
6 Some issues in designing and reviewing industry assistance

As earlier chapters and previous editions of *Trade & Assistance Review* demonstrate, governments utilise an extensive array of measures to assist industry. Grants and tax concessions, tariffs and quotas, statutory marketing arrangements, and other measures are deployed to provide direct assistance to industries. Governments also provide support in less direct ways; for example, by funding public bodies such as CSIRO and Tourism Australia that provide services of benefit to certain industries. The Commission's assistance estimates for 2006-07 include well over 100 separate measures in the budgetary category alone. In total, Australian industries were estimated to have received the equivalent of around \$15.7 billion in assistance (in gross terms) from all the Australian Government measures covered in the 2006-07 estimates.

The nature and extent of assistance arrangements have changed considerably over time. In particular, there has been a substantial reduction in the use of trade restrictive devices such as tariffs over the last two decades or so. There has also been considerable 'churn' in the delivery of assistance, particularly budgetary programs, with particular measures frequently being amended, extended or repackaged. Such changes reflect reassessments of the merits of different forms of assistance as well as governmental priorities and external pressures.

After more than 16 years of economic growth in Australia, underpinned partly by reforms to industry assistance arrangements, pressures for further changes are emerging:

- The recent appreciation of the Australian dollar has directly affected the competitive position of businesses that export or compete against imports, prompting some calls for additional subsidies, or for a pause in scheduled reductions in protection, to provide relief.
- At the same time, concerns about skills shortages and capacity constraints are highlighting the 'opportunity costs' of assistance measures that enable inefficient and declining industries to hold resources, restricting the scope for more efficient industries to expand.
- Emerging inflationary pressures and a more difficult economic outlook internationally have led the new government to signal its intention to adopt a

stringent approach to fiscal policy, which implies a need for greater scrutiny of budgetary assistance measures, including the potential to rationalise programs.

- Looking longer-term, the goal of sustaining and lifting living standards while addressing issues such as climate change and the ageing of the population demands ongoing improvements in economic efficiency, to which industry assistance will need to contribute rather than to hold back.

The new government has already announced some revisions to assistance arrangements and has foreshadowed several reviews, including in relation to innovation, exports, and the automotive and textiles, clothing and footwear industries.

All this makes it timely to take stock of the principles that should guide the efficient development and application of industry assistance, and to consider areas where changes may be needed.

The Commission has examined a wide range of industry assistance over the years, including both industry-specific measures (such as tariffs and subsidies for the automotive industry) and more broadly-based measures (such as R&D and export assistance available to businesses generally). Most recently, its *2007 Science and Innovation* study examined various business programs and made recommendations for modifications to improve their effectiveness.

Drawing on this work, in this chapter the Commission:

- outlines developments in approaches to promoting industry development;
- sets out some key requirements for government assistance to be effective and productive; and
- points to a number of areas of assistance warranting review.

6.1 The evolution of industry assistance

Mirroring an improved understanding over the past two or so decades of what constitutes appropriate macroeconomic policies and objectives, there has been an accumulation of experience and evolution in the understanding of which microeconomic policies are conducive to appropriate business and industry development.

Not all of these matters could be said to be ‘settled’; nor is it possible or even desirable for them to be considered so. Indeed, good public policy requires an ongoing openness to examine the implications of emerging theoretical developments, and to assimilate evidence of the success or failure of past policy approaches and ‘experiments’. That said, gaining an appreciation of the effects and merits of industry assistance and other microeconomic policies can be quite complicated. This

can be compounded by the claims and influence of groups that have a strong stake in the outcomes. Accordingly, even if the weight of theoretical and practical evidence strongly supports particular policy approaches, wider acceptance of those approaches can sometimes be difficult to achieve.

Nevertheless, there has generally been a move away from a narrow and defensive conception of industry policy, founded on protecting firms and industries from competition. Taking its place has been a growing recognition that there is a need to get the broad economic environment right for all firms, and to facilitate adjustment to competitive market pressures rather than to resist it.

There has also been increasing recognition that assistance to one industry typically comes at a cost to other industries and to Australians generally. Indeed, in its 2002 report on automotive assistance, the Commission found that tariffs on imported cars restricted choice, inflated the price of cars for consumers and added to the costs of the many businesses that use motor vehicles as inputs. Together with direct taxpayer support, the total transfer to the industry from the then prevailing level of automotive assistance was estimated to be at least \$1 billion per year, or some \$2800 per vehicle.

Accordingly, sectional claims for assistance are now treated more critically. It is increasingly accepted that for assistance to be warranted, it is necessary to establish a sound rationale as to why government intervention would benefit the economy and the community at large, beyond the particular needs and interests of people in specific firms or industries.

Further, industry assistance has come to be recognised as just one facet of industry policy, which is itself increasingly seen as encompassing the broad range of policy-related factors that bear on the performance of industry generally. Those factors, which the Commission outlined a decade ago (box 6.1), include policy areas that historically have constituted impediments to industry performance (such as high cost government provision of infrastructure services) as well as areas of support targeted at market failures (such as R&D assistance).

Many of the economic reforms of the last two decades or so have addressed these areas, with a particular focus on removing obstacles to competition. The effect of many of the reforms has been to heighten the pressure on firms to be cost-conscious, innovative and productive, while increasing their capacity to perform effectively in these respects. Inevitably, not all economic reforms during this period have been appropriate or effective, and in some areas government policies appear not to have kept pace with the needs of workforce and industry. Emerging gaps in infrastructure are but one indicator that much more needs to be done. Even so, there has been considerable progress in most of the areas previously identified by the Commission (box 6.1) as central to securing a productive industry policy framework.

Box 6.1 The dimensions of a 'productive' industry policy

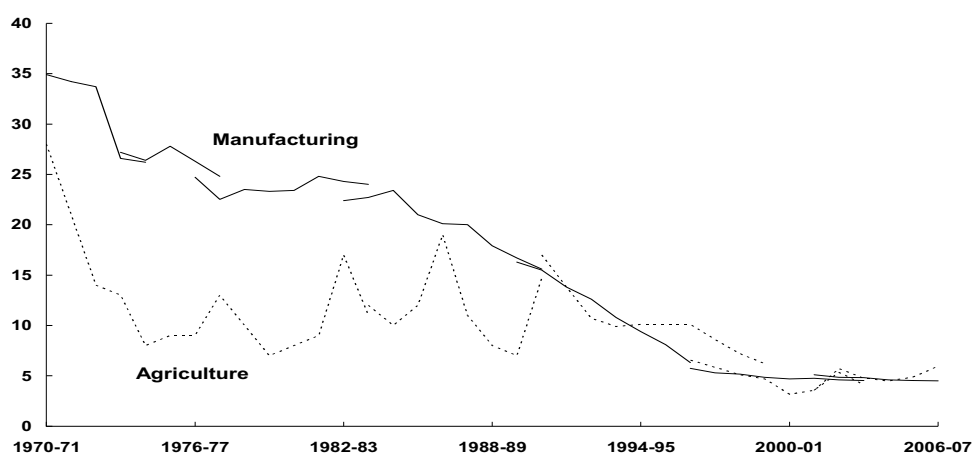
In its *Annual Report 1996-97*, the Industry Commission identified that, in addition to sound fiscal and monetary policy, an economic environment conducive to efficient and productive industry development must include the following elements:

- labour market regulation which facilitates flexibility and responsiveness within Australia's diverse enterprises and regions;
- education and training systems which can produce people with the mix of critical and applied skills that industry needs, and which facilitate the 'lifelong learning' necessary in the face of rapid change;
- a taxation system which can generate the revenue needed for government activities and social programs without distorting decisions on investment and work, or penalising production or trade;
- efficient, high quality infrastructure services — including transport, telecommunications and energy, all of which are critical determinants of industry performance in our large, remote country;
- competitive and efficiently regulated capital markets which provide access to debt and equity internationally at low cost;
- a regulatory framework which meets social, environmental and economic goals at least cost to business and the community generally;
- property rights which provide a secure foundation for investment and innovation;
- the removal of inappropriate barriers to competition both domestically and at our borders, as well as effective government participation in international forums directed at trade liberalisation in our foreign markets; and
- public support for research and innovation through basic research activities in universities, effective linkage mechanisms between the public and private sectors, and assistance to induce socially beneficial business R&D which otherwise would not be undertaken.

Source: IC (1997).

There has been particularly significant reform in the area of industry-specific assistance. While there was a significant one-off tariff cut in 1973, systematic reform commenced in the mid-1980s. This included the abolition of import quotas, local content schemes and the like, programs of phased reductions in virtually all tariffs to 5 per cent or less (from 1988 to 1996), and the progressive dismantling of agricultural price supports. Accordingly, by 2000, there had been substantial reductions in overall levels of assistance to agriculture and manufacturing (figure 6.1), as well as a closing of disparities in assistance to different industries. At the same time, there have been increases in budgetary assistance for activities such as enterprise adjustment and R&D.

Figure 6.1 **Assistance to manufacturing and agriculture**
Effective rate of assistance (per cent)



Data source: Commission estimates.

The microeconomic reforms of recent decades have generated or facilitated significant changes in the Australian economy, including:

- enhanced structural change, with resources shifting between sectors and industries more on the basis of market signals about consumer demand and relative returns;
- increasing business expenditure on R&D, which has roughly trebled as a proportion of GDP since the mid-1980s;
- strong growth in exports as well as imports following reductions in border protection; and, ultimately
- significantly higher productivity and incomes following a surge in labour productivity growth during the 1990s.

Overall, Australia's economic performance since the early 1990s has shown a marked improvement compared to earlier periods and the experience of many other developed countries, with stronger growth in per capita incomes, lower inflation and, more recently, lower unemployment. While many factors affect economic outcomes, a range of research and analysis (see, for example, OECD 2004, PC 2005c, Banks 2005) has confirmed that reforms to assistance, along with other structural reforms, have been an important element in improving economic performance.

6.2 'Productive' industry assistance

What lessons can be drawn from these experiences that can help guide Australia's approach to industry assistance going forward?

The most fundamental requirement is that assistance be shown to be beneficial for the community as a whole, rather than just for a narrow group of recipients. Although this may seem obvious, for most of Australia's history it was effectively disregarded in industry policy debates, and even today some claims for assistance implicitly presume that if one sector benefits from a measure, that makes it beneficial for the overall economy.

In fact, as outlined above, assistance enjoyed by one industry or activity typically comes at a cost to other industries and activities across the economy. These 'economy-wide' costs of assistance arise not just from the direct effects of, for example, tariffs on consumer spending power and subsidies on the budget, but also through diffuse but significant side-effects on economic variables such as input prices, relative wage levels and the exchange rate. Particularly in times of capacity constraints such as at present, assistance risks being a zero-sum game at best, and at worst can leave the community as a whole significantly worse off. This is not least because, in addition to its adverse effects on other industries, providing assistance can in itself entail substantial costs — including tax raising, administration and compliance costs.¹ Hence, calls for assistance need to be treated cautiously.

That said, there are various instances where market characteristics mean that appropriately targeted and designed assistance measures can yield a net pay-off for the community as a whole.

To ensure that any particular assistance measure does provide such a pay-off, rigorous analysis of policy proposals is needed. This entails a sequence of steps, commencing with an examination of the nature and causes of a policy problem and the associated rationale for government action. It concludes with a preferred policy measure, based on an assessment of its benefits and costs, relative to other feasible options, including as a baseline a 'no response' option. And after a measure has been in place for some time, there needs to be an evaluation of its effects and, where appropriate, a reformulation of the measure.

¹ The 'deadweight costs' of raising taxes alone are substantial, with most estimates lying between 20 and 50 cents in the dollar (CIE 2005a). The administrative costs of delivering budgetary assistance programs can vary widely. At the very low end, the Commission estimated the administration costs of the Pharmaceuticals Industry Investment Program to be less than 1 per cent of total program payments (PC 2003). On the other hand, in its last inquiry into State and local government assistance (IC 1996), it found that the delivery costs for a range of programs averaged 28 per cent of the assistance provided, and some exceeded 80 per cent.

Rationales for industry assistance

A sound rationale is a necessary (though not sufficient) basis for good policy. Various rationales are posited for assistance, but some are more defensible than others.

Market failure

In exploring a wide range of policy issues, the Commission has found that government intervention in the economy is most likely to generate net benefits when focussed on addressing *genuine* and *significant* market failures. The ‘spillovers’ from one firm’s R&D to rival firms is a well known example of a ‘market failure’; the ‘information gaps’ that hinder some businesses in determining whether it is worthwhile to invest in energy efficiency measures is another. Where market failures are significant and government measures can be devised that address them efficiently, such measures offer scope to generate net benefits.

In practice, much government intervention (for example, in relation to public utilities and financial markets) has been predicated on market failure and, over the years, the Commission itself has identified numerous instances where government interventions have been warranted on these grounds — including, for example, in relation to product liability, consumer protection, gambling, broadcasting, building standards, water supply, recycling, workplace safety, chemicals and plastics, access to infrastructure services and trade practices.

In relation specifically to industry assistance measures, in its recent study on *Science and Innovation* the Commission confirmed that there are significant market failures surrounding R&D and that a number of existing R&D assistance measures, while amenable to improvement, are likely to yield net benefits (PC 2007b). Commission research has also identified market failures that might warrant industry assistance in other areas including, for example, in relation to aspects of exporting and business networking (Lattimore et al. 1998). And the Commission has identified significant market failures in the context of some inquiries into particular industries, such as the automotive industry (PC 2002b).

That said, there is a tendency for proponents of assistance to co-opt the language of market failure — labelling ordinary inter-industry linkages as ‘spillovers’, for instance — or to assert that a particular market outcome represents a market failure and justifies a particular assistance measure. No market is without its imperfections but, for instance, the failure of particular commercial enterprises does not constitute market failure. Moreover, while market failures in a strictly technical sense can be pervasive, the task for policy making is to identify those instances of *sufficient significance* that ‘corrective’ government action (and its costs) are warranted.

'Second best' rationales

There can also be a 'second best' rationale for the provision of assistance — essentially, to counter the effects of distortions caused by other government policies. For example, profits and losses are treated differently under Australia's corporate tax system: profits are taxed immediately, whereas losses must be carried forward for tax purposes and thus lose some of their value (as a means of reducing tax payable) to the business. Often this loss is appreciable. In effect, governments generally share more of the gains of higher risk investments, compared to less risky ones, but considerably less of the losses. In this case, it is not feasible to address the problem through changes in current tax law without significant risk of abuse. Accordingly, there may be a case for compensating assistance measures to encourage riskier investments (PC 2007b, p.81).

Distributional issues

Distributional considerations provide a further rationale for some forms of industry assistance. Most clearly, assistance may sometimes be warranted to compensate producers for government decisions that lead to the loss of pre-existing 'property rights'. For example, when the dairy industry was deregulated in 2000, causing a decline in milk prices, the Government provided producers with compensatory payments, as well as exit assistance to those producers wanting to leave the industry.

Equity considerations may also be a factor underpinning the provision of retraining and adjustment assistance for workers displaced by reforms or structural change. Similar considerations may apply to the retention for a period, albeit at progressively lower rates, of tariffs and other pre-existing forms of assistance that would otherwise be clearly unjustified. Equally, it needs to be recognised that the special treatment for recipients inherent in the provision of assistance can itself be criticised on equity grounds.

Problematic pretexts

In contrast to the above circumstances in which assistance is potentially justified, a variety of propositions used to advocate assistance do not in themselves constitute valid rationales. These include arguments that assistance is necessary to boost exports, to protect jobs or increase employment, to enhance the viability or competitiveness of particular firms and regions, to promote the growth of 'strategic' sectors and transform industry structures, to reduce or rectify trade imbalances in particular sectors, to hasten business outcomes, or to counteract the effects of exchange rate appreciation or competition from low-cost foreign suppliers.

Box 6.2 **Problematic pretexts for assistance**

As noted in the text, it is sometimes proposed that assistance is necessary to boost exports, to reduce or rectify trade imbalances in particular sectors, to enhance the viability of particular firms and regions facing heightened competition from abroad, to maintain employment, and to hasten business outcomes and so on.

Among other things, some propositions of this type suggest confusion about the appropriate aims of economic policy. For example, exporting is not an end in itself because, while exporting brings benefits, the production, marketing and delivery of goods and services for export also uses Australian resources. For Australia to gain from any particular exporting activity, the benefit received needs to exceed the value that could have obtained by using the embodied resources to supply the domestic market (or, in some cases, by 'leaving them in the ground' to retain the option of future use). Thus, while most current exporting activity may well generate net benefits for Australia, it cannot be presumed that additions to exports, particularly if induced artificially by assistance, will automatically do so too. Economic policies should aim to enhance the net pay-off the Australian community gains from its resources; not to achieve particular levels of (or increases in) activities such as exporting.

Some also reflect misunderstandings of the mechanics of economic activity and policy. For example, the objective of rectifying trade imbalances in particular sectors presumes that such imbalances are bad. Yet the exploitation of sectoral trade imbalances allows economies to specialise in certain areas of production, export their surpluses and import other products. This is where many of the benefits of trade arise. Similarly, that some firms and industries are rendered less profitable or even viable by movements in the exchange rate is not a market failure; rather, it is a necessary aspect of the process of structural adjustment by which resources are induced to move between sectors within the economy in order to best exploit changing economic circumstances and emerging opportunities.

Some pretexts for support fail to recognise the strength and adequacy of private and commercial incentives in many facets of economic activity. For instance, certain R&D assistance schemes have been predicated on the basis that 'speed to market' is critical for an innovation's commercial success. However, business people have no shortage of incentives to take account of things that are known to be critical for commercial success, and to make appropriate judgments about whether it is worth devoting resources to hasten their speed to market.

And some relate to objectives, such as employment, that are best dealt with using other instruments. Of course, it may be possible to retain jobs in a particular sector by assisting that sector, at least in the short term. However, the provision of assistance can be costly and typically has adverse side-effects on other industries, reducing employment opportunities elsewhere in the economy. Employment levels within an economy are largely dependent on macro-economic phenomena and education, training and labour market policies, and are poorly dealt with via industry assistance.

The Commission has examined propositions of this type in a variety of contexts, and has generally found them to be insufficient on their own to justify industry assistance. This is not to say that benefits do not derive from exports, jobs, firm viability and so on; nor that rationales do not exist that would justify measures that would promote these. However, as self-standing rationales for industry assistance, such propositions have several limitations (box 6.2), and assistance measures based on them risk generating significantly more costs for Australia than benefits.

Ensuring net pay-offs

While the identification of a well-founded rationale is an important prerequisite, it is not enough to ensure that assistance measures will confer a material net pay-off to the community. Given the adverse side-effects and other costs of providing assistance, mentioned earlier, it remains necessary to consider whether the economic efficiency and/or distributional benefits of particular measures are likely to exceed those costs. Some matters relevant to such assessments are discussed later in this section.

A further consideration is whether a particular assistance measure is the best response available to address an identified market failure or a second best or equity concern. For example, in its report on automotive assistance, the Commission (2002b, p. 147) concluded that the automotive industry generates significant spillovers, but that it is preferable to support spillovers through generally available measures, such as general R&D support, rather than to provide compensatory industry-specific assistance. Similarly, the social security and tax systems, as well as generally available adjustment measures, will usually be the most appropriate vehicles for assisting the adjustment process and moderating adverse distributional impacts, including those induced by changes in government policy (PC 2001).

Careful design of assistance measures

The design of an assistance measure entails many choices. Some of these are threshold issues, such as what type of policy instrument to use; others are of a more detailed nature, such as how to define ‘small’ business or ‘eligible’ investment activity, for the purposes of delimiting access to the assistance.

Box 6.3 contains several principles and considerations that provide guidance for the design of efficient and effective industry assistance. These have relevance for the design of assistance measures generally, although the main focus of the following discussion is on the design of budgetary assistance programs.

In the Commission’s experience, the extent to which sound assistance policy and design requirements are met in practice varies greatly.

Box 6.3 Key questions in designing assistance measures

Scoping and targeting the problem

- What is the underlying market failure, distortion or distributional concern that may warrant intervention? What economic activity is considered to be ‘undersupplied’ by the market, and are there impediments to that activity that cannot be changed? Why are personal or commercial incentives insufficient to generate reasonable outcomes?
- How large and widespread is the problem? For how long may support be needed?
- Is there a clearly defined target/recipient for assistance that is closely linked to the problem? What types of measures would most directly correct the problem or counter its effects?
- What are the (measurable) outcomes by which to judge effectiveness?

Maximising induced activity (additionality) that has public benefit spillovers:

- Where relevant, what types of firms or activities are more likely to have high inducement rates together with high spillover effects? What design mechanisms could be used to target those and screen out activity that would have taken place anyway, without assistance? Are there risks that the assistance may ‘crowd out’ other activity (such as diverting resources from unassisted R&D to assisted R&D)? How can these be managed?

Minimising adverse behaviour and unintended (indirect) effects:

- Is there potential for inefficient strategic changes in activity to qualify for assistance or manipulation to inflate claims? Will cost subsidisation reduce the incentive to contain total costs and exercise sound project management? Is there potential for leakage of assistance to unintended beneficiaries (such as foreign shareholders or local service providers)?
- Could the assistance undermine the objectives of other economic and social policies (for example, by diverting land and labour and bidding up input prices)?

Eligibility:

- Should the assistance be selective (merit based) or generally open to all? Do the selection criteria reflect sound assistance principles (such as additionality and spillover benefits)? Is the selection process appropriately transparent, publicly accountable and cost efficient?

Quantum considerations:

- Is the assistance provided proportionate to the scale of the problem?
- Are there overlaps with other assistance measures, including State and Local Government measures? Will effective assistance fluctuate with variables outside of program control (exchange rates, tax rates)? Are there key design parameters which need regular updating, and can they be estimated precisely?
- Are the anticipated benefits of the amount of assistance to be provided (taking into account inducement rates, spillovers etc) sufficiently large to outweigh the costs (including the administration, compliance, and tax-raising costs)?

Targeting

Effective programs draw on sound rationales to target, as closely as possible, the underlying problem. For example, small business programs should address economic problems that are associated with firm size — such as informational market failures — rather than be aimed at supporting small business per se. Good targeting should translate into a capacity to articulate (measurable) objectives.

In turn, targeting the underlying problem has implications for the nature of the assistance measure adopted. For example, one rationale for export facilitation assistance is that firms may be ignorant of the benefits of exporting or not have the required know-how. However, this problem is probably only significant for smaller non-exporting firms in certain industries, and suggests an awareness raising program rather than the general provision of export subsidies (Lattimore et al. 1998).

Targeting of the problem can also have implications for the duration of assistance. For example, where a program is premised on a lack of awareness of the value of certain practices (such as improving energy efficiency) or of undertaking a particular activity (such as breaking into new export markets), the assistance should have a fixed life, with the important objective that the better practices and activities will continue once public support has ceased. In a similar vein, the intention of the forerunner of the current Tasmanian Wheat Freight Subsidy Scheme, which commenced in 1989, was to provide *transitional* assistance to Tasmanian bulk wheat users (such as flour millers and livestock farmers) to adjust to the deregulation of domestic wheat marketing and pricing arrangements. This implies a program of limited duration (whereas, in fact, the assistance remains in place today even though the original objective has been met.) (PC 2006b).

Inducing additional activity

A critical consideration for the design and effectiveness of many budgetary assistance programs is how to induce an increase in the level of the targeted activity, rather than just transferring taxpayers' dollars to firms for little or no public benefit.

Public funding does not necessarily translate into new dollars of activity. This is partly because some of the assisted activity may have taken place anyway. For instance, around half of the subsidies for R&D and value added activity under the (former) Pharmaceutical Industry Investment Program (PIIP) were estimated to have represented a 'free lunch' for the recipients (PC 2003); and, as reported in chapter 3, some 63 per cent of Export Market Development Grants (EMDG) recipients surveyed by the CIE indicated that the scheme had little or no influence

on their export marketing. Further, a series of assessments of the basic (125 per cent) R&D tax concession strongly suggests that the majority of subsidised activity would have occurred anyway (BIE 1993, Lattimore 1997, CIE 2003, PC 2007b).

Even where recipients of assistance are induced to undertake some new activity, the assisted activity may ‘crowd out’ some unassisted activity. For example, assistance for exporting to ‘new’ markets may divert supply away from existing markets. Diversion effects (both within a firm and between firms, industries and regions) are more likely when there are capacity constraints on necessary inputs, such as skilled labour, that limit overall expansion.

Close attention to targeting can achieve higher rates of inducement. Thus, for example, inducement will tend to be higher where assistance is provided for activities that extend firms beyond their current skill sets (such as breaking into new, culturally different export markets). Inducement may also be higher than otherwise where eligibility criteria identify firms that are constrained (such as liquidity-constrained start-up firms, firms with tax losses, or firms with higher debt/equity ratios).

One challenge facing designers of assistance measures is that managers of firms have weak incentives to disclose to program administrators whether they were going to undertake some subsidised activity or not. When assistance eligibility conditions are not tight and compliance costs are low, firms will be more likely to apply for government subsidies, even though they were going to do the activity anyway.

Some program designs try to create incentives, or to ring-fence assistance, to avoid assisting activity that would have occurred anyway. These include schemes that tie assistance to increments in firms’ activity levels, such as the premium (175 per cent) R&D tax concession. These and some other mechanisms for inducing additionality are discussed in box 6.4.

Box 6.4 **Some options for improving additionality**

Incremental schemes

Tying assistance to increments in firms' activity levels is one way to better ring-fence assistance to avoid assisting activity that would have occurred anyway. For example, the 175 per cent R&D tax concession is only payable for certain R&D expenditure exceeding the firms' average expenditure on such R&D for the previous three years. Similarly, under the Pharmaceutical Partnerships Program, assistance is provided only for incremental activity over a rolling average base. Incremental schemes put pressure on firms to keep lifting their activity level. To encourage such effort, incremental schemes tend to offer significantly higher subsidy rates than non-incremental schemes. That said, it is an empirical question as to whether a particular incremental or non-incremental scheme generates a better 'bang-for-public buck', as it depends on the actual inducement and subsidy rates.

Contingent repayable assistance

Repayable assistance schemes have been used in Australia (for example, as part of the R&D Start scheme) and overseas, partly as a means of limiting assistance to non-induced activity. If the targeted activity proves not to generate sufficient revenue for the firm to cover the costs it incurs (even though it may generate important spillovers), the firm retains the assistance. But where projects prove to be profitable in their own right, the assistance is returned to the government.

The incorporation of 'profit sharing' and 'stock option arrangements', contingent on commercial success, can further sharpen the incentives for firms to not seek assistance for projects that they were intending to do anyway. For example, if the government were to require a share of the royalties from any subsidised R&D projects that proved commercially successful, a firm that has a commercially attractive proposition will be reluctant to dilute its interest by agreeing to share the profits. Genuine "incentive compatible mechanisms" of this nature — along the lines proposed by Fölster (1991) — do not appear to have been applied widely in practice, but there are arguments for such experimentation.

Selection methods

Additionality is also likely to be affected by methods used to distribute assistance to applicants. The 'open to all' approach — where assistance is 'automatic' within the rules of the scheme (such as under the basic R&D tax concession) — is less likely to screen out activity that would have taken place without assistance. However, such simple and broadly-based rules can reduce resources devoted to wasteful lobbying and litigation. In contrast, allowing greater administrative discretion in decisions regarding assistance provision, using particular selection criteria, may be justified if the extent of social spillover benefits and/or the responsiveness to assistance (inducement rate) varies 'noticeably' from one 'target' (firm, industry, sector, type of activity) to another — the policy challenge is whether such differences can be reasonably known beforehand by decision makers.

Minimising strategic behaviour and unintended effects

Another important consideration for the design of some assistance measures is the risk that some firms may simply alter their reporting practices in order to qualify for additional assistance. Past examples of this phenomenon include:

- attempts by firms to have non-R&D activity pose as genuine R&D, as occurred in the case of core technology, feedstock in pilot plants and interest deductions in the R&D tax concession and syndicated R&D programs during the 1990s — in 1995-96 assistance claims for such ‘other’ R&D expenditure totalled over \$2 billion, close to half of total R&D claims (Banks 2000); and
- manipulation of claims to increase assistance paid under the Tasmanian Freight Equalisation Scheme (TFES), where a quirk in the design allowed businesses to make inflated claims (PC 2006b, p. 102).

Further, the provision of some forms of assistance can dull incentives for good project management and cost control, such as where funding is made proportional to the recipient’s costs. One design approach for preserving these incentives is a sliding scale of reducing assistance as costs rise. A more extreme approach is to decouple assistance from costs: for example, by providing assistance as a flat rate of subsidy per unit of output.

Assistance may also leak to unintended beneficiaries if, for example, service providers (say a business consultant or freight company) are able to increase their prices in the knowledge that clients are to be subsidised. The scope for such appropriation of assistance by third parties depends predominantly on the degree to which the input markets are competitive. Leakage of assistance can also occur where it is provided to foreign-owned firms, but the level of inducement of the targeted activity is less than 100 per cent. Some of the assistance in such cases is a pure transfer from Australian taxpayers to foreign shareholders and a loss to Australia. The Commission (2003, p. 6.20) estimated such leakage to foreigners over the first three years of the PIIP to amount to \$35 million, after allowing for company and withholding tax.

The provision of assistance may also undermine other objectives. For example, the provision of assistance to ethanol production would be expected to increase demand for land and feedstock, thereby bidding up the price and/or diverting supply away from other agricultural activities.² Such impacts should be properly canvassed and weighed prior to the introduction of a measure.

More generally, efficient and effective assistance design needs to take account of potential interactions with other policies and programs. Areas where assistance is provided through multiple mechanisms include renewable energy technologies,

regional assistance, emerging technologies and ‘strategic’ sectors, tourism, exports and R&D. Policies and programs in such areas may overlap, compensate for, complement or adversely affect each other. Whether they collectively exhibit a degree of redundancy or complementarity is an important consideration. In this context, the potential for (and impact of) double-dipping needs to be closely scrutinised. For example, during its TFES evaluation (PC 2006b, p. 102), the Commission found some Tasmanian companies were receiving both freight assistance and regional development assistance.

Trade-offs and strategic considerations

The various principles and considerations elaborated above are inter-related, and at times involve trade-offs. For example, merit selection can aid targeting and induce greater additionality but may reduce administrative efficiency and increase compliance costs. Thus, isolated criticisms of a particular scheme’s design are just that; ultimately it is the total effectiveness and efficiency of a program or measure that counts.

At a broader strategic level, the provision of assistance can entail ‘diminishing marginal benefits’. For example, the positive inducement effect of more assistance (such as via a higher rate of subsidy, wider coverage, or longer duration) is, at some point, likely to wane. Moreover, a proliferation of schemes spreads government analytical and administrative expertise more thinly. Further, political economy considerations need to be recognised: if, once in place, a measure may be difficult to withdraw due to lobbying, that risk of irreversibility is a basis for caution at the outset, both in regard to introduction of the measure and the initial quantum of assistance it provides.

At the same time, the complexities and uncertainties entailed in the design of assistance programs mean that a degree of policy experimentation is warranted. Some mechanisms that have been used to contain these risks while retaining the benefits of experimentation include pilot programs, duration sunsets and multiple merit selection rounds, which can provide opportunity for learning and reformulation as well as cater for new entrants who missed earlier rounds.

² Indeed, an Australian study (CIE 2005b) estimated that mandatory blending of ethanol with petrol and diesel would permanently increase the average price of grain in Australia by over 25 per cent. An OECD study (cited in Webb 2008) estimated that the biofuels production in the United States, Canada and the European Union needed to replace 10 per cent of fossil fuels in transport could require between 30 and 70 per cent of existing crop areas (other things equal). As noted in chapters 3 and 4, assistance to ethanol is one factor underpinning recent increases in the price of feed grains, which has adversely affected pig producers and other rural industries (PC 2007c).

In sum, the design of assistance measures is not amenable to a mechanical approach. Rather, the design principles and options elaborated above have to be applied in a nuanced way, taking account of each specific context. As such, continuing reflection and appraisal of the rationale, effectiveness and economy-wide value for money of assistance measures is paramount.

Performance evaluation and redesign

As noted, because it is difficult to anticipate all the effects that interventions may have, and because circumstances change over time, there needs to be periodic evaluation of assistance programs, feeding back into better design.

While this happens in some cases, the Commission's *Science and Innovation* study identified some gaps and deficiencies in current practices:

Programs with significant budgetary implications are not always subject to routine, transparent and independent evaluation, nor always use rigorous methods to determine program effects. The results of evaluations are not always used to change programs that are not working well. There are some notable shortcomings in the arrangements for evaluating business programs, and most recently R&D Start, the predecessor to Commercial Ready. Reforms are needed. (PC 2007b, p. XXVI)

Three factors central to good post-implementation evaluations and reformulation are:

- structuring the review team and process to reflect the measure's significance and complexity;
- obtaining and using sound data and rigorous methodologies; and
- openness to sharing evaluation results and feeding sound assessment findings back into program design.

Appropriate structuring of review arrangements

While internal evaluations may be satisfactory for seeking ways of improving a program's administration and cost-effectiveness, more complex and significant cases are best addressed by review teams independent of program administration or policy. This is particularly so for evaluations that examine the fundamental question of a measure's appropriateness, which entails the assessment of its rationale, effectiveness and efficiency in an economy-wide sense. Inevitably, departmental officials may face mixed incentives when considering evidence that points to deficiencies in programs administered by their department or that could require the withdrawal of assistance to certain firms and industries within the portfolio's ambit.

While there are a variety of review arrangements entailing degrees of independence (Banks 2007), the robustness of a review is likely to be greater, and the risks of conflicts of interest minimised, where the review body is fully independent of both a program's administration and its direct beneficiaries.

Evaluation processes can also be bolstered by providing:

- scope for public consultation and the testing of policy options;
- appropriate terms of reference, encapsulating a focus on key principles such as rationales, economic spillovers and additionality; and
- sufficient time for thorough research, deliberation and reporting.

Sound methodology

Evaluations of assistance measures are fundamentally about assessing the impacts of a measure, including not only its direct effects on the recipients of assistance, but also its indirect effects on recipients and others. Empirical facts and analysis are a cornerstone of sound evaluations:

Effective policy advice ... must embody the highest standards of evidence-based analytical rigour. ... Analytical rigour demands soundness of empirical methods, analytical tools, models and frameworks. Analytical rigour should be the foundation upon which all advice is based; the ultimate assurance of its quality and credibility. (Henry, 2007)

There appears to be a good basis for internal and external quantitative program evaluation in Australia, including availability of reasonable data (departmental databases, ABS data, business records, international studies) and people with the relevant skills. Even so, data collection could be enhanced by setting appropriate and measurable performance indicators at the commencement of assistance programs, backed by the ongoing collection of relevant data and by limiting to the extent possible the confidentiality of data (PC 2007b; PC 2006b)

A stock-take of the many hundreds of evaluations undertaken across government programs would inevitably show a wide range in the methodologies and level of rigour applied. While in practice all evaluations are constrained to some extent by time, data and expertise, there are some aspects of the empirical component of program evaluations, and the appraisal of assistance measures generally, that often require closer attention (box 6.5).

Box 6.5 Empirical techniques and principles for evaluating assistance

A number of well-known empirical techniques are useful for evaluating the impacts of assistance measures. They are particularly relevant for 'ex-post' evaluations; although the underlying concepts can also be useful in policy development for helping to estimate, in advance, the potential impact of proposals. But the use of these techniques is mixed, and there are pitfalls to avoid.

- *Focussing on additionality* — This is typically paramount for determining a measure's effectiveness, but has at times been poorly measured.
- *Using control groups* — Comparison of outcomes achieved by assistance recipients with those of a control group (individuals or firms not in the program, but which are, in other respects, identical to the treatment group) can help distinguish the impact of the program from the many other influences affecting the behaviour of participants.
- *Distinguishing between correlation and causation* — For example, although there is a positive statistical relationship between export promotion expenditure and the size of EMDG grants, this does not indicate whether the grants cause promotion expenditure to increase: it is possible that firms that spend more on promotion qualify for larger grants.
- *Examining non-assistance influences on business outcomes* — Investigation of factors, aside from assistance, that may influence business outcomes (such as exchange rate changes, trade policies in overseas countries, and regulatory settings) can also help to isolate and understand the effects of the assistance, and may assist in better targeting.
- *Assessing the economy-wide benefits and costs* — In addition to measuring the gross benefits of assistance to recipients, assessments need to consider the type and scale of offsetting effects, such as from 'crowding out' that reduces the total inducement rate and any adverse effects on other firms, industries, consumers and the costs to taxpayers. For major assistance schemes, general equilibrium modelling can assist in gauging the more diffuse effects on variables such as exchanges rates, input costs and wage levels.
- *Using appropriate industry or activity data* — For example, the Commission's 2005 examination of tourism assistance found that official tourism statistics significantly overstate the size of the industry and do not provide a good basis for measuring the activity benefitting from, and potentially responding to, government support. Their use can cloud judgments about the impact of tourism assistance.
- *Avoiding the misuse of multipliers* — Gross input-output multipliers have been used in many studies to boost the estimated impact of assistance, in terms of jobs, income and tax revenue. While such multipliers are useful for understanding linkages between industries, they do not provide an appropriate measure of the impact of assistance. In particular, they do not measure spillover benefits and, by not considering the 'opportunity costs' of activity induced by assistance, they do not measure the economy-wide effects.

Post evaluation reporting and reformulation

Performance evaluation will only be useful if the findings are drawn on to enhance the future benefits of public support.

The timely and public reporting of the results of program evaluations should be expected as it increases transparency, reinforces the accountability of those designing and managing programs to act in the community's best interests and provides useful information to potential program participants. In practice, this has not always happened (PC 2007b pp. 420-421).

When sound evaluations identify assistance programs that do not pass an economy-wide net pay-off test, or recommend options that could improve effectiveness and value for money, it is reasonable to expect that the program will be reformulated or terminated. This occurred, for example, in response to the Commission's 2003 PIIP evaluation, which had found that additionality from assistance to pharmaceutical value added had been much lower (and had fewer spillover benefits) than from assistance to pharmaceutical R&D. The PIIP was replaced by the Pharmaceutical Partnerships Program in July 2004, with assistance tied solely to R&D.

However, there are also many cases where adverse evaluation findings have not been fed back into program design. These include the CIE's 2003 review of the R&D Start program and the Commission's March 2007 findings in relation to the basic R&D tax concession (although this program is within the scope of the new Government's innovation review). The release by the government of a statement of reasons for non-implementation is appropriate in such cases.

6.3 Areas of assistance for review

Notwithstanding the considerable reform of industry assistance over recent decades, there remain specific industry assistance measures, or broad areas that receive assistance from a number of measures, that prima facie warrant review. In some cases, this reflects apparent inadequacies in the policy processes used in establishing the measures, or in subsequent evaluations or reformulations, or concerns that have come to light since the measures were last examined. More generally, as noted above, with changing circumstances and improvements in the understanding of assistance, there is a need to periodically review the ongoing relevance and effectiveness of all programs, and interactions between them.

Recently announced reviews

The new government has already announced reviews in several areas of industry assistance (box 6.6), notably in relation to:

- the national innovation system;
- the automotive industry;
- the textiles, clothing and footwear industry; and
- exports policies and programs, including preferential trade agreements.

Other reviews announced recently that potentially cover some industry assistance matters include an independent review of quarantine and biosecurity arrangements (Burke 2008) and a parliamentary inquiry into coastal shipping (Albanese 2008).

National innovation system

The innovation review was announced on 22 January 2008. In releasing details of the review, the Minister for Innovation, Industry, Science and Research said:

In today's economy, innovation policy is industry policy. ... In particular, we need to find ways to increase innovation performance across the economy, to ensure that business has better access to new ideas and new technologies and to bridge the divide between industry and research (Carr 2008c).

Among other things, the review's terms of reference require examination of the scope for simplifying and reducing program duplication and ensuring that any support is well-targeted and easy to access. They specifically request examination of the R&D tax concession and the Cooperative Research Centres (CRC) program.

As noted in chapter 3, the Commission's 2007 *Science and Innovation* study made a number of recommendations to improve the design of the R&D tax concession and related programs, in particular to improve the extent to which the measures induce additional R&D activity and spillovers, rather than acting primarily to transfer money from taxpayers to R&D-intensive businesses. To date, only one of these recommendations has been implemented.

In relation to the CRC program, while collaboration between business and academic entities can generate significant benefits, the Commission found that current cost-sharing arrangements mean that the effective subsidy to business can potentially be very high compared with support provided by other science and innovation programs, and that such subsidies should be better aligned with the social benefits (PC 2007b, pp. 443, 455). The CRC program is geared toward large-scale, longer term research programs which are more suited to big research users. The Commission also found that CRCs are relatively cumbersome avenues for partners

Box 6.6 Arrangements for recently announced reviews

Innovation

The review is chaired by Dr Terry Cutler (Director of CSIRO and Chair of the Advisory Board for the Centre for Excellence for Creative Industries), supported by a panel comprising academics, business representatives and senior public servants. It is to consult nationally and provide a 'Green Paper' for public comment by the end of July 2008, before a Government 'White Paper' is released later in 2008.

The establishment of a panel to review the innovation system reflects a pre-election commitment made by the new government. The terms of reference also require the panel to have regard to the Productivity Commission's study on *Public Support for Science and Innovation*, among other studies.

Automotive and TCF

The automotive review is headed by Mr Steve Bracks (the former Premier of Victoria), supported by a panel, principally comprising current and former automotive industry and union representatives. The review is to consult stakeholders and call for public submissions. An interim report is to be provided to the Government by 31 March 2008, with a final report due by 31 July.

The TCF review is headed by Professor Roy Green (the Dean of the Macquarie Graduate School of Management), supported by a reference group principally comprising industry and union representatives and academics. The review is to consult stakeholders and call for public submissions, with a report to be provided to the Government by 31 August 2008.

The establishment of panels to review the automotive and TCF industries reflects pre-election commitments made by the new government. In announcing the reviews, in each case the Minister indicated that the Government would also request the Productivity Commission to undertake modelling on 'economy-wide effects' of future assistance options, with the modelling to be released publicly to inform the panel's examination of the industry, public debate, and the Government's deliberations.

Export programs and PTAs

The review is to be chaired by Mr David Mortimer AO (Chairman of Leighton Holdings, Australia Post, Crescent Capital Partners and the Defence Procurement Advisory Board), supported by Dr John Edwards (Chief Economist with HSBC Australia). The review is to report by 31 August 2008. It will consult with stakeholders and call for public submissions. As part of the review, research will be conducted on Australia's approach to 'free trade agreements', under the leadership of an expert reference group, with the results to be incorporated in the export review's final report.

Sources: Carr 2008a, 2008b, 2008c; Crean 2008.

to enter and exit a venture and entail a heavy compliance burden, concluding that there were complementary options for business collaboration with public sector research agencies and universities that could provide more ‘nimble’, less management-intensive, arrangements (PC 2007b, p. XXIX).

The automotive and textiles, clothing and footwear industries

In announcing the review of the automotive industry on 14 February 2008, the Minister for Innovation, Industry, Science and Research said:

The automotive industry is strategically vital to Australia in terms of employment, exports and innovation. ... The review will assist laying down a new set of principles to make the industry sustainable into the future. (Carr 2008a)

The automotive review’s terms of reference require an evaluation of the key outcomes of the Automotive Competitiveness and Investment Scheme (ACIS), an assessment of the automotive tariffs (which are currently scheduled to fall from 10 per cent to 5 per cent in 2010), and an assessment of current and prospective trade obligations arising from Australia’s multilateral and preferential trade agreements.

The review of the Australian textile, clothing and footwear (TCF) industries was announced on 8 March 2008, the Minister stating:

The TCF industries have an important role to play in Australia’s economic and social future. ... [The review’s] task will be to develop practical and effective strategies to ensure Australia’s TCF industries will be vibrant, innovative and competitive well into the future (Carr 2008b).

Among other things, the TCF review’s terms of reference require an evaluation of the appropriateness and effectiveness of sector-specific assistance and trade measures, including TCF tariffs (which are scheduled to decline in 2010). It is also to examine the adequacy of existing structural adjustment assistance.

In announcing each review, the Minister indicated that the Productivity Commission would be requested to undertake and publish separately modelling on ‘economy-wide effects’ of future assistance options, to aid debate and deliberations in these areas.

The economy-wide effects of assistance to these industries include not only its effects on people in the industries but also its effects on the consumers, taxpayers and other industries that bear the costs of that assistance. They also include any spillover benefits to other sectors. Central to such an analysis are the effects of assistance on the allocation of Australia’s labour, capital and other resources within the economy generally. Especially in times of skills shortages and capacity constraints, measures that enable favoured industries to hold or attract resources are likely to restrict the scope for other industries to expand, with the net outcome for

the economy being dependent on the relative efficiency of the industries concerned and the burden imposed by the cost of the assistance.

Export programs and policies

The review of export policies and programs was announced on 21 February 2008 by the Minister for Trade, who stated:

... Australian exports have underperformed in recent years. Across all major export categories, growth of export volumes in the past six years has been below the historical average since the floating of the Australian dollar in 1983...

[the review] represents the Government's determination to develop an integrated approach to trade policy and ensure it is part of the broader economic policy settings ... to ensure that our trade performance once again becomes a strong contributor to Australia's economic performance to sustain us beyond the resources boom. (Crean 2008)

The review's terms of reference include an examination of export policy and programs across all government portfolios and agencies and their linkages to State and Territory programs, and an examination of Australia's trade performance over the past two decades with a view to identifying measures to maximise Australia's export competitiveness potential. The review of the EMDG scheme, already required under legislation, will be brought forward and undertaken as part of this broader review.

Over the years, a variety of reasons — relating to trade balance considerations, export diversification, and the (perceived) higher value of income from exports — have been advanced as to why export support may be in the national interest. The Commission has undertaken research and made comment on various aspects of export assistance, including in the context of specific reviews (see, for example, Lattimore et al. 1998, PC 2000c, Gabbitas and Gretton 2003). In its submission to the 2000 Austrade review of the EMDG scheme, the Commission (PC 2000c) examined these rationales and concluded that 'it is very doubtful that some of [these] ... provide a sound basis for assisting export activity.'

However, as mentioned in section 6.2, some rationales might form the basis for an export facilitation program — at least for small business — that could be justified on an economy-wide net benefit basis. These include spillover benefits to other Australian exporters from knowledge about new markets and the reputation built by 'trail blazers', ignorance of the benefits of exporting, and adverse business attitudes to exporting arising from an attitudinal legacy of tariff protection that focussed businesses on competing against imports rather than overseas expansion (Lattimore et al. 1998, table 4.4).

The appropriate policy response would depend on which of these problems applied, and whether the actual benefits of a particular measure exceeded the costs, taking into account the extent of spillovers and additionality induced by the measure.

The EMDG scheme itself has been in operation since 1974 and it has been reviewed and changed numerous times. However, the fundamental rationale for the scheme appears never to have been satisfactorily resolved, making it difficult to target assistance under the scheme, and to evaluate it.³ In making specific recommendations about the continuation of the EMDG, as required under the review's terms of reference, the review will need to consider whether the scheme has a defensible rationale and is able to generate net benefits. As part of this assessment, the review will need to investigate the extent to which the scheme induces additional export marketing activity and the nature and extent of spillovers that arise from that additional activity, and to compare these to the benefits that might be obtained from more targeted export facilitation schemes. If it is deemed appropriate to retain the scheme in some form over the longer term, it will also be necessary to consider modifications to increase the level of exporting activity that it induces. Some design options were outlined in section 6.2.

Preferential trade agreements

As part of his February 2008 announcement, the Minister for Trade indicated that a research project on Australia's approach to 'free trade agreements' will be undertaken in parallel with the export policies and programs review, and its results will be incorporated in the export review's final report. Among other things, the research will assess the net benefits of Australia's most recent agreements, including the Australia-United States Free Trade Agreement, and will examine options for ensuring that any agreements Australia might negotiate in the future will strengthen the WTO multilateral trade system.

The Commission has commented on various aspects of what are more accurately labelled 'preferential trade agreements' (PTAs) in the last six editions of *Trade & Assistance Review*. A key message is that the effects of PTAs are significantly more

³ The 1989 review of EMDG (Hughes Committee 1989) endorsed the scheme on the basis that one legacy of protectionism was a business culture unused to international orientation. Clearly, such an environment is of the past. The current objective of the EMDG Scheme, set down in the *Export Market Development Grants Act 1997* is 'to bring benefits to Australia by encouraging the creation, development and expansion of foreign markets for Australian goods, services, intellectual property and know-how.' What is missing is account of the factors that may suppress exports below the socially beneficial level. The most recent review (Austrade 2005) did not assess the fundamental rationale for the scheme, instead focussing on the effectiveness of the assistance and changes that could be made within the current framework.

complex and uncertain than the effects of multilateral reform. Among other things, while offering scope to capture some of the well known benefits associated with trade liberalisation, PTAs can also divert trade from the most efficient supplier countries, entrench support for less ambitious multilateral reform from the beneficiaries of PTA discrimination, open the way for the inappropriate inclusion of ‘non-trade’ objectives in trade agreements, and divert skilled and experienced negotiating resources. Thus, depending on its scope and design, any particular PTA may either enhance or reduce economic welfare.

Much of the analysis of PTAs has involved modelling the potential impacts on trade and production in advance of the implementation of a PTA. Australia’s recent PTA negotiations have typically been preceded by such ‘in advance’ modelling, which has generally indicated that a PTA with the partner country in question could generate significant net benefits for Australia. The Commission discussed some common limitations of such modelling in *Trade & Assistance Review 2004-05*.

One of the few empirical studies to assess the effects of PTAs *in place*, in various parts of the world, was conducted in 2003 by Productivity Commission staff (Adams et al. 2003). This analysis, while not definitive, suggested that a number of longer-standing PTAs may have diverted more trade than they created, potentially reducing welfare in the countries where this had occurred. However, the study also found evidence that some non-trade provisions could enhance international investment flows, particularly where the provisions were non-preferential in nature.

There are typically other considerations in developing PTAs that extend beyond traditional trade policy matters. The review will need to consider these, as well as how to balance the risks associated with PTAs with the risks of being left out in a world where trading blocs are proliferating.

Other areas that appear to warrant review

Beyond the reviews already announced, there are other assistance measures and programs that prima facie warrant review. As noted above, with changing circumstances and improvements in the understanding of market dynamics and the effects of assistance, there is a need to periodically review the ongoing relevance and effectiveness of all programs, and interactions between them. Indeed, there may be a case for developing a program of reviews, embodying robust processes, akin to those for reviewing restrictions on competition under National Competition Policy.

In assessing the need for such reviews and where the priorities might lie, relevant considerations include:

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- whether the area in question receives high levels of assistance, and/or has received a recent increase in the level of assistance or changes in the form in which it is provided;
 - whether the area receives assistance from a range of measures, which might offer scope for rationalisation;
 - whether the relevant assistance measures were initially devised or previously reviewed in an appropriate way;
 - whether there is a market failure or other rationale that, *prime facie*, would clearly justify the assistance;
 - whether there have been significant changes in relevant markets or conditions that might affect the effectiveness of the measure; and
 - whether previous evaluations have identified significant issues or raised questions about the appropriateness or design of the measure, and/or have recommended that it be reformed or reviewed.

A preliminary assessment against such criteria suggests that the following areas/measures be considered for inclusion in an initial tranche of reviews.

Drought relief — State and Commonwealth Governments provide significant drought relief. There have been many changes to drought payment schemes, especially the Exceptional Circumstances (EC) and Farm Management Deposits schemes, and a sharp increase recently in the quantum of assistance. The 2003 Craik Review (DRP 2004) of the administration of the EC scheme recommended that there be a wider independent review. The prospect of significant climate change in the future adds to the desirability of such a review.

Defence procurement — Defence procurement involves very large budget outlays, and purchasing preferences can provide substantial assistance to industries such as ship building, aerospace, electronics and engineering. Improvements in the efficiency and cost-effectiveness of the procurement function could yield large economic benefits. Australia's defence procurement arrangements were last examined (by the Commission) some 13 years ago.

Renewable energy assistance — Assistance to renewable energy production, consumption and business R&D is significant, increasing, and characterised by considerable uncertainty. It is provided by both State and Commonwealth Governments and in many different forms. Particular concerns have been raised about effects of ethanol assistance on feed grain prices. A review could usefully consider the merits and effectiveness of assistance for renewable energy, including its links and interactions with other responses to greenhouse emissions.

Tourism assistance — State and Commonwealth governments provide significant assistance to tourism, and the quantum of assistance provided at the Commonwealth level has increased significantly in recent years (chapter 3), not always with robust justifications. There has been no recent independent review against best practice assistance principles.

Export marketing arrangements for wheat — Previous analyses of ‘single desk’ marketing have generally concluded that the potential benefits to the industry are likely to be small relative to the costs, and possibly involve net losses to the community as a whole. The most recent Wheat Marketing Review (Williams et al. 2004) lacked transparency and breadth.

Anti-dumping and countervailing duties — These measures are employed to promote ‘fair’ trade and to guard against predatory pricing behaviour. However, they also act as a barrier to imports and may result in higher prices that penalise consumers and user industries (including exporters). A scheduled National Competition Policy review of anti-dumping — which would examine whether the application of anti-dumping arrangements is appropriate — is now several years overdue.

Pharmacy restrictions — Restrictions on competition in the pharmacy sector are ostensibly in place to ensure consumer advice is safe, accessible and effective. As a by-product of the ways these objectives are targeted, pharmacy owners are specifically assisted and prices to consumers are higher. Previous reviews of pharmacy regulations have been piecemeal, and there have been concerns about some review analysis and government responses.

State, Territory and Local government assistance to industry — The Commission last reviewed the substantial assistance to industry provided by State, Territory and Local governments more than ten years ago (IC 1996). Since then, most States have signed a cooperative agreement to constrain interstate bidding wars, although some rivalry continues. More generally, multiple jurisdictions and multiple assistance measures across all sectors provide a rich opportunity to identify and share what works ‘best’. Equally, current capacity constraints in Australia increase the impetus to avoid assistance that predominantly shuffles labour and capital across regions with minimal net benefit at best.

Beyond these areas, there are several other government measures that, while addressing broader public policy goals, potentially provide considerable assistance to industry and may also warrant scrutiny. These include the private health insurance rebate, regional development programs, concessional treatment of small businesses, the ‘three mines’ uranium policy, and funding for elite sports and the arts.

Institutional processes for future reviews

In many of the above cases, the benefits of the assistance measures are concentrated in particular industries or sectors, while the costs are spread thinly across the broader community. This points to a need for wider public involvement in these reviews, independent review bodies, and terms of reference that emphasise an economy-wide perspective in examining the merits of the measures.

Looking more broadly, there may be merit in promulgating formal guidelines for the conduct of assistance reviews, taking account of the best practice assistance principles enunciated earlier. As noted above, there may also be a case for examining the merits of instituting a more systematic program of reviews of assistance measures, including programs at the State level.

Whether this is seen as warranted or not, in the Commission's view some matters from the above list need priority attention. These include drought relief, defence procurement, and assistance to ethanol and renewable energy policies. There is also a case for the government to undertake a stock take of recommendations from major recent reviews of industry assistance that have not been implemented — as is currently being done for the Regulation Taskforce's 2006 report, *Rethinking Regulation* — and to examine whether the considerations that led to non-implementation remain salient today.