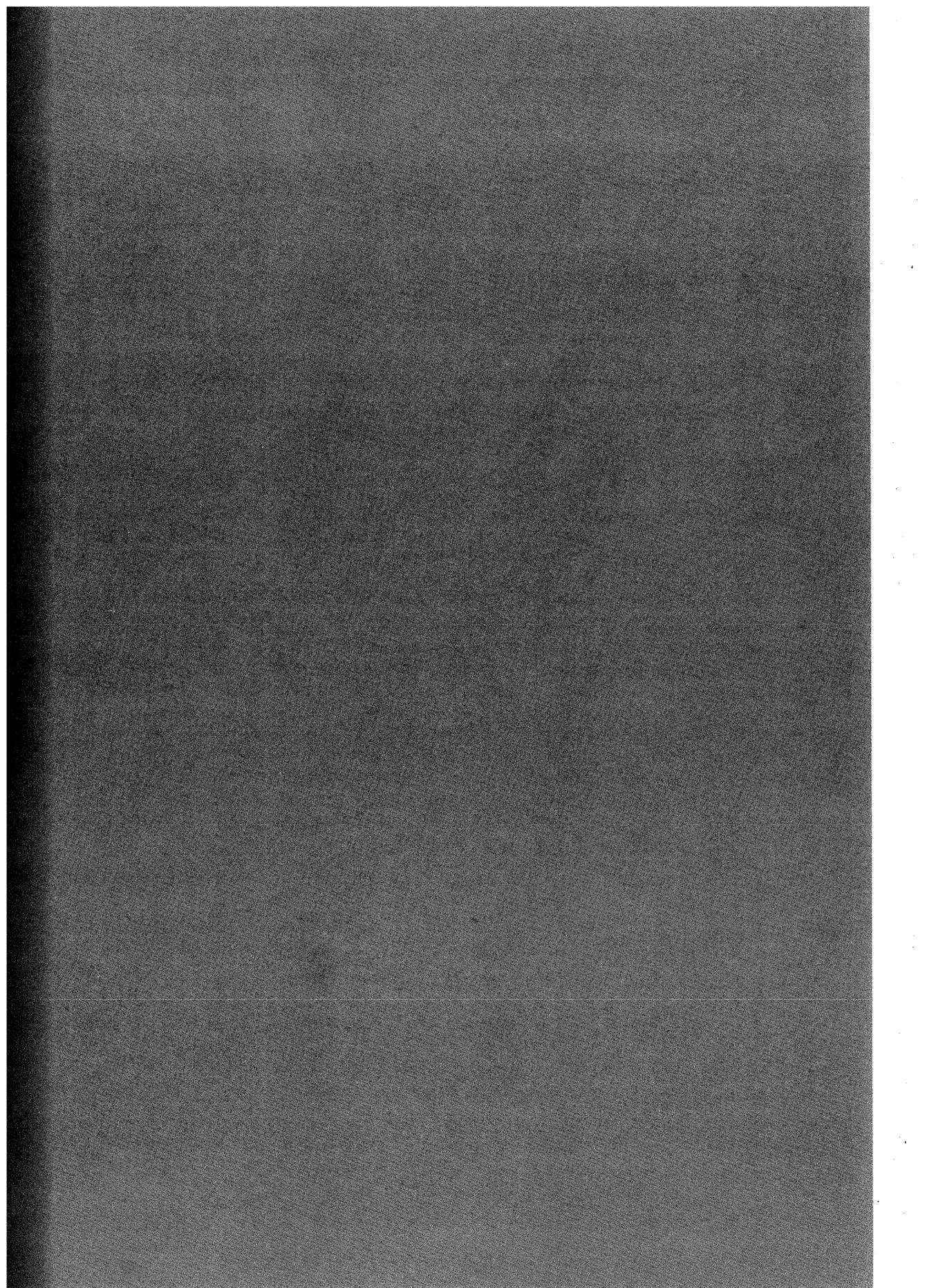
- environmental assessment impact on major projects
- the consequences of exchange rate variability
- microeconomic reform and the structure of industry
- tax losses and risky projects
- impediments to manufactured exports

*Prices Surveillance Authority*

- Tasmanian petrol prices
- petroleum products pricing
- charges by the stevedoring and container depot industries
- harbour towage charges.



## **Corporate review**



## Appendix 12

### Administrative matters

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## Corporate and portfolio overview

### Objectives of the Industry Commission

The Commission's mission statement as detailed in its corporate plan states:

*Our aim is to achieve improvements in the well-being of Australians by providing information to the community and independent, public advice to Australian governments on ways to improve overall economic performance.*

The Commission is the Commonwealth Government's major review and inquiry body in industry matters and its expertise is in examining microeconomic policy issues. The operations of the Commission are governed by the *Industry Commission Act 1989*. The Commission's responsibilities under this Act are to respond to specific issues referred to it by the Government, and to report annually on the economic performance of industry and the effects of assistance and regulation on industry and the economy.

The Commission operates on three fundamental precepts:

- it is an independent advisory body, free of executive or administrative functions on industry matters;
- its inquiry procedures are open and public, providing the opportunity for public involvement in policy formulation and scrutiny of requests and the advice the Commission provides; and
- it reviews industry matters from the perspective of the community as a whole rather than the interests of any particular industry or community group.

As part of the Commission, the Office of Regulation Review is responsible for: examining and advising the Government on proposed business regulation; preparing public information papers and submissions on overall developments in regulation and on particular aspects of regulation; and the business regulation request and response procedure. An overview of the work of the Office of Regulation Review is provided in chapter 5 of this report.

The main part of the Commission's annual report reflects the work undertaken by the Commission during the year. The report draws upon, but is not limited to, inquiry work carried out in the year.

### The Commission's structure

#### *Office of the Chairperson*

Mr A S Cole, ceased duty as Chairperson of the Commission on 14 February 1991 to take up an appointment as Secretary to the Department of the Treasury. Mr A C Harris acted as Chairperson from 15 February 1991 until 1 August 1991.

Mr S T Sedgwick was appointed as Chairperson of the Commission on 2 August 1991 for a term of five years. He was previously a Deputy Secretary at the Department of Finance.

**Chairperson and Commissioners**

The current full-time membership of the Commission is as follows:

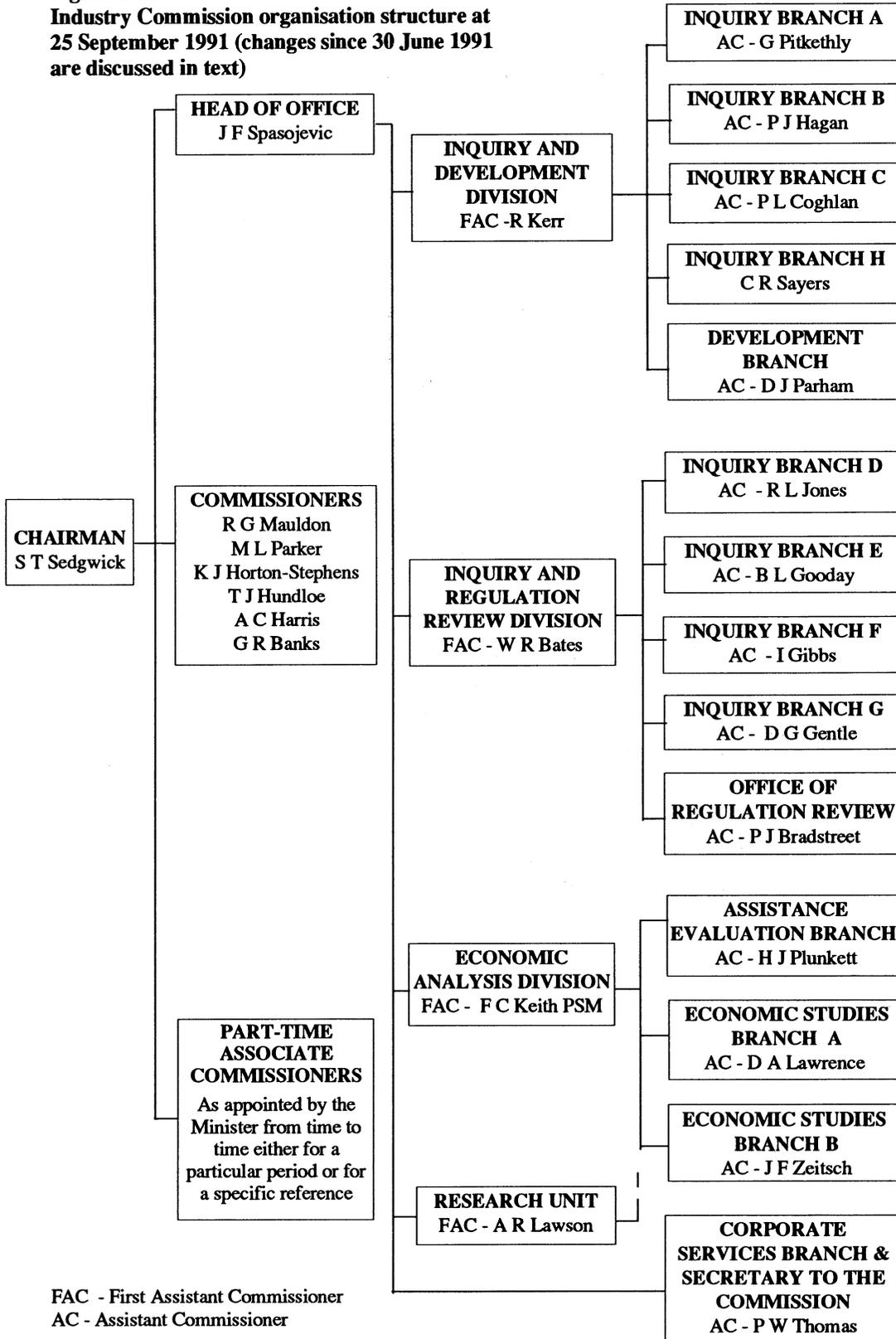
<i>Name</i>	<i>Position</i>	<i>Period of appointment</i>	
		<i>From</i>	<i>To</i>
Mr S T Sedgwick	Chairperson	2.8.91	1.8.96
Dr R G Mauldon	Commissioner	9.3.90	31.12.94
Dr M L Parker	Commissioner	9.3.90	8.3.95
Mr K J Horton-Stephens	Commissioner	9.3.90	8.3.95
Dr T J Hundloe	Commissioner	16.5.90	15.5.92
Mr A C Harris	Commissioner	16.5.90	15.5.95
Mr G R Banks	Commissioner	19.6.91	18.6.96

Mr D L McBride's term of appointment as a Commissioner expired on 30 June 1991. On 1 July 1991 he was appointed as a part-time Associate Commissioner for the duration of the inquiry on the Australian dairy industry.

Mr G R Banks, who had been an Associate Commissioner since 9 March 1990, was appointed as a Commissioner on 19 June 1991.

Figure A12.1 shows the Commission's structure as at 25 September 1991. The only changes to the structure that existed at 30 June 1991 were that Mr A C Harris was acting Chairperson and Inquiry Branch E was located in the Economic Analysis Division.

**Figure A12.1**  
**Industry Commission organisation structure at**  
**25 September 1991 (changes since 30 June 1991**  
**are discussed in text)**



FAC - First Assistant Commissioner  
 AC - Assistant Commissioner

**Part-time Associate Commissioners**

The following part-time Associate Commissioners were appointed for inquiries as indicated :

<i>Name</i>	<i>Reference</i>	<i>Appointed</i>	<i>Completed</i>
<b><i>Appointments lapsing in 1990–91</i></b>			
Mr R J Whitelaw	Product liability	9.3.90	18.7.90
Mr W I Scales	The automotive industry	26.5.90	17.12.90
Mr D R Chapman	Recycling	9.3.90	22.2.91
Prof R J Blandy	Mining and minerals processing in Australia	9.3.90	25.2.91
Mr B Smith	Mining and minerals processing in Australia	9.3.90	25.2.91
Mrs H A Rolfe	The commercial tariff concession and by-law systems	11.5.90	8.3.91
Mr E Sieper	Construction costs of major projects	9.3.90	11.3.91
Dr C Gellatly	Statutory marketing arrangements for primary products	12.6.90	26.3.91
Mr A J Webb	Energy generation and distribution	26.6.90	17.5.91
<b><i>Appointments lapsing in 1991–92</i></b>			
Dr B J Chapman	Exports of education services	10.12.90	14.8.91
Mr G K R Reid	Rail transport	12.6.90	21.8.91
Mr D L McBride	Australian dairy industry	1.7.91	30.9.91
Mr M S Common	Costs and benefits of reducing greenhouse gas emissions	24.12.90	15.11.91
Mr E M W Visbord OBE	Availability of capital	7.1.91	7.12.91
Mr N J Paterson	Exports of health services	2.1.91	31.12.91
Mr A R Oxley	Overseas export enhancement measures	5.4.91	8.4.92
Mr G W Edwards	Australian sugar industry	20.3.91	21.3.92
Mr G K R Reid	Raw materials pricing for domestic use	9.5.91	9.5.92
Mr M Easson	Commercial restrictions on exporting (including franchising)	9.5.91	9.5.92
<b><i>Appointments lapsing in 1992–93</i></b>			
Mr D R Chapman	Water resources and waste water disposal	18.7.91	18.7.92

## Human resources

### Staffing in the Office of the Industry Commission

As at 30 June 1991 there were 251 staff, including inoperative staff, employed by the Commission. The corresponding figure as at 30 June 1990 was 244. All were employed under the *Public Service Act 1922* in the following categories (figures in brackets are as at 30 June 1990):

female – full-time permanent	98	(94)	full-time temporary	2	(1)
part-time permanent	5	(2)	part-time temporary	3	(6)
male – full-time permanent	140	(138)	full-time temporary	2	(0)
part-time permanent	1	(3)	part-time temporary	0	(0)

As at 30 June 1991, the Commission employed the following numbers of Senior Executive Service (SES) officers under the Public Service Act:

<i>Substantive SES Band</i>			<i>Female</i>	<i>Male</i>
SES Band 1	full-time	permanent	1	12
SES Band 2	full-time	permanent	0	5
SES Band 3	full-time	permanent	0	1

The staffing profile of the Commission at 30 June 1991 is shown in figure A12.2 and excludes inoperative staff members.

### Recruitment and separations

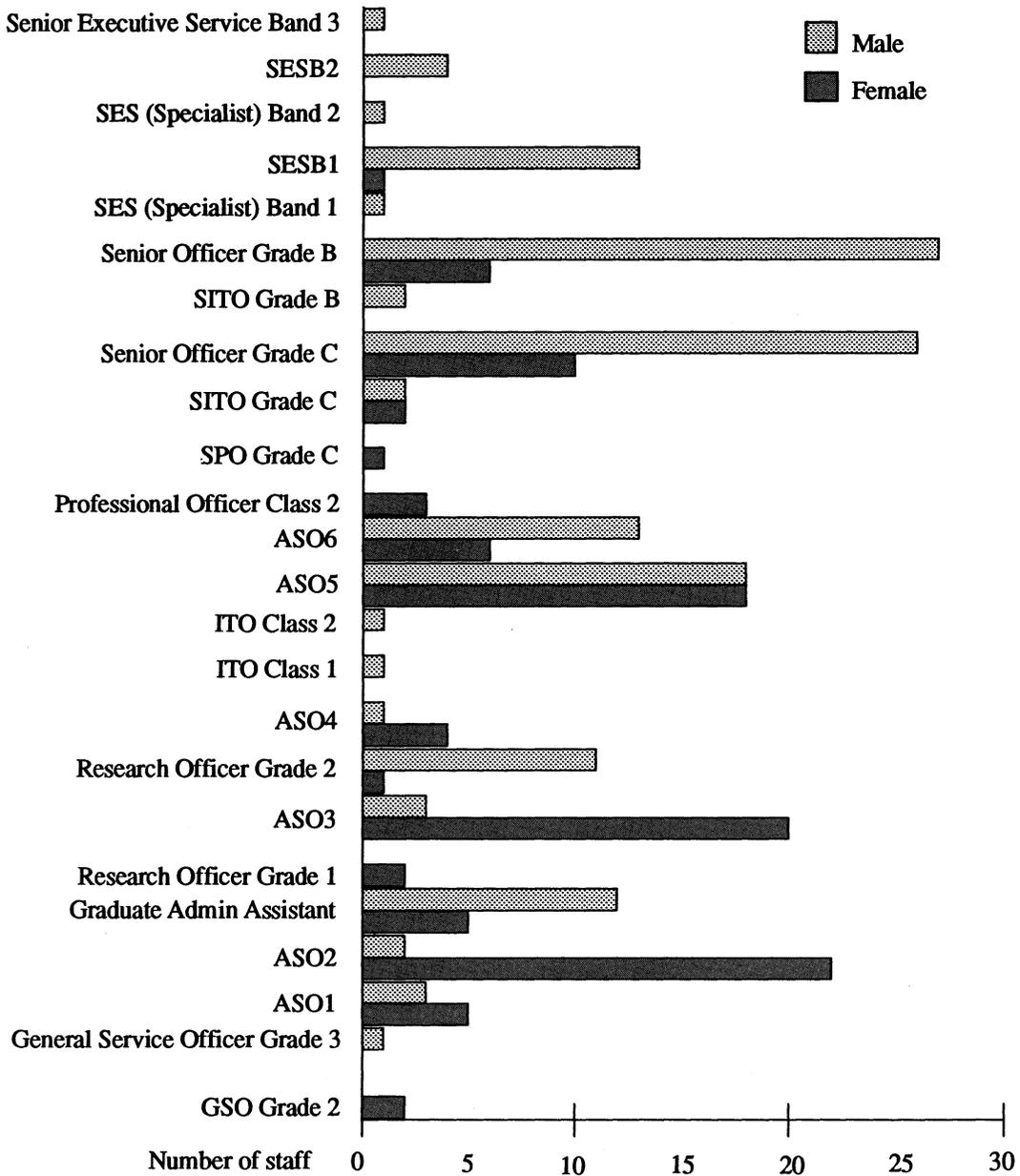
The Commission hired 23 males and 24 females on a permanent basis during 1990–91. Fourteen temporary staff were hired during the financial year of which eight were female. Three were still employed as at 30 June 1991.

In 1990–91 the Commission found it was able to attract more suitably qualified staff including 20 graduates to maintain a high quality work team. This has partly overcome problems the Commission experienced in 1988–89 and 1989–90 in attracting suitably qualified staff.

One staff member was retrenched on the grounds of inefficiency, while one other staff member was declared excess to the Commission's requirements and subsequently retrenched following the amalgamation of the Industries Assistance Commission with the Inter-State Commission.

Table A12.1 shows the classification and method of separation of Commission staff.

**Figure A12.2**  
**Staffing profile of the Office of the Industry Commission as at 30 June 1991**



SITO Senior Information Technology Officer  
 SPO Senior Professional Officer  
 ITO Information Technology Officer  
 ASO Administrative Services Officer

**Table A12.1**  
**Classification and method of separation of Commission staff**

	<i>Method of separation</i>				
	<i>Promotion</i>	<i>Transfer</i>	<i>Resignation</i>	<i>Retirement</i>	<i>Other</i>
Senior Executive Service Band	–	–	2	–	–
Senior Officer Grade B	1	1	–	–	1
Senior Officer Grade C	–	2	1	–	–
Senior Information Technology Officer Grade C	1	–	–	–	–
Professional Officer Class 2	1	–	–	–	–
Information Technology Officer 2	1	–	–	–	–
ASO6	1	1	3	–	1
ASO5	1	3	1	–	–
Research Officer Grade 2	1	–	–	–	–
ASO3	1	2	1	–	–
Graduate Admin Assistant	–	–	1	–	–
ASO2	1	1	3	2	–
ASO1	2	2	1	1	1
Cadet	–	–	1	–	–
<b>Total</b>	<b>11</b>	<b>12</b>	<b>14</b>	<b>3</b>	<b>3</b>

There were no applications from departing officers under Chapter 13 of the Guidelines on Official Conduct of Commonwealth Public Servants (1987) relating to the acceptance of business appointments on retirement or resignation.

### Consultancy services

The Commission engaged the services of 34 consultants during the year. The Commission engages consultants when the required specialist knowledge or expertise is not available within the Commission.

In addition to the various consultancies shown in table A12.2 the Commission also seconded staff from other agencies to provide expert advice. An officer from the Bureau of Meteorology was seconded at the SES level to assist with the greenhouse gas emissions inquiry and a senior officer from the Department of the Treasury was seconded to assist with the availability of capital inquiry.

**Table A12.2**  
**Consultancy services in 1990-91**

<i>Consultants</i>	<i>Cost</i> \$	<i>Purpose</i>	<i>Period</i>
<b>Inquiry related</b>			
Centre for International Economics	5 530	Editorial assistance in production of an information paper on government business enterprises	August 90
Intelligent Energy Systems Pty Ltd	25 000	The scope for introducing more efficient pricing policies in electricity and gas utilities (Energy generation and distribution)	August-September 90
Centre for International Economics	4 960	Editorial assistance in production of an information paper on strategic trade theory and the east Asian experience	December 90
H A Simons Ltd	16 500	Preparation of study on comparative capital cost of bleached hardwood kraft pulp mills (Construction costs of major projects)	September-October 90
Australian Bureau of Statistics	18 545	Assistance in survey of local government practices in waste management and recycling (Recycling)	March-January 91
Jaakko Poyry Pty Ltd	25 000	Data on saw mills, pulp and paper mills (Recycling)	June 90-January 91
Mr D R Chapman	4 927	Provide expert assistance pending appointment as a part-time Associate Commissioner (Water resources and waste water disposal)	March-May 91
Prof R Bowden (Unisearch)	16 104	Report on access and efficiency in the supply of foreign capital to Australia (Availability of capital)	April-May 91

<i>Consultants</i>	<i>Cost</i> \$	<i>Purpose</i>	<i>Period</i>
Travers Morgan Pty Ltd	30 000	The effects of adopting international best practices in Australian rail systems (Rail transport)	February–May 91
Swan Consultants	4 800	Capital stock and other estimates (Energy generation & distribution)	April 91
Mr H Hudson	8 825	Report on overseas students policy in Australia (Exports of education services)	April–August 90
Dr R Harrold	10 000	Report on aspects of exporting higher education services (Exports of education services)	April–August 90
	sub total		
	170 191		
<b>Staff development related</b>			
Australian Bureau of Statistics	13 850	Statistical Consultancy Service – Staff opinion survey (management, career, reforms etc)	May 91
Cameron & Associates	28 454	Training in use of Dataease, divisional support management, leadership and management development for SES and SOGBs	October–December 90
Burson Marsteller	19 353	Media skills in leadership and management development	July 90–June 91
Harris Van Meegan & Associates	2 900	Interview skills workshop	April–May 91
Coverdale & Associates	19 628	Performance management sessions	December 90–March 91

<i>Consultants</i>	<i>Cost \$</i>	<i>Purpose</i>	<i>Period</i>
Ian Macauley & Associates	2 300	Report writing course	June 91
Training Strategies	2 680	Management skills course	April 91
	<hr/>		
sub total	89 165		
Other	3 120	Eight minor consultancies	
 <b>Multi-country multi-commodity general equilibrium model of the world economy for Department of Foreign Affairs and Trade (SALTER Project)</b>			
Dr G Ryan	30 000	European Community database	22 August–5 September 90
KP Soft	16 500	Enhancement of GEMPACK (SALTER Model)	July–December 90
Purdue Research Foundation	1 943	Estimates of trade margins	August–October 90
Prof Tom Hertel	20 000	Review of SALTER Model	January 91
Institute of Applied Economic and Social Research	35 000	Survey of multi-country models	March 91
Centre for International Economics	7 160	Editorial assistance in production of SALTER Model	March 91
	<hr/>		
sub total	110 603		
	<hr/>		
<b>Total</b>	<b>373 079</b>		

## Program reporting

The Commission received 10 references from the Government and conducted public inquiries with a total of 134 sitting days during the year. Table A12.3 provides information on inquiry activity.

Through its inquiry process the Commission seeks to enhance community understanding of the merits of the reforms it proposes. It is difficult to measure performance against this objective in the short term but by encouraging interested parties to participate in the inquiry process, by releasing information, discussion, working and issues papers, and by generating media coverage, the Commission aims to stimulate public debate on the issues it identifies.

Through its inquiry procedures, maximum opportunity is provided for public scrutiny of the Commission's work.

The inquiries into impediments to competitiveness in the Australian economy generate a great deal of community interest and awareness. As an indication of this awareness, the Commission released 19 043 copies of its final reports during the year and 19 055 copies of its draft reports; a total of 38 098 copies. In addition, 4 500 copies of various information papers, 1 300 copies of various discussion papers and 300 copies of a working paper were released. During the year, the Commission also

**Table A12.3**  
**Commission inquiry activity: 1988–89 to 1990–91**

	1988–89	1989–90	1990–91
References received	5	12	10
Issues/background papers released	7	9	10
Information/discussion papers released	13	6	4
Public hearings (sitting days)	42	74	134
Participants <sup>a</sup>	242	663	2029 <sup>c</sup>
Draft reports completed	4	4	10
Reports completed <sup>b</sup>	4	9	9
References on hand (30 June)	6	10	11

Note: Includes the inquiry activity of the Industries Assistance Commission in 1988–89 and 1989–90.

a Number of participants in inquiries for which reports were completed in the year.

b Includes interim reports, reports on parts of references and reports covering more than one reference. Draft reports are listed separately.

c Includes 795 participants in the inquiry on aids and appliances for people with disabilities.

**Table A12.4**  
**Inquiry expenditure in 1990-91**

<i>Inquiry</i>	<i>Term</i>	<i>Total</i>	<i>Travel</i>	<i>Reports</i>	<i>Advertising</i>	<i>Transcripts</i>	<i>Venue hire</i>	<i>Incidentals</i>
		\$	\$	\$	\$	\$	\$	\$
Aids and appliances for people with disabilities	10/89-07/90	28 024	14 259	11 000	-	1 896	231	638
Recycling	10/89-02/91	114 534	48 207	46 339	4 291	10 465	4 778	454
Product liability	10/89-07/90	10 815	5 915	4 900	-	-	-	-
Construction costs of major projects	10/89-04/91	22 885	14 521	5 270	2 175	913	-	6
Mining and minerals processing in Australia	10/89-02/91	151 348	78 071	48 749	3 177	15 377	5 740	234
Commercial tariff concessions and by-law systems	02/90-03/91	72 715	21 446	19 547	2 479	25 655	3 409	179
Statutory marketing for primary products	05/90-03/91	70 160	32 252	7 296	8 804	14 174	7 567	67
Rail transport	05/90-08/91	60 745	30 928	-	5 476	20 610	2 290	1 441
Energy generation and distribution	05/90-05/91	124 370	75 466	17 200	4 935	21 502	4 652	615
The automotive industry	05/90-12/90	56 533	32 439	10 413	1 631	10 363	1 517	170
Cost recovery for managing fisheries	12/90-12/91	49 458	29 237	-	1 635	16 742	1 765	79
Availability of capital	12/90-12/91	23 008	11 936	-	1 328	7 461	2 026	257
Exports of health services	12/90-12/91	28 690	19 055	-	1 635	5 889	2 034	77
Australian dairy industry	12/90-09/91	15 855	12 816	-	61	1 959	979	40
Costs and benefits of reducing greenhouse gas emissions	12/90-09/91	31 655	20 917	-	1 635	7 730	1 130	243
Exports of education services	12/90-08/91	10 780	10 376	-	61	-	250	93
Australian sugar industry	03/91-03/92	10 684	9 453	-	861	-	200	170
Review of overseas export enhancement measures	04/91-12/91	8 773	7 601	-	1 089	-	-	83
Raw material pricing for domestic use	05/91-05/92	3 294	3 294	-	-	-	-	-
Commercial restrictions on exporting (including franchising)	05/91-05/92	1 118	1 118	-	-	-	-	-
Water resources and waste water disposal	07/91-07/92	29 495	29 302	-	-	-	-	193
<b>Total</b>		<b>924 939</b>	<b>508 609</b>	<b>170 714</b>	<b>41 273</b>	<b>160 736</b>	<b>38 568</b>	<b>5 039</b>

conducted seminars and other workshops relating to its inquiries or other reporting obligations. Media reaction to reports and other publications is monitored and reported to monthly meetings of Commissioners.

Further information on inquiry activity and reports is given in appendix 14. Table A14.6 sets out detailed information on the stages of completion of inquiries including a summary of the Government's response to those inquiries finalised.

Table A12.4 summarises the Commission's 1990–91 inquiry expenditure on specific items. As inquiries often span financial years, the figures do not represent the total expenditure on those items. For example, advertising expenditure for the inquiry on aids and appliances for people with disabilities was incurred in 1989–90. Similarly, the final report printing costs for inquiries to be finalised in 1991–92 will be incurred in that year.

In addition to inquiry work, Commission staff were involved in various research activities. Details of the publications of the Commission in 1990–91, other than reports arising from the inquiry program, are provided in table A12.5

**Table A12.5**  
**Papers released by the Commission in 1990–91**

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**Information /discussion papers**

*Measuring the performance of selected government business enterprises*, August 1990.

*Strategic trade theory: the East Asian experience*, November 1990.

*Waste management and recycling: survey of local government practices*, March 1991.

**Working paper**

R Valdes, *An analysis of the factors affecting steel scrap collection*, No. 1, May 1991.

**Staff issues papers**

J Zeitsch and D Parham, *Microeconomic reform and State Government finance*, No. 1.

R Arnold and D Parham, *Green tariffs — protection for the environment?*, No. 2.

W Bates and R McDougall, *Microeconomic reform and the current account deficit*, No. 3.

**Office of Regulation Review**

*Pay TV: why regulate?* Discussion paper, April 1991.

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## IMPACT Project

The IMPACT Project is a longstanding joint endeavour of Commonwealth agencies and universities. The Commission supports further development of the ORANI model of the Australian economy and associated databases and computing systems, for use in policy analysis by the Commission and other institutions. The ORANI model provides an analytical framework to estimate the economy-wide impacts of the Commission's inquiry recommendations.

The Project was funded by a Commonwealth budget appropriation of \$147 000 in 1990–91. In addition the Commission seconded four staff to the project and provided administrative support.

During 1990–91 the development work of the project focused on: enhancements to modelling software; estimation of parameters for the ORANI model; integration of macro and general equilibrium models; issues in the analysis of international trading arrangements; and prototype intertemporal models (see Powell 1991).

Further funding has been provided for 1991–92. During this time the Commission will be carrying out an evaluation of the project, which will determine whether future funding is appropriate and/or whether changes should be made to existing arrangements for the development and use of economy-wide models by the Commission and other agencies.

While not being publications of the Commission, table A12.6 provides a list of IMPACT Project papers published during the year.

**Table A12.6**  
**IMPACT Project papers released in 1990–91**

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R-08	A A Powell, <i>IMPACT Project report – a brief account of activities over the period 1st January 1988 to 31st December 1990</i> , February 1991.
IP-48	K R McLaren, <i>The use of adjustment cost investment models in intertemporal computable general equilibrium models</i> , March 1991.
IP-49	M Malakellis and M Peter, <i>Stimulation of employment in neo-classical models</i> , March 1991.
I-50	P B Dixon, <i>The mathematical programming approach to applied general equilibrium modelling: notes and problems</i> , April 1991.
IP-51	G Codsì, K R Pearson and P J Wilcoxon, <i>General-purpose software for intertemporal modelling</i> , May 1991.
IP-52	T W Hertel, <i>Factor market incidence of agricultural trade liberalization: some additional results</i> , June 1991.
IP-53	T W Hertel, <i>The fate of agriculture under trade liberalization: challenging conventional conclusions</i> , June 1991.
IP-54	T W Hertel, J M Horridge and K R Pearson, <i>Mending the family tree: a reconciliation of the linearization and levels schools of CGE modelling</i> , June 1991.

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## **Other resources**

### **Financial statement**

A summary of the Commission's financial position for 1990–91 is shown at table A12.7. The Commission's formal financial statement for 1990–91 is in appendix 13.

### **Fraud control**

A draft Fraud Control Statement is being prepared for consideration by the Commission's Management Committee and when approved it will be published and disseminated to staff to increase their awareness of possible fraud against the Commonwealth. Each instance of loss to the Commission is assessed as to the possibility of fraud before write-off action is recommended. No instances of fraud were identified during 1990–91.

### **Purchasing**

The Commission has reviewed its procurement functions in line with the Purchasing Reform Guidelines and has implemented new purchasing and asset management procedures.

The Commission gazettes purchase arrangements on a monthly basis through its computerised accounting system.

### **Property**

The Commission's inquiry hearing room facilities in Sydney were transferred to the Civil Aviation Authority on 9 July 1990 and alternative venues are now hired, as required, to conduct the Commission's public hearings. Savings have accrued from this arrangement.

### **Information services**

#### ***ADP Support***

The ADP Section was the subject of a major internal review in 1991 which examined services, staffing and expenditure. The review found that the current ADP strategies were flexible and cost effective and that service levels were high and technically efficient. A system of cost attribution and cost accountability will be introduced in 1991–92 to monitor demand for ADP resources.

The Commission adheres to the information technology acquisitions purchasing policy outlined in the *Commonwealth Procurement Policy Framework* 1989. All information technology acquisitions during 1990–91 have been for small-scale systems, and where the items have been available, have been purchased using the Department of Administrative Services' common use contracts.

**Table A12.7**  
**Financial summary for 1990-91**

	<i>1990-91</i> <i>appropriation</i> \$	<i>1990-91</i> <i>actuals</i> \$
<b><i>Expenditure items</i></b>		
Running costs		
<i>Salaries and allowances</i>		
Other than SES (inc. HOPO) salaries	8 517 900	8 274 971
SES salaries	1 369 000	1 334 922
<i>Administrative expenses</i>	4 132 160	4 032 582
Total running costs expenditure	14 019 060	13 642 475
Property operating expenses (POE)		
POE current	1 874 000	1 772 979
POE capital	-	-
IMPACT Project	147 000	147 000
Total expenditure	16 040 060	15 562 454
<b><i>Receipt items</i></b>		
Section 35 receipts account	(184 000)	(183 060)
Miscellaneous receipts account	(30 000)	(42 688)
Total receipts	(214 000)	(225 748)
<b><i>Trust fund</i></b>		
Services for other governments and non-departmental bodies		
Cash balance at 1 July 1990	-	-
Receipts	-	(2 963)
Expenditure	-	2 963
Cash balance at 30 June 1991	-	-

***Notes***

SES Senior Executive Service

HOPO Holder of Public Office, ie Chairperson and Commissioners

The Commission has been pursuing as far as possible an open system policy in order to maintain as much information technology vendor independence as possible. As government open systems standards emerge these are being followed. The Commission intends to maintain this policy for the future and plans are currently being developed which will enable remaining vendor specific information technology components to be replaced by suitable open systems alternatives.

### ***Library support***

The Library was also the subject of a major review in 1991 which examined services, staffing and expenditure. Information collected for this review included a client survey which indicated a high level of support for the library throughout the Commission and provided useful feedback on specific services. The findings of the review will enable future expenditure to be more specifically targeted and services to be better focused.

## **Management issues**

### **Staff survey**

The Commission requested the Australian Bureau of Statistics to conduct a survey of Commission staff to assess their attitudes about their individual jobs and job prospects, knowledge of Public Service reforms, and management and the organisation as a whole. Eighty per cent of staff replied to the questionnaire and the subsequent report has provided data which will assist the implementation of improved practices and systems for management of the Commission's resources.

### **Performance appraisal**

The Commission also initiated a performance appraisal system for all staff. The system was adapted from the Public Service Commission's (PSC) model for SES officers and its implementation is continuing throughout the Commission. All staff were given the opportunity to attend information sessions on the system as well as a one-day workshop which aimed to enhance skills in strategic planning, performance planning and skills development for effective negotiation of performance agreements. Other developments in the Commission are outlined under the equal employment opportunity and industrial democracy sections below.

### **Devolution**

During 1990–91 the Commission devolved responsibility for staff salaries, staff development and travel budgets to divisions.

In addition the Commission moved to a system of budgets for each inquiry. These inquiry budgets are devolved to the inquiry team. Table A12.4 shows expenditure on inquiries for 1990–91 for the devolved components.

The Commission expects to further refine the process of devolution in 1991–92.

## **Training**

The Commission's annual payroll is \$9.6 million which generates a minimum training requirement of \$96 000 (1 per cent). The Commission's actual eligible training expenditure, \$450 562, was considerably more than the minimum requirement, reflecting the higher priority placed on staff training and development in 1990-91.

On average, each staff member spent 3.2 days participating in training programs. Categories of eligible training programs include: performance management; skills development; professional development (for example Studybank); and an SES fellowship.

During the year the Commission developed and implemented two study guidelines, the Studybank Guidelines and Postgraduate Awards Guidelines. Both were developed through staff and management consultations.

Other training activities were:

- Twenty two staff at the ASOC 5 to Senior Officer Grade B level attended a five day residential program under the Government subsidised middle management development program which is designed to enhance the core skills identified for middle managers throughout the Public Service.
- One Commissioner and one Senior Officer Grade B attended the PSC's SES development programs.
- One SES officer attended a senior women in management (SWIM) meeting.
- Three Senior Officer Grade B officers attended the PSC's coordinated management modules for feeder groups to the SES.
- One SES officer undertook a three month SES fellowship at the Massachusetts Institute of Technology in the USA.

Thirty-four staff undertook part-time study under the Commission's Studies Assistance Scheme. The majority of the students were undertaking their first qualification, others included one postgraduate and six second degree students.

## **Equal employment opportunity (EEO)**

During the year, the Commission reviewed the previous Industries Assistance Commission EEO program and developed a new program, policy and plan for the Commission as required under Section 22B of the Public Service Act. The EEO program was developed through extensive staff consultation before Management Committee endorsement. Once negotiations and consultations with the PSC and relevant staff associations have been completed, the Commission's Consultative Council will be invited to comment on it.

Data on the four EEO target groups within the Commission are presented in table A12.8.

**Table A12.8**  
**EEO target groups as at 30 June 1991**  
 (number of staff)

<i>Class</i>	<i>Total</i>	<i>Women</i>	<i>PWD</i>	<i>NESB1</i>	<i>NESB2</i>	<i>ESB</i>	<i>No data</i>
above \$52101 (includes SES)	21	1	1	—	1	11	9
\$45402-\$52100 (includes SOB)	35	6	1	3	1	23	8
\$40906-\$45401 (includes SOC)	41	13	1	5	5	22	9
\$34560-\$40905 (includes ASO6)	23	9	—	2	1	11	9
\$32000-\$34559 (includes ASO5)	36	18	—	1	4	19	12
\$27780-\$31999 (includes ASO4)	18	5	—	3	4	10	1
\$25740-\$27779 (includes ASO3)	25	22	5	2	2	13	8
\$22600-\$25739 (includes ASO2)	41	27	1	7	6	27	1
below \$22599 (includes ASO1)	11	7	2	1	2	3	5
<b>Total</b>	<b>251</b>	<b>108</b>	<b>11</b>	<b>24</b>	<b>26</b>	<b>139</b>	<b>62</b>
<b>Per cent</b>	<b>100</b>	<b>43</b>	<b>4</b>	<b>10</b>	<b>10</b>	<b>55</b>	<b>25</b>

*Notes:*

PWD People with disabilities

NESB 1 Non-English speaking background 1st generation

NESB 2 Non-English speaking background 2nd generation

ESB English speaking background

No Aborigines were employed by the Commission at 30 June 1991

The major priorities during 1990–91 were: developing and lodging the EEO program; encouraging the development and training of target group members; and the establishment of the EEO computer database. No formal grievances related to EEO were received in the last twelve months.

For 1991–92 the Commission's major EEO objectives include: finalising and adopting the recently developed EEO program; ensuring an increased awareness of EEO principles and practices; establishing and disseminating harassment guidelines; examining all selection documentation which cite a high standard of English as a criterion for employment and which includes unnecessary or irrelevant qualifications; including EEO responsibilities in the duty statements of line managers and supervisors; and further developing the EEO database.

The EEO program is coordinated by a Senior Officer Grade C who reports to the Head of Office (senior executive responsible for EEO) on all aspects. Part of the duties of an Administrative Service Officer Class 5 involve the implementation and co-ordination of the program and related EEO issues.

### **Status of women**

As the Commission is a small organisation, it does not have a Women's Unit. However, mechanisms which promote the status of women are outlined in the Commission's EEO program, staff selection guidelines, and Industrial Democracy Plan and will be included in the guidelines for discrimination/harassment complaints.

### **Industrial democracy (ID)**

During 1990–91, the previous Industries Assistance Commission's industrial democracy practices, including the Consultative Council, were reviewed. This led to the development of an industrial democracy plan which now awaits endorsement by relevant staff associations. Staff were requested to comment on the plan.

The plan will be formally reviewed every two years with minor revisions as necessary. The review will draw upon the objectives of the plan and evaluate the degree of implementation of ID practices that have occurred during the previous two years.

The Commission's Consultative Council is the main consultative mechanism whereby management, staff associations and staff representatives can consult and keep each other informed. Other consultative means are regular section and branch level meetings between supervisors and staff, performance assessments and discussions with staff on selected issues at division or Commission level.

The corporate plan identifies the need to create a fair and reasonable environment where staff can make the greatest contribution to the aims of the Commission and to their own development. A number of management objectives have been identified to ensure ID mechanisms are implemented.

While final responsibility for the implementation of the principles of ID rests with management, management recognises that if it is to be effective it must be developed

and complemented with the full knowledge, co-operation and agreement of relevant staff associations. Similarly, staff throughout the Commission contribute to the successful operation of ID through: staff participation in the consultative process as it touches on matters within their area of responsibility; membership of the Consultative Council; and through their involvement in a participative work style.

### **Occupational health and safety (OH&S)**

During 1990–91 the Commission commenced development of its OH&S policy statement to meet the requirements of the *Occupational Health and Safety (Commonwealth Employment) Act 1991*. The policy statement complements the Commission's rehabilitation policy and procedural guidelines. Both policies outline the Commission's commitment to the promotion of safe and healthy work practices, the implementation and management of rehabilitation programs and the prevention of injury and illness.

Specific initiatives implemented and continuing include: the purchase of ergonomic furniture and equipment; physiotherapist visits to staff who require advice on any aspect of their work environment; a hazard/near miss report system which identifies existing and potential hazards, with follow-up action as required; encouragement of staff to participate in activities which complement good health, (for example, aerobic exercise lunch-time sessions held in-house); regular notification of available courses, (for example, stress management courses); screen-based equipment eye tests; first aid facilities; and poster displays to heighten staff awareness of OH&S practices.

Formation of an OH&S Committee to act as a consultative forum for OH&S matters and related issues is underway and staff associations have been invited to join. Negotiations with the Public Sector Union are in progress on the formation of Designated Work Groups.

The Commission commenced negotiations with the Employee Assistance Service ACT to implement a Commission-wide Employee Assistance Program. This program will provide professional counselling for staff and close family members with work-related problems or personal problems which may be affecting their work.

Activities planned for 1991–92 include: the finalisation and adoption of the Commission's OH&S policy statement; finalisation and implementation of the Employee Assistance Program for all Commission staff; OH&S training as identified by legislation; and development of a statistical system to record OH&S information.

The Commission entered into three rehabilitation programs this financial year. Two case management plans resulted in successful rehabilitation to same job/same employer and one is continuing.

### **Social justice (including access and equity)**

The Commission's commitment to social justice is reflected in its mission statement. The Commission supports the principles of access and equity which is a government initiative designed to help all Australians including Aboriginals, immigrants and

second generation Australians, who may face barriers of race, culture or language. To give effect to its support for access and equity the Commission has reviewed its procedures to ensure they allow for the greatest possible involvement by the community.

A statement on access and equity has been included in the Department of Treasury's portfolio program. The principles of equity, equality, access and/or participation are also embodied in the Commission's EEO Program, the Industrial Democracy Plan and the Staff Selection Guidelines.

## **External scrutiny**

### **Reports by the Auditor-General**

*Audit Report No. 22 1990–91 – Aggregate and Departmental Statements 1989–90*, tabled on 11 April 1991, was the only audit report which referred to the operation of the Commission. It noted that the records and financial statements of the Commission for the year ended 30 June 1990 have been audited with satisfactory results.

### **Freedom of information (FOI)**

During 1990–91 the Commission received one request for information under the *Freedom of Information Act 1982*. Access for this request was refused as documents were exempt under section 34(1)(d) — Cabinet documents, and section 36(1) Internal working documents. An internal review of the decision was requested in accordance with section 54 and the original decision was upheld. In accordance with the relevant provisions in the Act, charges were notified in respect of the request received. The total amount of fees and charges notified and collected was \$147.50.

The FOI statement as required under section 8 of the Act is at annexure 1.

### **The Privacy Act**

The *Privacy Act 1988* came into effect on 1 January 1989 and places stringent requirements on all people dealing with the collection, use and disclosure of personal information. Staff have been notified of their obligations under the Privacy Act. Privacy contact officers have attended courses and seminars concerning the effect of the Privacy Act.

No requests for information under the Privacy Act were received by the Commission during 1990–91.

## **Impact monitoring**

### **Business regulations**

No regulations under the Industry Commission Act were made during the year. The Commission had no cause to exercise its power to compel participants in inquiries to provide evidence.

### **Environmental matters**

During 1990–91 the Commission investigated a marked increase in its electricity costs. Because of inadequate metering in the Benjamin office complex it is not possible to determine which department, let alone which area within a department, has increased its consumption. It is possible, therefore, that the Commission is paying a share of another department's increased usage.

The Australian Property Group (APG) has been asked to provide more appropriate metering but they have advised the Commission that the Estate Manager (the landlord of the complex) is unable to meet the cost of installing additional metering out of its 1991–92 budget. Negotiations are continuing with APG with a view to finding some arrangement whereby the Commission can monitor and control its electricity consumption.

### **Annual reporting guidelines and aids to access**

Information contained in this annual report on the Commission's operations is provided in accordance with subsection 25(6) of the *Public Service Act 1922*, section 8 of the *Freedom of Information Act 1982* and the *Privacy Act 1988*. Chapters 1 to 5 are provided in accordance with section 45 of the *Industry Commission Act 1989*.

An index of requirements in compliance with the guidelines for the preparation of departmental annual reports is at annexure 2.

Contact officer for inquiries or comments concerning this report should be addressed to:

Assistant Commissioner  
Corporate Services Branch  
PO Box 80  
Belconnen ACT 2616  
Telephone No: (06) 264 3356  
Facsimile No: (06) 253 2346

Inquiries about any Commission publication including the corporate plan and the inquiry procedures, Office of Regulation Review procedures and the graduate recruitment booklets can be made to :

**Publications Officer  
Industry Commission  
PO Box 80  
Belconnen ACT 2616  
Telephone No: (06) 264 3263  
Facsimile No: (06) 253 1999**

## Annexure 1

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### Freedom of information statement

The following information is provided as required under section 8 of the Freedom of Information Act.

#### The Commission

The Industry Commission was created under the *Industry Commission Act 1989*, with effect from 9 March 1990.

It consists of a Chairperson and full-time Commissioners appointed by the Governor-General, and Associate Commissioners appointed by the Minister, in accordance with the Industry Commission Act. Appointment is for a term not exceeding five years, or until the inquiry and report on a particular matter is completed.

Staff assisting the Commission are employed under the Public Service Act.

The Commission maintains its office in Canberra and public hearing rooms in Canberra and Melbourne.

The Commission is required under its Act to conduct public inquiries on the industry matters referred to it by the Government. The Commission may inspect and copy relevant documents and summons persons to give evidence in the course of its inquiries, and such witnesses are protected under the Act from being subject to prejudicial treatment as a result of their giving evidence.

#### Categories of documents

The Commission releases draft reports for most inquiries, giving interested parties the opportunity to examine and comment on them.

Documents for circulation within the Commission include the monthly inquiry program (activities and information), office circulars relating to staff matters, the corporate plan, an inquiry procedures booklet, Office of Regulation Review procedures and a graduate recruitment booklet.

The Commission holds working documents relating to:

- administrative information on financial allocations and expenditure, staffing, internal audit, official travel, office accommodation, assets and stores;
- ministerial and general correspondence;
- records of meetings, discussions, interviews; and
- inquiry correspondence and public hearing material.

Current information circulars, issues papers and inquiry guidelines are issued to interested parties and inquiry participants and are made available to the public free of charge, upon request.

Access to the Commission's Register of Personal Information (as required by the Privacy Act) can be requested from the FOI contact officer.

Documents available for purchase at Commonwealth Government Bookshops are:

- the Commission's annual report to Parliament;
- reports on matters referred to the Industry Commission by the Minister; and
- reports on matters researched by the Commission.

Copies of submissions made to inquiries, excluding confidential material, can be purchased through the Commission's contract with Xerox Copy Centre, PO Box 1154, Fyshwick, Canberra, ACT, 2609.

Transcripts of public hearings can be purchased from Spark and Cannon Pty Ltd, who have offices in Melbourne, Adelaide, Sydney, Brisbane and Perth.

Transcripts and submissions are available for perusal in the Commission's library.

### **Facilities for access**

The Commission's documents may be inspected in the Commission's offices in Canberra between 9.00 am and 4.30 pm, Monday to Friday (excepting public holidays).

Information and written requests for access to Commission documents under the Freedom of Information Act can be made through:

The Director  
Finance and Services Section  
Industry Commission  
PO Box 80  
Belconnen ACT 2616  
Telephone: (06) 2643357

Decisions regarding requests for access to documents under section 23 of the Freedom of Information Act will be made at division and branch head level. An applicant who is not satisfied with a decision relating to the provision of access, or relating to the liability to pay a charge, may seek a review of the decision by applying to the Chairperson of the Commission within 28 days of receiving notice of the decision.

## Annexure 2

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## Appendix 13 Financial statements 1990–91

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our ref;

**INDUSTRY COMMISSION  
AUDIT REPORT ON FINANCIAL STATEMENT**

In accordance with sub-section 50(1) of the Audit Act 1901, the Chairman of the Industry Commission has submitted for audit the financial statement of the Industry Commission for the year ended 30 June 1991.

Sub-section 50(2) of the Act provides that the financial statement shall be prepared in accordance with financial statement guidelines issued by the Minister for Finance. Paragraphs 50(2)(a) and 50(2)(b) respectively, require the statements to set out:

- (a) particulars of the receipts and expenditures of the Consolidated Revenue Fund, the Loan Fund and the Trust Fund during the financial year in respect of the Commission; and
- (b) such other information (if any) relating to the financial year as is required by the financial statement guidelines to be included in the statement.

The parts of the financial statement prepared in accordance with paragraph 50(2)(b) of the Act are not subject to audit examination and report unless the Minister for Finance has declared that they are to be subject to full examination. At the date of this report the Minister had not made a declaration in respect of the Industry Commission.

The parts of the financial statement prepared in accordance with paragraph 50(2)(a) of the Act which are subject to audit have been prepared in accordance with the policies outlined in Note 1(a),(b),(c),(g). For the purpose of providing this report pursuant to sub-section 51(1), the statements have been audited in conformance with the Australian National Audit Office Auditing Standards which incorporate the Australian Auditing Standards.

In accordance with sub-section 51(1) of the Act, I now report that in my opinion the parts of the statement prepared in accordance with paragraph 50(2)(a) are:

- . in agreement with the accounts and records kept in accordance with section 40 of the Act, and
- . in accordance with the financial statement guidelines made by the Minister for Finance.

D. S. Lennie  
Executive Director  
Australian National Audit Office

23 August 1991

**Statement by the Departmental Secretary  
and  
Principal Accounting Officer**

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**Certification**

We certify that the attached financial statements for the year ended 30 June 1991 are in agreement with the Commission's accounts and records and, in our opinion, the statements have been prepared in accordance with the Financial Statements Guidelines for Departmental Secretaries issued in June 1991.

Signed



Dated

19. 5 91

Signed



Dated

16. 8 91.

Chairman

Head of Office

## Industry Commission

### Aggregate statement of transactions by fund for the year ended 30 June 1991

This statement shows aggregate cash transactions, for which the Commission is responsible, for the Commonwealth Public Account (CPA). The Commission was not responsible for any transactions of the Loan Fund.

<b>1989-90</b>		<b>1990-91</b>	<b>1990-91</b>
<b>Actual</b>		<b>Budget</b>	<b>Actual</b>
<b>\$</b>		<b>\$</b>	<b>\$</b>
<i>Consolidated Revenue Fund (CRF)</i>			
<u>324 558</u>	Receipts	<u>214 000</u>	<u>225 748</u>
-	Expenditure from Special Appropriations	-	-
<u>14 419 119</u>	Expenditure from Annual Appropriations	<u>15 391 000</u>	<u>15 562 453</u>
<u>14 419 119</u>	Expenditure	<u>15 391 000</u>	<u>15 562 453</u>
<i>Trust Fund</i>			
-	Notional Balance 1 July 1990		NIL
-	Receipts		2 963
<u>-</u>	Expenditure		<u>2 963</u>
<u>-</u>	Notional Balance 30 June 1991		<u>NIL</u>

## Industry Commission

### Detailed statement of transactions by fund for the year ended 30 June 1991

This statement shows details of cash transactions, for which the Commission is responsible, for the Consolidated Revenue Fund and the Trust Fund. The Commission was not responsible for any transactions of the Loan Fund.

#### **CONSOLIDATED REVENUE FUND (CRF)**

##### **Receipts to CRF**

The CRF is the main working fund of the Commonwealth and consists of all current moneys received by the Commonwealth (excluding loan raisings and moneys received by the Trust Fund).

The Commission is responsible for the following receipt items.

<b>1989-90</b>			<b>1990-91</b>	<b>1990-91</b>
<b>Actual</b>	<b>Program*</b>		<b>Budget</b>	<b>Actual</b>
<b>\$</b>			<b>\$</b>	<b>\$</b>
50 659	Miscellaneous (a)	7	30 000	42 688
	Section 35 of Audit Act 1901 –	7		
	Credited to Running Costs –			
<u>273 899</u>	Division 676 (see Note 2) (a)		<u>184 000</u>	<u>183 060</u>
<u>324 558</u>	<b>Total Receipts to CRF</b>		<u>214 000</u>	<u>225 748</u>

(a) Receipts offset within outlays

\* Refer to Program Statement (this information has not been subject to audit).



## **TRUST FUND**

This section discloses details of each Head of the Trust Fund and Trust Account for which the Commission is responsible. It provides a break-down of the information relating to the Trust Fund contained in the Aggregate Statement of Transactions by Fund.

Transactions under the Head of Trust relate to incapacity payments to current employees in accordance with determinations made, and funds issued, by COMCARE.

<b>1989-90</b>		<b>1990-91</b>	<b>1990-91</b>
<b>Actual</b>		<b>Budget</b>	<b>Actual</b>
<b>\$</b>		<b>\$</b>	<b>\$</b>
<u>Services for Other Governments and Non-Departmental Bodies</u>			
. Legal Authority—Audit Act 1901			
. Purpose—Payment of costs in connection with services performed on behalf of other governments and non-departmental bodies			
. Receipts and expenditure —			
—	Cash Balance at 1 July 1990	—	NIL
—	Receipts	—	2 963
—		—	2 963
—	Expenditure	—	2 963
—	Cash Balance at 30 June 1991	—	NIL
. Investments - NIL			

**Industry Commission**  
**Program summary**  
**for the year ended 30 June 1991**

This Statement shows the outlays for each program for which the Commission is responsible, and reconciles the Commission's total outlays to total expenditure from appropriations. 'Expenditure' refers to the actual amount of resources consumed by a program whereas 'outlays' refers to the 'net' amount of resources consumed, after offsetting associated receipt and other items.

The Statement also reconciles the total receipts classified as revenue (ie receipts not offset within outlays or classified as financing transactions) for each program, with 'Receipts to CRF'.

This Statement has not been subject to audit.

1989-90 Actual \$'000		1990-91 Budget \$'000	1990-91 Actual \$'000
	<i>Expenditure</i>		
	Outlays		
14 095	7. Industry Commission	15 177	15 337
	Plus Receipts Offset Within Outlays		
<u>325</u>	7. Industry Commission	<u>214</u>	<u>226</u>
<u>14 420</u>	<i>Total Expenditure From Appropriations</i>	<u>15 391</u>	<u>15 563</u>
	<i>Receipts</i>		
<u>325</u>	Receipts Offset Within Outlays	<u>214</u>	<u>226</u>
<u>325</u>	<i>Total Receipts to CRF</i>	<u>214</u>	<u>226</u>

**Industry Commission**  
**Program statement**  
**for the year ended 30 June 1991**

From 1989-90 approval was given for the former Industries Assistance Commission to adopt a single program reporting structure within the Treasury Portfolio Program Statements. A similar structure was adopted for the Industry Commission following its establishment on 9 March 1990.

This Statement therefore shows details of expenditure from annual appropriations at the program level. Each 'annual' appropriation item is identified by its description followed by its appropriation code in brackets. Where 'expenditure from appropriations' and 'outlays' differ, the Statement discloses information reconciling the amounts concerned. The Statement also shows details of revenue (where applicable).

Detailed explanation of the Commission's program is provided in appendixes to the Commission's Annual Report.

This Statement has not been subject to audit.

1989-90 Actual \$'000		1990-91 Budget \$'000	1990-91 Actual \$'000
<b>7. Industry Commission</b>			
	Running Costs (676.1)		
8 382	Salaries and Payments in the nature of Salary	9 749	9 610
3 779	Administrative Expenses	3 633	4 033
2121	Property Operating Expenses (676.2)	1 862	1 773
138	Contribution to the University of Melbourne for the further development of the IMPACT project (676.3.01)	147	147
<u>14 420</u>	<b>Expenditure from Appropriations</b>	<u>15 391</u>	<u>15 562</u>
	<b>Less Receipts Offset Within Outlays</b>		
51	. Miscellaneous	30	43
2	. Balance of Section 35 Receipts not transferred to Running Costs (see Note 2)	—	—
<u>53</u>		<u>30</u>	<u>43</u>
272	. Section 35 Receipts transferred to Running Costs (see Note 2)	184	183
<u>325</u>		<u>214</u>	<u>226</u>
<u>14 095</u>	<b>Outlays</b>	<u>15 177</u>	<u>15 337</u>

**Industry Commission**  
**Statement of supplementary financial information**  
**as at 30 June 1991**

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This Statement has not been subject to audit.

1989-90	Notes	1990-91
\$'000		\$'000
<i>Current assets</i>		
6		9
		9
22	3	9
<i>Non-current assets</i>		
971		93
1449		3 100
458		327
<i>Current liabilities</i>		
181	4	67

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## Industry Commission

### Notes to the financial statements for the year ended 30 June 1991

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#### Note 1

#### Statement of Significant Accounting Policies

- (a) The financial statements have been prepared in accordance with the 'Financial Statements Guidelines for Departmental Secretaries' issued by the Minister for Finance.
- (b) The financial statements have been prepared:
- on a cash basis, with the exception of the Statement of Supplementary Financial Information which includes certain accrual-type information; and
  - in accordance with the historical cost convention. They do not take account of changing money values or, except where stated, current values of non-current assets.
- (c) Amounts shown in the Aggregate Statement of Transactions by Fund and the Detailed Statement of Transactions by Fund (and related notes) have been rounded to the next lower, or next higher, dollar. Amounts in the other Statements have been rounded to the nearest thousand dollars in accordance with the following principles:
- amounts have been rounded up if the three end-digits are greater than 500, or down if less than 500;
  - if the three end-digits equal 500, the amount has been rounded to an even figure, for example -
    - \$17 484 500 = \$17 484 (even, therefore stays even)
    - \$17 483 500 = \$17 484 (odd, therefore has been rounded up to even);
  - all totals are the rounded additions of *unrounded* figures.
- (d) Land and buildings, computer software and intangible assets such as patents and copyrights have not been accounted for in the Statement of Supplementary Information. Nor have minor assets – other than receivables, advances and investments – having a unit value less than \$2 000.
- (e) Administrative expenses shown in the Program Statement include minor capital expenditure items as they are considered part of ordinary annual services for the purposes of the Appropriation Acts. 'Minor capital expenditure' includes items of capital expenditure costing less than \$250 000.
- (f) Liabilities relating to salaries, wages, annual leave, long service leave and superannuation with respect to officers or employees of the Commission have not been accounted for in the Statement of Supplementary Financial Information.
- (g) Foreign currency transactions occurring during the year have been converted at the rate of exchange prevailing at the date of each transaction.

**Note 2****Running Costs (Annotated Appropriation 676.1.00)**

This appropriation was annotated pursuant to Section 35 of the Audit Act 1901 to allow the crediting of certain receipts.

The arrangement allowed for the crediting to Running Costs of receipts which were generated by the sale of surplus or underperforming personal property assets and user chargings in relation to the use of economic models and other cost recoveries, and consultancy fees for work undertaken on behalf of the Department of Foreign Affairs and Trade.

The annotated appropriation operated as follows:

<i>Annotated Appropriation</i>	<i>Receipts</i>	<i>Appropriation</i>	<i>Expenditure</i>
(1)	(2)	(1)+(2)	
\$13 836 000	\$183 060 <sup>(a)</sup>	\$14 019 060	\$13 642 475

(a) The Department of Finance only issued Funds Allocation Authority for \$165 700.

**Note 3 (This note is not subject to audit)****Receivables**

<u>1989-90</u>	<u>1990-91</u>
<u>\$'000</u>	<u>\$'000</u>

Of the total amount of \$9 217 outstanding as at 30 June 1991 the following amounts were overdue for:

0.612	Less than 30 days	1.144
1.387	30-60 days	1.035
19.566	More than 60 days	4.668
<u>21.565</u>		<u>6.847</u>

All the receivables are expected to be fully recovered.

**Note 4 (This note is not subject to audit)****Trade Creditors**

As at 30 June 1991 an amount of \$67 005 was owed to trade creditors.

There were no amounts overdue for payment.

**Note 5 (This note is not subject to audit)****Forward Obligations**

The Commission has not entered into any forward obligations (as defined for the purposes of the Government's general obligations system) as at 30 June 1991.

**Note 6** (This note is not subject to audit)

**Act of Grace Payments**

No payments were made during the financial year 1990–91 pursuant to authorisations given under Section 34A(1) of the Audit Act 1901.

**Note 7** (This note is not subject to audit)

**Waiver of Rights to Payment of Moneys**

No payments were waived during the financial year 1990–91 under sub-section 70C(2) of the Audit Act 1901.

**Note 8** (This note is not subject to audit)

**Amounts Written Off**

The following details are furnished in relation to amounts written off during the financial year 1990–91 under sub-section 70C(1) of the Audit Act 1901.

		<i>UP TO \$1000</i>		<i>OVER \$1000</i>	
		<i>Number</i>	<i>Amount</i>	<i>Number</i>	<i>Amount</i>
			\$		\$
(i)	Losses or deficiencies of public moneys	1	16	–	–
(ii)	Irrecoverable amounts of revenue	–	–	–	–
(iii)	Irrecoverable debts and overpayments	1	384	–	–
(iv)	Amounts of revenue, or debts or overpayments, the recovery of which would, in the opinion of the Minister, be uneconomical	–	–	–	–
(v)	Lost, deficient, condemned, unserviceable or obsolete stores	2	1 557	–	–

**Note 9** (This note is not subject to audit)

**Losses and Deficiencies etc in Public Moneys and Other Property**

During the 1990–91 financial year the Commission took action against two (2) officers under Part X11A of the Audit Act 1901 in respect of a loss of public moneys. As a result of this action, liability for \$23 of the loss was determined and subsequently repaid. The balance of the loss (\$15.85) was written off under Section 70C(1) of the Audit Act (see Note 8).

**Note 10** (This note is not subject to audit)

**Resources Received Free Of Charge**

During the 1990–91 financial year the Australian National Audit Office (ANAO) provided auditing services, as required by the Audit Act 1901, to the Commission without charge. The estimated cost of those services is \$30 000. The expenditure incurred in providing those services was met from the ANAO's appropriations.

In addition, a number of other Commonwealth departments and agencies provided services to the Commission without charge for which it is not practicable to estimate a cost. Expenditures for those services were met from appropriations to the department or agency concerned. The major services received include the following:

**Department of Finance**

- Accounting and budgetary services in the form of the computerised Finance ledger and payroll services.

**Attorney-General's Department**

- The provision of legal services not able to be provided within the Commission.

**Australian Archives**

- The provision of on-going archival services.

**Note 11**

**Establishment of the Industry Commission**

- (a) The Industry Commission was established by the Industry Commission Act 1989, which was proclaimed on 9 March 1990. The new Commission incorporates functions undertaken by the former Industries Assistance (IAC) and Inter-State (ISC) Commissions, and the former Business Regulation Review Unit (BRRU) of the Department of Industry, Technology and Commerce (DITAC).
- (b) As at 8 March 1990 office requisites outlays by the former Inter-State Commission included the following prepayments:
  - (i) \$45 091 for the publication of Commission reports in accordance with the Australian Government Publishing Service printmax operations, and
  - (ii) \$9 763 held at the Reserve Bank of Australia to facilitate the settlement of the Commission's Australian Government Credit Card account with the Westpac Banking Corporation.

Both the above balances were transferred to the Industry Commission. During the 1990-91 financial year the Industry Commission utilised these funds in the course of its operations. At 30 June 1991 the above balances stood at :

- (i) Australian Government Publishing Service – NIL
- (ii) Reserve Bank of Australia – \$22 891.

## Appendix 14

### Inquiry activity and reports of the Commission

**Table A14.1**  
**References received in 1990–91**

<i>Title</i>	<i>Received</i>	<i>Due</i>
Exports of education services	10.9.90	31.7.91
Australian dairy industry	7.12.90	30.9.91
Costs and benefits of reducing greenhouse gas emissions	7.12.90	15.11.91
Availability of capital	7.12.90	6.12.91
Cost recovery for managing fisheries	7.12.90	6.12.91
Exports of health services	7.12.90	31.12.91
Australian sugar industry	21.3.91	20.3.92
Review of overseas export enhancement measures	8.4.91	8.4.92
Raw materials pricing for domestic use	9.5.91	9.5.92
Commercial restrictions on exporting (including franchising)	9.5.91	9.5.92

**Table A14.2**  
**Draft reports published in 1990–91**

<i>Title</i>	<i>Date of release</i>
The automotive industry	21.9.90
Mining and minerals processing in Australia	28.9.90
The commercial tariff concession and by-law systems	10.10.90
Recycling	12.10.90
Construction costs of major projects	29.10.90
Statutory marketing arrangements for primary products	13.12.90
Energy generation and distribution	15.1.91
Rail transport	17.4.91
Export of education services	4.6.91
Australian dairy industry	18.6.91

**Table A14.3**  
**Reports completed in 1990–91**

<i>Report no.</i>	<i>Title</i>	<i>Date</i>
3	Aids and appliances for people with disabilities	18.7.90
4	Product liability	18.7.90
5	The automotive industry	17.12.90
6	Recycling	22.2.91
7	Mining and minerals processing in Australia	25.2.91
8	Construction costs of major projects	11.3.91
9	The commercial tariff concession and by-law systems	8.3.91
10	Statutory marketing arrangements for primary products	26.3.91
11	Energy generation and distribution	17.5.91

**Table A14.4**  
**Inquiry activity since 30 June 1991**

<i>Report no.</i>	<i>Title</i>	<i>Date</i>
<b><i>Final reports</i></b>		
12	Exports of education services	14.8.91
13	Rail transport	21.8.91
<b><i>Draft reports</i></b>		
	Cost recovery for managing fisheries	19.8.91
	Costs and benefits of reducing greenhouse gas emissions	22.8.91
	Exports of health services	11.9.91
	Availability of capital	25.9.91
<b><i>References received</i></b>		
	Water resources and waste water disposal	18.7.91
	Intrastate aviation	18.7.91

**Table A14.5**  
**The Commission's forward inquiry program**

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***Announced references to be sent in 1991 and early 1992 are:***

Mail, courier and parcel services  
National procurement development program  
Implications for Australia of firms locating offshore  
Land use planning

***New references to be sent before end-1991 are:***

Horticulture  
Regional impediments to industry restructuring

***New references to be sent before end-1992 are:***

Book bounty  
End-use by-laws for chemicals, plastics and inputs to paper and printing  
Urban public transport including rail  
National industry extension service  
Meat processing  
Grants for industry research and development  
Workers' compensation  
Competition in the professions  
Provision of public housing

***New references to be sent before end-1993 are:***

Tobacco  
Long term agreements

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Source: Kerin (1991c).

## Index to Table A14.6

<i>Reference</i>	<i>page</i>
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Rice industry, The . . . . .	323
Statutory marketing arrangements for primary products . . . . .	335
Water resources and waste water disposal . . . . .	344

**Table A14.6**  
**Stage of completion of inquiries to 25 September 1991 and action taken on those inquiries<sup>1</sup>**

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25.8.86	<p><b>Reference title</b>      <b>The rice industry</b></p> <p><b>Terms of reference</b></p> <p>The terms of reference for this inquiry were included in the IAC's 1986–87 Annual Report.</p> <p><b>Assistance before report</b></p> <p>Details were included in the IAC's 1986–87 Annual Report.</p> <p><b>Stage of completion</b></p> <p>Interim IAC Report No. 396 signed 15.10.86.</p> <p>The IAC's recommendation and government decision were included in the IAC's 1986–87 Annual Report.</p> <p>Second Interim IAC Report No. 403 signed 29.5.87.</p> <p>The IAC's recommendations and government decision were included in the IAC's 1986–87 and 1987–88 Annual Reports respectively.</p> <p>The Rice Industry, IAC Report No. 407 signed 23.10.87.</p> <p>The IAC's recommendations, comments and suggestions were included in the IAC's 1987–88 Annual Report.</p> <p><b>Government response</b></p> <p>(Letter to the Treasurer from the Minister for Primary Industries and Energy, 28.5.91)</p> <p>The Minister advised that the Commission's recommendations in Report No. 407 had been adequately addressed by the Government without the need for reference to Cabinet and that action on the report had been completed. In particular:</p> <p><b>Water and land use</b></p> <ul style="list-style-type: none"> <li>• The Commission's recommendations on land and water use (and similar recommendations made in the IAC Report on Fresh Fruit and Fruit Products) had largely been addressed through consultations within the Murray–Darling Basin Ministerial Council.</li> <li>• On aspects of water and land use policy not covered within that forum, the Minister had written to the Ministers for Agriculture in all States and the Northern Territory concerning the IAC recommendations and sought their advice on action taken by their governments on these issues. These arrangements have established a formal mechanism to enable Commonwealth–State consultation on the issues referred to by the Commission.</li> </ul>
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<sup>1</sup> Includes inquiries of the Industries Assistance Commission and the Industry Commission for which the recommendations and/or government decisions on reports were not included in previous annual reports. IAC inquiries and reports begun but not completed at the commencement of the Industry Commission Act on 9 March 1990 were transferred to the Industry Commission.

- The Minister noted that progress had also been made on removal of restrictions on land and water use. The only restrictions applicable for rice production in NSW were for environmental reasons, so that legislative controls on production had, by and large, been dropped. While production quotas still existed in Queensland, these had never been enforced.

*Compulsory acquisition*

- The Minister noted that the compulsory acquisition powers of State Rice Marketing Boards were a matter for State Governments. However, the NSW Government had reviewed the vesting arrangements that apply to rice in that State and announced on 20 May 1991 that they would remain. A consultative committee was to be established however to consider, on an annual basis, the sole agency agreement between the Rice Growers' Co-operative Limited and the NSW Rice Marketing Board. The Rice Marketing Board in Queensland did not possess compulsory acquisition powers.

*Trade practices*

- The Trade Practices Commission has been requested to provide advice on the trade practices implications of sole agency agreements between the NSW Rice Growers' Co-operative and NSW Rice Marketing Board. The Commission concluded, after consideration of the agreement between the Co-operative and the Board, that the rice marketing activities of the Co-operative would be exempt from the Trade Practices Act under section 51.

*Direct assistance*

- IAC recommendations concerning direct assistance to the rice industry had been implicitly accepted by the Government. As part of its May 1988 Economic Statement, the Government had removed the 2 per cent revenue duty which applied to imports of rice.

4.6.87 **Reference title**      **Precious metals, gems and jewellery**

***Terms of reference***

The terms of reference for this inquiry were included in the IAC's 1986-87 Annual Report.

***Assistance before report***

Details were included in the IAC's 1986-87 Annual Report.

***Stage of completion***

IAC Report No. 412 signed 3.5.88.

The IAC's recommendations were included in the IAC's 1987-88 Annual Report.

***Government response***

Under the tariff reduction program announced in the May 1988 Economic Statement, the Government did not propose any additional action on the tariff aspects of this report.

On 18 October 1989 the Treasurer announced that the Government had accepted the IAC's recommendation that the sales tax exemption available to Australian uncut gems and gold coins be extended to comparable imported products. The

Government also decided to extend the exemption for imported coins to include all imported coins which are legal tender in the country in which they are minted. (Treasurer, *Press Release*, No. 95, 18.10.89.)

Other aspects of the report not addressed as at 25 September 1991 include recommendations on:

- resource policies,
- certain taxation matters,
- Customs administration and certain tariff-related matters, and
- coin production.

20.9.88     ***Reference title***     **Food processing and beverages industries**

***Terms of reference***

The terms of reference for this inquiry were included in the IAC's 1988–89 Annual Report.

***Stage of completion***

Interim report on government regulation of packaging and labelling of processed foods and beverages, IAC Report No. 417, signed 24.2.89. The IAC's recommendations and the Commonwealth Government's decisions on Report No. 417 were included in the IAC's 1988–89 Annual Report.

Food processing and beverages industries, IAC Report No. 424 signed 15.12.89. The IAC's recommendations were included in the IC's 1989–90 Annual Report.

***Government response***

Major reforms to Australia's food regulatory system agreed to at the special Premiers' Conference in October 1990 were that uniform food standards would apply across the nation and be regulated by a National Food Authority (NFA).

The National Food Authority, an independent statutory authority, commenced operations on 19 August 1991.

In developing standards, and variations to standards, the NFA must have regard to the following objectives in descending priority order:

- the protection of public health and safety;
- the provision of adequate information relating to food to enable consumers to make informed choices;
- the promotion of fair trading in food;
- the promotion of trade and commerce in the food industry; and
- the promotion of consistency with standards applied to food in international trade.

In announcing appointments to the NFA, the Minister said that: 'Over the next 18 months the Authority's first task will be to review all existing food standards' (Staples 1991).

Decisions on other recommendations on Customs Regulations and export quality controls had not been announced as at 25 September 1991.

18.10.89 *Reference title*      **Aids and appliances for people with disabilities**

*Terms of reference*

The terms of reference for this inquiry were included in the IC's 1989–90 Annual Report.

*Stage of completion*

IC Report No. 3 signed 18.7.90.

The IC's recommendations were included in the IC's 1989–90 Annual Report.

*Government response*

*Government provision of hearing aids*

(Minister for Aged, Family and Health Services, *Media Release*, PS242/90, 17.10.90)

After consideration of the Commission's report, the Government announced changes to the operations of the National Acoustic Laboratories (NAL). NAL would be established as a statutory authority and enter into a collaborative arrangement with Australian Hearing Aids for research, development and manufacture of hearing aids in Australia. The Government said that NAL would adopt improved business practices under these new arrangements. Further details are in appendix 5.

The Commission had recommended changes to end segmentation among service providers and introduce competition across the whole market. The Commission recommended the proposed collaborative agreement be set aside.

*Tariffs on aids and appliances*

(Minister for Industry, Technology and Commerce, *News Release*, 123/90, 4.12.90)

Tariffs on imported pacemakers, defibrillators and wheelchairs were reduced to zero from 1 January 1991. The Government accepted the Commission's recommendations on pacemakers and defibrillators but decided to remove the duties on wheelchairs in one go rather than phase them out as recommended by the Commission.

The decision on wheelchairs took into account the Government's previously announced decision to accede to the Florence Agreement which specified free trade in goods of an educational, scientific and cultural nature and its extension by the Nairobi Protocol to articles for the blind and other handicapped persons. The Minister also announced that the Government would introduce a revised Customs By-Law which would significantly expand the range of aids which could be imported duty free by institutions on behalf of persons with disabilities.

*Sales tax exemptions*

In its 1991–92 budget the Government announced that it had decided to implement the majority of the IC's sales tax proposals. Item 123 was being amended to remove the restriction that the goods to be exempted only be those 'not ordinarily used by persons who are not suffering from sickness, disease or disablement'.

The Government also modified the sales tax exemption under Item 135A on purchases of new motor vehicles used by designated classes of veterans and other persons with certain physical disabilities. From 20 August 1991, the exemption

has been subject to a maximum sales tax benefit equal to the sales tax payable on a motor vehicle priced at the luxury motor vehicle threshold.

The Government also amended Item 42C to extend sales tax exemptions beyond goods used to modify a motor vehicle to adapt it for *driving* by a person suffering physical disability to include modifications to enable the *transportation* of a passenger suffering from physical impairment.

The Government did not announce a decision on the IC's recommendation to extend exemptions under Item 123A to include computer equipment.

*Other*

The Government had not responded to the Commission's recommendations on Government production of artificial limbs, the funding for the Independent Living Centre database, or changes to the tariff description of orthopaedic appliances as at 25 September 1991.

18.10.89 *Reference title*      Recycling

*Terms of reference*

The terms of reference for this inquiry were included in the IC's 1989-90 Annual Report.

*Stage of completion*

IC Report No. 6 signed 22.2.91.

The Commission reported on current levels of recycling in Australia and on the benefits and costs, both economic and environmental, of recycling specific products. The Commission concluded that governments cannot be expected to determine efficiently how much recycling of each product should occur now or in the future. But, by changing arrangements in some areas, governments can contribute to more efficient recycling.

*Waste management and collection of recyclables*

- Recycling is an alternative to waste disposal. Consequently reforms in waste management can have an immediate effect on recycling. There is evidence that waste management charges in many areas are:
  - too low to allow Local Councils to meet the financial costs of waste disposal and make adequate provision for site replacement and environmental costs;
  - poorly structured because they do not vary with the quantity of waste disposed by individual ratepayers.Both reduce the incentive to recycle.
- Councils should observe the following principles in relation to waste management and recycling:
  - kerbside collections for waste disposal and for recycling to be treated as integral parts of waste management;
  - waste disposal charges to reflect the real costs (including environmental) of waste collection and disposal and, in areas where waste disposal costs are high, vary with the amount of waste collected for disposal;

- charges for recycling collections to be set with reference to costs of collection, less the value of the collected material to reprocessors, and to vary with the volume collected for recycling.
- Where volume-based charging is too costly to implement, it is appropriate for Councils to provide financial support for the collection of recyclables, up to the avoided waste collection and disposal costs.

#### *Environmental controls*

- There is a need to clamp down on waste disposal practices which impose significant environmental costs. If the 'price' of disposing of harmful materials is too low, the incentive to recycle will also be too low. But the pollution and litter control policies of governments should be based on the real net costs of environmental damage and not driven by recycling objectives.
- Efficient recycling is not advanced where governments give priority to readily identifiable, but not significant, elements of the household waste stream (as with South Australia's container deposit legislation and Victoria's recycling targets).

#### *Resource pricing*

- Where natural resources are appropriately priced, markets can provide a reasonable guide as to what makes good conservation sense. However, if governments underprice resources such as forests, electricity or water, some producers are likely to have an incentive to use more virgin and less reprocessed material.
- The Commission did not find evidence of underpricing of pulpwood that would have significantly affected the decisions of Australian paper manufacturers to use wood rather than reprocessed fibres.
- Changes are needed in the management and pricing policies of Australia's forest services in order to bring about a higher return to the community's forest resources. The changes would have major implications for the *sawlog* industry. However, their effect on *paper recycling* is likely to be small. Some strategies for raising rates of return could discourage recycling.

#### *Other matters*

- Governments need to:
  - review legislation and regulation which unnecessarily disadvantages recycled materials or favours one form or level of recycling at the expense of another (such as the Commonwealth's sales tax exemption for 100 per cent recycled paper); and
  - ensure that when promoting recycling they accord with sound principles of public administration.
- The important question for governments and the community alike is not whether recycling rates in Australia could be increased, but whether the community would be better off if they were.

**Government response**

No response to the report had been announced as at 25 September 1991.

The Commission drew on its recycling report in providing comments to the Department of Arts, Sport, the Environment, Tourism and Territories' discussion paper on the draft national waste minimisation and recycling strategy. The Commission concluded that, overall, the approach taken in the discussion paper was unlikely to meet the objectives specified and, indeed, could reduce community welfare. The strategy needed to be modified in ways which pay more attention to the operation of markets and the removal of impediments to efficient resource use (see IC 1991h).

18.10.89 **Reference title**      **Product liability**

**Terms of reference**

The terms of reference for this inquiry were included in the IC's 1989-90 Annual Report.

**Stage of completion**

IC Report No. 4 signed 18.7.90.

The IC's recommendations were included in the IC's 1989-90 Annual Report.

**Government response**

(Minister for Justice and Consumer Affairs, *Media Release*, 13.5.91)

As foreshadowed in the March 1991 Statement, the Government accepted the Commission's recommendation to reject the Australian Law Reform Commission's proposals. A new product liability regime would be based on the 1985 European Community Product Liability Directive. Further details are provided in appendix 7.

18.10.89 **Reference title**      **Construction costs of major projects**

**Terms of reference**

The terms of reference for this inquiry were included in the IC's 1989-90 Annual Report.

**Stage of completion**

IC Report No. 8 signed 11.3.91.

The Commission found that:

- In some areas (for example certain mineral processing projects), Australian construction costs for major projects are comparable or lower than overseas. In other areas (for example certain chemical and forest products), there are disadvantages of the order of 20 per cent compared to the lowest cost developed country.
- Capital costs for those major projects for which data were available represented about 40 per cent of the unit cost of the final product. Erection costs were around half of capital costs. Labour costs accounted for around half of erection costs.
- Industrial relations problems, particularly in the central business districts of Sydney and Melbourne, and inefficient planning approval processes are the

two most important factors subject to the influence of government which result in the capital costs of major projects in Australia being higher than necessary.

- Governments, being major clients of the industry, can hasten labour market reform by insisting that more efficient labour and management practices are adopted on government construction sites. Avenues for change which could be usefully explored include: reduced payment for time-off as a result of inclement weather or safety disputes; the use of section 115 of the Federal Industrial Relations Act to increase the enforceability of site agreements; and greater use of productivity bonuses.
- Governments need to accelerate reviews of regulations, standards and associated administrative procedures so as to reduce uncertainty and delays, and reduce the costs resulting from variations in standards and regulations. Greater resort to the one-stop-shop concept, increased use of performance based standards, and mutual recognition by governments of the standards and regulations of other governments would help to reduce costs associated with obtaining necessary approvals.
- Economic efficiency will not be enhanced by policies to increase artificially the Australian content of major projects. Such policies increase costs and reduce the competitiveness of major projects.
- The complex and intermittent nature of major projects in Australia provide limited opportunities for acquiring project management skills. Recent initiatives involving government and the private sector seek to overcome information deficiencies about tendering and contract processes. Other than improving the management of its own projects, the Commission did not consider there was any additional role for government in improving project management skills.

***Government response***

No response to the report had been announced as at 25 September 1991.

18.10.89 ***Reference title*** Mining and minerals processing in Australia

***Terms of reference***

The terms of reference for this inquiry were included in the IC's 1989–90 Annual Report.

***Stage of completion***

IC Report No. 7 signed 25.2.91.

The Commission found that governments in Australia had erected a whole array of impediments to one of the few industries in which Australia enjoys a clear advantage relative to many of our competitors. Dismantling just some of the barriers preventing these activities from realising their full potential was estimated to boost the value of resource sector outputs by some \$5 billion annually, translating to annual gains of the order of \$10 billion on an economy-wide basis.

While reforms aimed at achieving quantifiable gains were clearly worth pursuing, the Commission considered that even greater benefits would result from implementing other reforms identified in its report — but the likely effects were

less amendable to quantification. Principal areas for reform included clarifying the rights of Aborigines, landholders and explorers; increasing reliance on market mechanisms to solve land-use conflicts; allocating and charging for mineral rights; modifying tax arrangements; improving mechanisms for dealing with environmental effects; and reducing regulation.

Access to land for exploration and mining purposes was seen as the single most important issue facing the mining industry today. The Commission recommended that:

- the Northern Territory and Commonwealth Governments investigate transferral of mineral rights on Aboriginal land in the Territory to the traditional landowners;
- the costs and benefits of declaring existing and proposed national parks be assessed. This would generally mean allowing exploration and the evaluation of other potential land uses;
- one government agency in each State/Territory be made responsible and accountable for processing a mining application within set time limits; and
- market-based mechanisms be used more and in preference to relying on governments to resolve land-use conflicts.

The Commission recommended that long-term (for example 99 year), tradeable mineral rights subject only to limited and well-defined conditions be allocated by competitive cash bidding — alone or in combination with pre-announced royalty arrangements and environmental safeguards. The Commission envisaged that such an auction would be triggered automatically whenever a formal application was made for an exploration licence over a particular area. The successful bid should be made deductible against any future liability to pay royalties.

The Commission recommended adoption of a pure-rent royalty system for other than low unit value minerals. Royalties should be regarded as a capital transfer from minerals in the ground and be accumulated in a Mineral Resource Capital Account, to be used to retire public debt or create capital assets.

Mining companies should be required to post rehabilitation bonds (or equivalent financial instruments) sufficient to cover the estimated costs of appropriate rehabilitation of the minesite. Further, governments could consider requiring the posting of 'performance' bonds (or equivalent financial instruments) in cases where it was judged that there was demonstrable potential that a mining project could cause 'catastrophic' environmental damage, with such bonds being automatically forfeited should such damage occur.

Mining and minerals processing are subject to detailed regulation involving all levels of government. Sovereign risk (when governments change the rules mid-project) is a grave problem facing the mining industry in Australia and one which diminishes the value of the mineral estate owned collectively by all Australians.

Independent pursuit of their own purposes by each level of government, combined with a penchant for frequent and in many cases *ad hoc* changes to the rules, has resulted in a bewildering mishmash of regulations. This imposes substantial costs, delays and uncertainty, while rarely achieving apparent objectives (or doing so only at enormous cost).

State/Territory Mining Acts often rely on outmoded concepts not conducive to modern mining methods, allow for an unwarranted degree of administrative or ministerial discretion to be exercised, and are sometimes inconsistent when there is no good reason for different approaches to be adopted. Many provisions in these Acts also unnecessarily restrict the decision-making powers and flexibility of companies to adapt to changing conditions, thereby inducing inefficient behaviour in the industry. The Commission recommended that State/Territory Governments review their Mining Acts.

Other findings/recommendations by the Commission included:

- abolishing existing export controls, other than those relating to nuclear safeguards;
- ending the export duties on coal and uranium;
- discontinuing the 'three mines' uranium policy and any controls on export pricing so that there is no restriction on the number of uranium mines in Australia;
- bringing foreign investment regulations applying to mining into line with those applying to industry generally;
- disbanding the Joint Coal Board and Queensland Coal Board; and
- disbanding the NSW and WA Coal Industry Tribunals, and subsuming their functions in the Industrial Relations Commission (or appropriate State body).

***Government response***

No response to the report had been announced as at 25 September 1991.

28.12.89 ***Reference title***      **Pulp and paper: bleaching and the environment**

***Terms of reference***

The terms of reference for this inquiry were included in the IC's 1989–90 Annual Report.

***Stage of completion***

IC Report No. 1 signed 21.5.90.

The IC's recommendations were included in the IC's 1989–90 Annual Report.

***Government response***

No response to the report had been announced as at 25 September 1991.

28.12.89 ***Reference title***      **Interim report on paper recycling**

***Terms of reference***

The terms of reference for this inquiry were included in the IC's 1989–90 Annual Report.

***Stage of completion***

IC Report No. 2 signed 21.5.90.

The IC's recommendations were included in the IC's 1989–90 Annual Report.

***Government response***

No response to the report had been announced as at 25 September 1991.

19.2.90 **Reference title**      **The commercial tariff concession and by-law systems**

**Terms of reference**

The terms of reference for this inquiry were included in the IC's 1989–90 Annual Report.

**Assistance aspects**

Details were included in the IC's 1989–90 Annual Report.

**Stage of completion**

IC Report No. 9 signed 8.3.91.

**Commercial tariff concession system (CTCS)**

The Commission recommended continuation of a system of commercial tariff concessions with some modifications:

- 'Goods serving similar functions' should remain as the core criterion. It should not be defined in terms of identity or cross elasticity as in present legislation; instead, Customs should have regard to a non-exhaustive list of considerations in legislation. The Commission provided a range of considerations that the legislation should address.
- The Commission saw no benefit in constructing a market-based or competition-related test; 'goods serving similar functions' and the list of legislated considerations are an administrable alternative.
- The Commission proposed that the existing definition of 'capability to produce in the normal course of business' be replaced in the legislation by a (non-exhaustive) series of considerations to which Customs should have regard.
- The 'substantially adverse effect' criterion should be removed from the CTCS.
- The 'national interest' criterion should be removed from the CTCS.
- The existing rules for local content and substantial process should be retained without change.
- The Excluded Goods Schedule should be abolished.
- End-use provisions should not be included in the CTCS.
- The legislation should be amended to remove the provisions which allow the Comptroller to revoke a Commercial Tariff Concession Order (CTCO) where local manufacture of, or capability to manufacture, the goods described in that CTCO develops *after* a concession is granted.
- The Government should not pursue its 1989 proposed amendments to section 269C(1) of the Customs Act concerning the breadth of CTCO applications. Instead, a sensible alternative was for Customs to use section 269C(2) *in addition to* private applications.
- Customs' internal review mechanism should be retained.
- The Administrative Appeals Tribunal (AAT) should become the main venue for reviewing the merits of decisions to make, or refuse, individual CTCOs.

- Internal review by Customs should be mandatory before a CTCO matter can be brought before the AAT.
- It should be made clear in legislation that, without loss of operative date, there should be facility for a CTCO application to be reworded at the applicant's request, provided that the range of goods covered by the application does not expand.
- There should be legislated time limits on each of the processing stages of a CTCO application and, if no decision is made by the end of the nominated time for a particular stage, deeming provisions should come into effect.
- The receipt of a CTCO application, as well as Customs decisions (whether actual or deemed) on applications at both the prima facie and final stages of processing, should be notified in the *Commonwealth Gazette*.
- Customs should promptly gazette the names and addresses of local manufacturers whose production has caused an application for concessional entry under the CTCS to be refused. The criterion under which the application has been refused should also be noted.
- Customs should publish, to the extent possible, all tariff and quota rates and levels, substantive, preferential or concessional, in a consolidated form in sequence according to Australia's Harmonised Tariff System. Additional concessions should be published as part of the same document, so that, at any time, an interested person can readily ascertain the duty payable on particular goods.

#### *By-law system*

The Commission supported retention of the by-law system, but recommended that it should be made more transparent, with less scope for administrative discretion:

- Industry Policy Items in Schedule 4 to the Customs Tariff Act should continue only to be introduced, revoked or substantially amended following inquiry and report by the Industry Commission.
- The Commission recommended that the Government's existing 'general guidelines and principles to apply to Policy By-laws' be rewritten and confined to the making of Items. They should also be made publicly available.
- The new guidelines should include several elements:
  - Policy Items should be consistent with the Government's general policy guidelines for industry, as enunciated in section 8 of the *Industry Commission Act 1989*;
  - Policy Items should not duplicate CTCS concessions;
  - Policy Items should only be made when they are the most appropriate mechanism;
  - A Policy Item should include clear statements of its objective, of its strategy to achieve that objective, and its intended ambit;

- If instruments are to be made under it, a Policy Item should give clear criteria against which they are to be made, including product coverage, duration of application, the duty rate and the agency responsible for making them.
- Existing Policy Items should be revised to state the Government's objectives for them and lay down explicit criteria for the making of their subordinate instruments.
- Provided better legislated criteria are established, the jurisdiction of the AAT should be extended into appeals against administrative decisions relating to By-laws and Determinations made under Policy Items.
- Import concessions should be removed from the Supplementary Provisions to the 'Working Tariff'; if the concessions are to be retained, they should be transferred to Schedule 4 and subjected to the same disciplines as Industry Policy Items.

***Government response***

No response to the report had been announced as at 25 September 1991.

10.5.90     ***Reference title***     **The automotive industry**

***Terms of reference***

The terms of reference for this inquiry were included in the IC's 1989-90 Annual Report.

***Assistance before report***

Details were included in the IC's 1989-90 Annual Report.

***Stage of completion and government response***

IC Report No. 5 signed 17.12.90. For details of the Commission's recommendations and their acceptance by the Government, see appendix 5.

20.5.90     ***Reference title***     **Statutory marketing arrangements for primary products**

***Terms of reference***

The terms of reference for this inquiry were included in the IC's 1989-90 Annual Report.

***Stage of completion***

IC Report No. 10 signed 26.3.91.

The inquiry's main purpose was to report on institutional, regulatory or other arrangements, subject to influence by governments, which lead to inefficient resource use, and to advise on courses of action to reduce or remove such inefficiencies. In pursuing this task, the Commission did not make detailed assessments of particular statutory arrangements for specific commodities or industries. Rather, the report was an 'in-principle' examination of the central issues, namely:

- the objectives of statutory marketing arrangements;
- their economic effects;

- ways to improve their efficiency; and
- priorities for change.

The Commission's principal findings were:

- Many objectives of statutory marketing arrangements are sound from the viewpoints of both producers and the wider community. However, with some exceptions (discussed below), these objectives are not sound from a community-wide viewpoint if they are based on powers which compel producers to participate, exclude entry to markets, or impose price increases on Australian user industries and consumers.
- Many features of statutory marketing arrangements — especially those dependent on powers of acquisition, production control and pricing — adversely affect the efficiency of resource use.
- Giving powers of compulsion to SMAs to enable producers to exercise domestic market power generally reduces, rather than improves, the efficiency of resource use.
- There is no justification for the blanket trade practices prohibition on authorising voluntary recommended price agreements between fewer than 50 parties. Assessment should be undertaken case-by-case.
- Governments should continue to review their procedures allowing for the deregulation and privatisation of SMAs (or features of their operations). The reviews should consider ways of streamlining the process and reducing its costs.
- Greatest efficiency gains are in prospect from modifying or terminating those statutory marketing arrangements where domestic price effects are greatest, and those which control marketing outlets, prices or production.
- All reviews of statutory marketing arrangements, both State and Commonwealth, should adopt an economy-wide approach and review committees should be constituted accordingly.

***Government response***

No response had been announced as at 25 September 1991

20.5.90      ***Reference title***      Rail transport

***Terms of reference***

The terms of reference for this inquiry were included in the IC's 1989–90 Annual Report.

***Stage of completion***

IC Report No. 13 signed 21.8.91 but not released as at 25 September 1991.

20.5.90 **Reference title** Energy generation and distribution

**Terms of reference**

The terms of reference for this inquiry were included in the IC's 1989–90 Annual Report.

**Stage of completion**

IC Report No. 11 signed 17.5.91.

The Industry Commission recommended that the following actions be taken by governments to rectify serious impediments to efficient resource use in the electricity and gas supply industries arising from existing institutional and regulatory arrangements:

- Increase competition in the electricity supply industry by, first, notionally separating (that is ring fencing) activities within two years and, second, fully separating activities as soon as possible thereafter. This would require government action in particular to:
  - separate ownership of generation, transmission and distribution functions;
  - break up existing publicly owned generating capacity to form a number of independent generating bodies;
  - form a public body to acquire and operate all transmission assets in New South Wales, Victoria, Queensland, South Australia and Tasmania;
  - create multiple distribution franchises in states where currently they do not exist; and
  - require all transmission and distribution bodies to provide open access.
- Increase competition in the natural gas supply industry by, first, notionally separating activities within two years and, second, by fully separating activities as soon as possible thereafter. This would require government action in particular to:
  - separate ownership of transmission and distribution functions;
  - create multiple distribution franchises in mainland states where currently they do not exist; and
  - require all transmission and distribution bodies to provide open access.
- Corporatise, within 12 months, all public bodies engaged in electricity generation and the transmission and distribution of electricity and natural gas to place them on a commercial basis, at arm's length from government.
- Modify regulatory and other controls applying to private utilities.
- Progressively sell publicly owned electricity generation and at least some electricity and gas distribution assets to the private sector.
- Implement several other initiatives to increase efficiency. These relate to retail pricing of electricity and gas; pricing of the output of the Snowy Mountains Hydro-Electric Scheme; processes for deciding on new capacity for public utilities; and load management and energy conservation measures.

- Initiate a review by an independent body — in three years time — of the progress made in implementing reforms and options for further improving efficiency.

The Commission provided greater detail on the range of measures it proposed in six schedules that accompanied and formed part of its recommendations.

***Government response***

No response to the report had been announced as at 25 September 1991. Developments on the national grid at the July 1991 special Premiers' Conference are discussed in appendix 1.

6.12.90 ***Reference title*** Australian dairy industry

***Terms of reference***

The Australian dairy industry — at the Commonwealth, State and Territory level — was referred for inquiry and report by 30 September 1991.

In reporting on market milk and manufactured dairy products, the Commission is to identify institutional, regulatory or other arrangements subject to influence by governments in Australia which lead to inefficient resource use and advise on courses of action to reduce or remove such inefficiencies.

Without limiting the scope of the inquiry the Commission was requested to give specific attention to:

- an evaluation of the marketing and assistance arrangements established by the *Dairy Produce Act 1986* (and related legislation);
- an evaluation of the cheese tariff quota introduced pursuant to *Customs Tariff Amendment Act (No 3) 1986*;
- an evaluation of the current regulatory and commercial operations of the Australian Dairy Corporation (and its subsidiaries); and
- the identification of appropriate institutional, regulatory and other arrangements that should apply to the manufactured dairy products sector following the termination of the assistance elements of the current arrangements on 30 June 1992.
- The Commission is to have regard to the established economic, social and environmental objectives of governments and to avoid duplication of any recent substantive studies undertaken elsewhere.

***Stage of completion***

Inquiry in progress.

6.12.90 ***Reference title*** Costs and benefits of reducing greenhouse gas emissions

***Terms of reference***

The following matters were referred for inquiry and report by 30 September 1991. The reporting date was subsequently extended to 15 November 1991.

- The costs and benefits for Australian industry of an international consensus in favour of a stabilisation of emissions of greenhouse gases not controlled by the Montreal Protocol on Ozone Depleting Substances, based on 1988 levels, by the year 2000 and a reduction in those emissions by 20 per cent by the year 2005.
- The new opportunities that could arise for Australian industry as a result of that international consensus.
- How Australia would best prepare itself to respond to those costs and benefits.

The Commission is to have regard to the established economic, social and environmental objectives of government and is to take account of any recent substantive studies undertaken elsewhere.

***Stage of completion***

Inquiry in progress.

6.12.90 ***Reference title***      **Availability of capital**

***Terms of reference***

The availability of capital for business was referred for inquiry and report by 7 December 1991.

The Commission is to identify impediments faced by business enterprises in obtaining equity and loan capital that lead to inefficient resource use, and advise on courses of action to reduce or remove such impediments.

Without limiting the scope of the inquiry, the Commission is to have regard to:

- the impediments to the raising of equity capital for medium-sized Australian companies
  - the changed character of the stockbroking industry including the decline in the practice of underwriting, particularly for medium businesses, and its implications;
  - debt financing of Australian businesses both medium and small;
  - the lending practices of the banking and finance sector;
- recommendations of the inquiry by the House of Representatives Standing committee on Industry, Science and Technology into Small Business (the Beddall Report) on:
  - small business access to start-up and working capital;
  - the effects of deregulation on the availability of venture capital to small businesses;
- the role of government financial institutions, except the Reserve Bank.

The Commission is to avoid duplication of any recent substantive studies undertaken elsewhere.

***Stage of completion***

Inquiry in progress.

6.12.91 **Reference title** Cost recovery for managing fisheries

**Terms of reference**

Cost recovery for managing fisheries under Commonwealth control was referred for inquiry and report by 7 December 1991.

The Commission is to determine the major beneficiaries of management of Commonwealth fisheries, including those sectors of the fishing industry which benefit both directly and indirectly, recreational fishermen, fishing communities, fish consumers and the wider community, and the extent to which each of these groups benefits.

In making its assessment the Commission is to take into account:

- Australia's international obligations particularly those under the United Nations Law of the Sea Convention to conserve and manage the fish resources of the Australian Fishing Zone;
- the Government's fisheries management objectives of resource conservation, economically efficient exploitation and an appropriate community return;
- the Government's policy that subject to it being cost effective to do so, the beneficiaries of services should contribute to the costs in proportion to the benefits received;
- the special circumstances existing in Torres Strait where management covers both commercial and subsistence fishermen and where special treaty obligations apply; and
- the government policy of meeting the full cost of surveillance and enforcement of illegal foreign fishing in the Australian Fishing Zone and of recovering the full cost of management from licensed foreign fishing boats.

The Commission is to consider the most suitable point(s) at which cost recovery levels could be imposed, bearing in mind the extent to which the cost recovery from one sector is likely to be passed on as a cost to other sectors of the fishing industry.

The Commission is to report on:

- which beneficiaries should contribute to the cost of fisheries management; and
- the average proportion of management costs that should be recovered from industry participants and that to be met by the Government for all Commonwealth managed fisheries.

The Commission is to identify fisheries where circumstances warrant variations to these cost proportions, and recommend appropriate variations for each of these fisheries.

The Commission is to have regard to the established economic, social and environmental objectives of governments and is to avoid duplication of any recent substantive studies undertaken elsewhere.

**Stage of completion**

Inquiry in progress.

6.12.90 **Reference title** Exports of health services

**Terms of reference**

Exports of health services were referred for inquiry and report by 31 December 1991.

The Commission is to report on any institutional, regulatory or other arrangements subject to influence by governments in Australia which impede the efficient export of health services, and advise on their effects and on any appropriate changes to these arrangements.

The Commission is to:

- have regard to established social objectives of governments and the potential impact of export development on access to, and the cost of, health services for the Australian community;
- avoid duplication of any recent substantive studies undertaken elsewhere; and
- have regard to controls over the various components of the migration program and measures which need to be applied to ensure that appropriate controls are maintained.

**Stage of completion**

Inquiry in progress.

10.12.90 **Reference title** Exports of education services

**Terms of reference**

Exports of education services were referred for inquiry and report by 31 July 1991.

The Commission was to report on any institutional, regulatory or other arrangements subject to the influence of governments in Australia which affect the efficient export of education services, and advise on their effects and on any appropriate changes to these arrangements.

The Commission was to have regard to:

- established social objectives of governments and the potential impact of export development on access to, and the cost of, education services for the Australian community; and
- the objectives determined by the Government for the migration program; controls over the various components of that program; and the processes for selection within each component including the provisions for offshore recruitment.

Without limiting the scope of the reference the Commission was to identify the economic (including trade and foreign affairs) costs and benefits to Australia of offering formal and non-formal courses to overseas students studying in Australia, and report on:

- impediments to growth in these courses;
- the effects of regulatory arrangements, including the adequacy of existing administrative and coordination arrangements, accreditation and compliance costs;

- the economic costs and benefits to Australia from these courses, including the impact of those students who subsequently migrate to Australia on Australia's skills base and the implication for the Australian labour market; and
- information available on the expenses and sources of funding of students participating in such courses and the destination of students after course completion.

The Commission was to avoid duplication of any recent substantive studies undertaken elsewhere.

***Stage of completion***

IC Report No. 12 signed 14.8.91 but not released as at 25 September 1991.

20.3.91      ***Reference title***      **Australian sugar industry**

***Terms of reference***

The Australian sugar industry — at the Commonwealth, State and Territory level — was referred for inquiry and report by 21 March 1992.

The Commission is required to review production, institutional, regulatory or other arrangements subject to influence by governments in Australia, including changes made since the 1983 IAC inquiry, and identify any further initiatives which will raise overall economic efficiency.

Without limiting the scope of the inquiry the Commission was requested to evaluate:

- marketing arrangements in Queensland and New South Wales including consideration of the national and international marketing environment for sugar cane and sugars; and
- the appropriate form and level of tariffs on imported sugar to apply from 1 July 1992.

The Commission is to have regard to the established economic, social and environmental objectives of governments.

***Stage of completion***

Inquiry in progress.

8.4.91      ***Reference title***      **Review of overseas export enhancement measures**

***Terms of reference***

Overseas export enhancement measures were referred for inquiry and report by 8 April 1992.

Without limiting the scope of the inquiry the Commission was requested to give specific attention to:

- the methods by which Australia's main trading partners promote export and import replacement activities;
- the direct costs and wider economic implications for these economies of these measures;

- the extent to which these measures are consistent with GATT obligations; and
- the economic implications of these activities for Australia.

***Stage of completion***

Inquiry in progress.

9.5.91 ***Reference title***      **Raw materials pricing for domestic use**

***Terms of reference***

The pricing of locally produced raw materials for domestic use was referred for inquiry and report by 9 May 1992.

The term 'raw materials' excludes wool, but is to be interpreted broadly to encompass a wide range of other materials including, but not limited to: basic shapes of ferrous and non-ferrous metals; processed minerals; oil and gas feedstocks; semi-processed timber products including wood chips; meat, grains, fruit, dairy, nuts, seafood and agricultural produce for further processing and natural fibres including cotton.

The Commission is to report on:

- the relationship between the export prices of raw materials and the prices at which they are available to domestic users; and
- institutional, regulatory or other arrangements subject to influence by governments in Australia which lead to inefficient resource use and advise on courses of action to remove or reduce inefficiencies.

***Stage of completion***

Inquiry in progress.

9.5.91 ***Reference title***      **Commercial restrictions on exporting  
(including franchising)**

***Terms of reference***

Franchise agreements and other like arrangements restricting Australian exports were referred for inquiry and report by 9 May 1992.

The Commission is to identify institutional, regulatory or other arrangements subject to influence by governments in Australia which lead to inefficient resource use and advise on courses of action to remove or reduce such inefficiencies.

Without limiting the scope of the inquiry the Commission is to:

- identify the range and scope of franchise or other like restrictions imposed on or agreed between Australian businesses and overseas enterprises which could impede market and product development; and
- assess the extent to which these restrictions or other limitations influence foreign investment in and exports from Australia.

***Stage of completion***

Inquiry in progress.

18.7.91      **Reference title**      **Water resources and waste water disposal**

**Terms of reference**

Water resources and waste water disposal were referred for inquiry and report by 18 July 1992.

The Commission is required to report on institutional, regulatory or other arrangements subject to influence by governments in Australia which lead to unsustainable and inefficient resource use and advise on how these institutional, regulatory or other arrangements might be revised.

The Commission is to have regard to the established economic, social and environmental objectives of governments and avoid duplication of any recent substantive studies undertaken elsewhere.

**Stage of completion**

Inquiry in progress.

18.7.91      **Reference title**      **Intrastate aviation**

**Terms of reference**

The regulation of intrastate aviation was referred for inquiry and report by 18 July 1992.

The Commission is required to report on institutional, regulatory or other arrangements subject to influence by governments in Australia which lead to inefficient resource use and advise on courses of action to reduce or remove such inefficiencies.

The Commission is to have regard to the established economic, social and environmental objectives of governments avoid duplication of any recent substantive studies undertaken elsewhere.

**Stage of completion**

Inquiry in progress.

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