

# **Assistance to agricultural and manufacturing industries**

**INFORMATION PAPER**

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## GLOSSARY

ABARE	Australian Bureau of Agricultural and Resource Economics
ABS	Australian Bureau of Statistics
ADC	Australian Dairy Corporation
AM	Assisted value of intermediate inputs
AP	Assisted value of production
ASIC	Australian Standard Industrial Classification
ASTP	Australian System of Tariff Preferences
AVA	Assisted value added
BAE	Bureau of Agricultural Economics
BD	Base duty rate
CIFE	Cost, insurance, freight and exchange
CTE	Consumer tax equivalent
DC	Developing country
ERA	Effective rate of assistance
GDP	Gross domestic product
GSE	Gross subsidy equivalent
LDC	Least developed countries
LLCS	Local Leaf Content Scheme
MTN	Multilateral Trade Negotiations
NRA	Nominal rate of assistance on outputs
NRM	Nominal rate of assistance on intermediate inputs
NSE	Net subsidy equivalent
PMV	Passenger motor vehicles
QR	Quota rent
SVA	Subsidy to value adding factors
TCF	Textiles, clothing and footwear
TEM	Tax equivalent on intermediate inputs
TPB	Tender premium bid
UM	Unassisted value of intermediate inputs
UP	Unassisted value of production
UVA	Unassisted value added

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## PREFACE

*The Commission's statutory charter requires it to report on government assistance provided to industries and the effects of assistance on the development of industries. The purpose of this paper is to present the latest series of assistance estimates for agricultural and manufacturing industries, as well as a complete time series of assistance covering all previously published estimates for the two sectors.*

*The work of the Industry Commission (IC), and its predecessor the Industries Assistance Commission (IAC), on assistance measurement has so far focused mainly on the agricultural and manufacturing sectors. Estimation began in the early 1970s with the industries in the manufacturing sector, as this sector was accepted as being the most highly assisted in the Australian economy and was the focus of the reform agenda at the time. Later, estimates were extended to cover agriculture. Estimates of assistance are also available for selected years for the mining sector but are not reported here.*

*The Commission has previously published five papers providing detailed estimates of assistance to agriculture and manufacturing: 'Assistance to Manufacturing Industries in Australia, 1968–69 to 1973–74' (IAC 1976a); 'Trends in the Structure of Assistance to Manufacturing' (IAC 1980), which covered the period 1974–75 to 1977–78; 'Assistance to Manufacturing Industries: 1977–78 to 1982–83' (IAC 1985); 'Assistance to Australian Agriculture' (IAC 1983b), which covered the period 1970–71 to 1980–81; and 'Assistance to Agricultural and Manufacturing Industries' (IAC 1987), which covered from 1982–83 to 1984–85 for manufacturing and from 1980–81 to 1984–85 for agriculture.*

*The latest series of estimates for agriculture covers the period from 1990–91 to 1992–93. The latest series of estimates for manufacturing runs from 1989–90 to 1993–94 and includes projections of assistance levels through to 2000–01.*

*The information presented in this paper indicates, over time, the extent to which some agricultural and manufacturing industries have been favoured by assistance relative to others. In addition, the paper discusses the theoretical aspects of assistance. In particular, the concept of effective assistance and the associated measures are discussed to give the reader a brief theoretical background in assistance measurement. There is also some analysis of the major forms of assistance.*

*The Commission and its predecessor, the IAC, have advocated reductions in assistance for many years, through annual reports and industry inquiries. The*

*outcome of this can be seen through various Government industry statements, most notably the May 1988 Economic Statement and the March 1991 Industry Statement. The assistance reductions set in train are clearly evidenced by the Commission's estimates of nominal and effective rates.*

*The Commission has aimed to achieve a comprehensive and consistent coverage of Commonwealth assistance. Nevertheless, the diversity and complexity of some government interventions are such that they are not reflected in the estimates. State government assistance is also not included. The projected levels of assistance may be revised as further information becomes available.*

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# 1 INTRODUCTION

This information paper presents the Industry Commission's latest assistance estimates for agricultural and manufacturing industries as well as a complete time series of assistance estimates covering all previously published estimates for the two sectors. In addition to presenting all the assistance estimates in a single reference source, the paper provides a guide to some of the theoretical and practical aspects of measuring assistance using the effective rate of assistance (ERA). The paper also includes a discussion of changes in assistance levels over time and the key factors influencing measured assistance.

The Industry Commission (IC) and its predecessor the Industries Assistance Commission (IAC) have been measuring manufacturing assistance on a consistent basis across industries since the early 1970s.<sup>1</sup> Estimation began with the industries in the manufacturing sector as this sector was accepted as being the most highly assisted in the Australian economy and was the focus of the reform agenda at the time. Later, estimates were extended to cover agriculture. Estimates are published annually for both sectors. Estimates of assistance are also available for selected years for the mining sector but are not reported here.<sup>2</sup>

The Commission has published five separate series of nominal and effective rates of assistance for manufacturing using production and materials usage weights, covering the period 1968–69<sup>3</sup> to 1993–94, and also projections of assistance levels through to 2000–01. For agriculture, the Commission's three series of estimates cover the period from 1970–71 through to 1992–93. Considerable changes in measured rates of assistance occurred (see Figure 1.1). For example, for agriculture the effective rate of assistance has declined from 28 per cent in 1970–71 to 11 per cent in 1992–93. The effective rate of assistance for the manufacturing sector declined from 36 per cent in 1968–69 to 12 per cent in 1992–93 and is projected to decline to 5 per cent by 2000–01.

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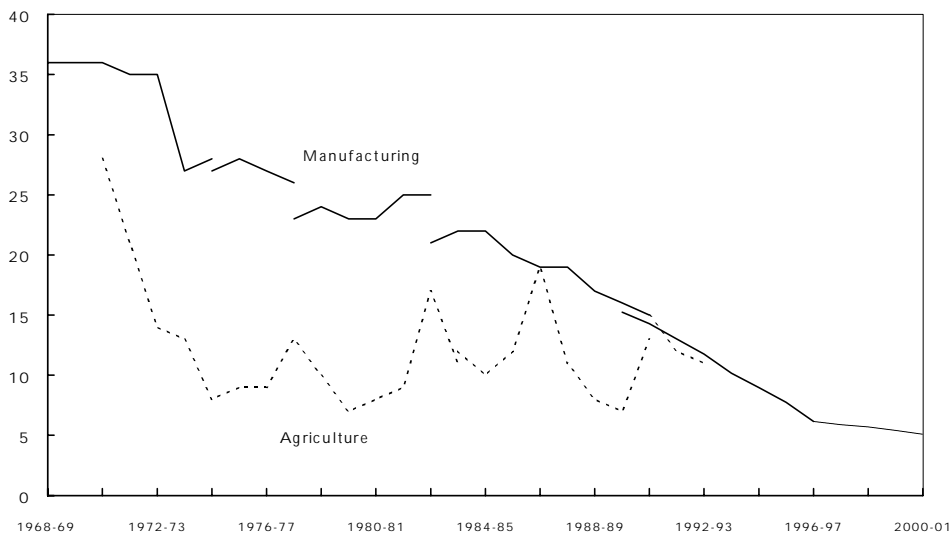
<sup>1</sup> The Australian Tariff Board, the predecessor of the Industries Assistance Commission, began calculating effective rates of assistance in the mid-1960s.

<sup>2</sup> The Commission's estimates of assistance to mining are restricted to the effects of border interventions (tariffs and quotas). Most mining industries do not receive border assistance. However, tariffs and quotas increase the cost of materials and capital inputs used by mining industries. Nominal and effective rates of assistance for the mining sector were last reported in the Commission's 1991–92 Annual Report (IC 1992).

<sup>3</sup> These estimates are not comparable with the Tariff Board's estimates for 1967–68 as significant differences existed in the coverage and classification of manufacturing statistics prior to the introduction of the ASIC classification by ABS in 1968–69.

Figure 1.1

**Average effective rates of assistance for agriculture<sup>a</sup> and manufacturing: 1968–69 to 2000–01 (per cent)**



a Estimates of assistance for the agricultural sector are not available before 1970–71.

Source: Commission estimates.

## The role of assistance measurement

Under its charter, the Industry Commission (and previously the IAC) has a statutory obligation to report annually to Parliament on the assistance provided to industries by government, the effect of that assistance on the development and economic performance of industries and the general effect on the Australian economy of the provision of industry assistance. The ERA has been an important tool in assessing the impact of the assistance structure on industry.

ERAs have also been used by the Commission as an aid to the review and formation of advice on assistance to specific industries under general policy guidelines, specified in the *Industry Commission Act 1989*. These guidelines include the need to encourage the development and growth of industries that are efficient in their use of resources, self reliant, enterprising, innovative and internationally competitive.<sup>4</sup> In assessing the assistance structure for industries or sectors, the Commission adopts an economy-wide perspective.

<sup>4</sup> *Industry Commission Act 1989*, S 8 & S 45.

The purpose of quantifying industry assistance is to enable governments to make more informed policy decisions that will lead to an improved allocation of a community's scarce resources and thus improve community welfare. The information generated has also resulted in wider public understanding of the costs imposed by the assistance structure; methods of reforming that structure; and the likely benefits of such reforms. An informed public is more likely to support policies which benefit the community as a whole and oppose those which protect particular sectional interests at the expense of the general well-being.

The assistance estimates published by the Commission provide an indication of the extent to which some activities are favoured by assistance relative to others. Measurement of levels of assistance has also been important because, in the past, the major form of assistance for the highly assisted industries was through quantitative import restrictions. The effects of these were not always apparent to either the general public or to policy makers. Indeed, in the past some industry advocates were known to call for assistance by way of quantitative restrictions in the mistaken view that, unlike high tariffs, such restrictions did not increase prices. In addition, quantification enabled changes in levels of assistance to be monitored, particularly the automatic increase in assistance provided by quantitative restrictions on imports as the competitiveness of such highly protected industries declined.

The publication of effective rates and associated measures of assistance by the Commission has been influential in the policy debate in favour of general reductions in industry assistance. The program of assistance reductions announced in the Government's March 1991 Industry Policy Statement and Working Nation 1994 Statement, together with meeting Australia's international obligations under the Uruguay Round, will leave most manufacturing industries with little industry-specific assistance by July 1996. As the schedule of reductions in assistance is known in advance, it has been possible to project the assistance levels through to the end of the program.

## **Benefits of assistance reductions**

As an indication of the benefits of general reductions in assistance, the Commission simulated the effects of the assistance reforms announced in the Government's March 1991 Statement using the ORANI model of the Australian economy.<sup>5</sup> The reductions in tariffs and certain other forms of assistance were projected to result in lower prices, increased competitiveness, higher employment, greater productive capacity (as measured by the aggregate capital

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<sup>5</sup> For a full description of the ORANI model, see Dixon et al. (1982).

stock) and an improvement in the allocation of the nation's resources. The overall effect was projected to be a permanent increase in Gross Domestic Product (GDP) in the order of 0.4 per cent, or some \$1.5 billion per annum in 1988–89 prices (IC 1991).

The Commission will continue to closely monitor assistance levels in all sectors. However, it should not be necessary to update estimates of assistance for manufacturing industries each year unless changes in government policy result in significant deviations from the previously announced schedule. For this reason it was considered an appropriate time to publish a compilation of all assistance estimates and projections of future assistance levels. In the future, special attention may be focussed on refining assistance estimates for the textile, clothing, footwear and passenger motor vehicle industries which are to continue to receive relatively high levels of assistance by 2000 when the March 1991 Statement changes have been fully implemented. However, post-2000 arrangements for these industries are to be reviewed in 1996.

## **Structure of the report**

The concept of effective assistance, the ERA and associated measures of assistance are outlined in Chapter 2 and discussed in more detail in Appendix 1. Assistance afforded agricultural commodities is discussed in Chapter 3 and manufacturing assistance estimates in Chapter 4. The detailed estimates of assistance are presented in Appendix 5 (agriculture) and Appendix 6 (manufacturing).

Whilst the Commission's general methodology has remained unchanged, some aspects have been refined over time especially with each new series of estimates. Changes between series include the revised treatment of certain forms of assistance and the inclusion of some new forms of assistance. These changes and other factors influencing measured assistance are discussed in Appendix 2. Appendix 3 presents details of the method of analysing some of the major forms of assistance.

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## 2 MEASURES, METHOD AND INTERPRETATION

The estimates of assistance to Australian manufacturing and agricultural industries presented in this paper are derived using the effective rate of assistance framework. As well as the ERA, the Commission uses several other related measures to report on levels of assistance. The measures used reflect different aspects of the assistance provided and allow diverse forms of assistance to be aggregated under simplifying assumptions.

The assistance measures enable broad comparisons of levels of assistance afforded individual activities over time and between activities within each sector. They also facilitate judgments of the probable effects of assistance on resource use in the manufacturing and agricultural sectors.

This chapter provides an overview of the measures used by the Commission and discusses aspects of the methodology. The measures and methodology are covered in more detail in Appendix 1.

### Assistance measures

In reporting on assistance to industries, the Commission provides information on the forms, levels and distribution of assistance. The principal measures used by the Commission are:

- **the nominal rate of assistance on outputs** — this is defined as the percentage change in gross returns per unit of output relative to the (hypothetical) situation of no assistance. Some forms of assistance (such as tariffs, import quotas and, in some years, domestic pricing arrangements) increase producers' returns by raising prices (called the price distortion) while other forms of assistance (such as production bounties) raise producers' returns without increasing prices paid by user industries. The nominal rate, therefore, measures the extent to which consumers pay higher prices and taxpayers pay subsidies and bounties in support of local output;
- **the nominal rate of assistance on materials (intermediate inputs)** — this is defined as the percentage change in the prices paid for materials used in the production process due to government intervention. For example, tariffs on intermediate inputs penalise user industries by raising prices, while consumption subsidies benefit user industries through lowering prices. Unlike the nominal rate of assistance on outputs, the nominal rate on inputs excludes

those forms of assistance (eg production bounties) which benefit the production of intermediate inputs without affecting prices paid by user industries;

- **the effective rate of assistance** — this is defined as the percentage change in returns per unit of output to an activity's value-adding factors due to the assistance structure. It measures net assistance to an activity's value-adding activities, by taking into account not only output assistance and direct assistance to value-adding factors (eg subsidised interest charges and income tax concessions), but also the penalties (eg from tariffs and excise taxes) and benefits (eg from input subsidies) of government intervention on inputs. The effective rate of assistance may be defined as the difference between value added per unit measured in assisted and unassisted prices, expressed as a percentage of value added per unit, measured in unassisted prices.

These measures are a useful means of describing the structure of incentives affecting industries. The ERA is a particularly useful indicator as it:

- can include most forms of barrier and non-barrier assistance to industries;
- includes both the benefits and costs of assistance to individual industries;
- provides an indicator of the extent to which the overall structure of assistance advantages or disadvantages an industry relative to other industries;
- provides a consistent measure across the traded goods sectors of the economy;
- provides a consistent measure over time; and
- provides a single, easy-to-grasp indicator of the net incentive effect of the many different forms of assistance.

## Background to development of the ERA

The effective rate of assistance is an extension of the concept of the effective rate of protection which was developed in the 1960s from the study of the effects of tariffs and other trade taxes on resource allocation within a country. The major insight behind the effective rate concept, as spelt out by Corden in 1966, is that:

Ordinary nominal tariffs apply to commodities, but resources move between economic activities. Therefore, to discover the resource-allocation effects of a tariff structure one must calculate the protective rate for each activity, that is the *effective* protective rate. The effective protective rate is the percentage increase in value added per unit in an economic activity which is made possible by the tariff structure relative to the situation in the absence of tariffs but with the same exchange rate. It depends not only on the tariff on the



commodity produced by the activity but also on the input co-efficients and the tariffs on the inputs. (Corden 1966)

The key thing to note is that effective rates apply to activities. Nominal rates apply to commodities. Where a local producer supplies goods to the domestic market in competition with imported goods, a tariff on those imports assists the local producer by allowing him to increase prices on the domestic market. The tariff, however, penalises consumers and other producers that use the goods. Thus, the benefit a producer receives on the goods he makes may be offset to some degree by tariff protection to local production of the materials, etc he uses. By taking into account both these effects, effective rates measure the net assistance provided by tariff protection.

The effective rate of assistance is closely related to the effective rate of protection in that both measure the net incentive facing activities producing tradeable goods. The main difference is that the effective rate of assistance includes not only border tariffs and taxes, but also non-border interventions that differentially influence the returns to value adding factors in an industry. In essence, the effective rate of assistance uses the same theoretical framework as the effective rate of protection but extends it to allow the incorporation of such non-border assistance as production bounties, input taxes and subsidies, special credit facilities, special depreciation allowances, special tax arrangements and the provision of industry-specific infrastructure. In this way it enables a more complete picture to be built up of the pattern of incentives on resource use in industries as a result of the totality of government intervention.

The analytical framework of the effective rate model used as a basis for assistance measurement is static and partial equilibrium in nature. Estimates of effective rates provide a description of the relative incentives afforded industries competing for resources at a particular point in time. The estimates do not take account of supply or demand responses either in the industries under consideration or in related industries.

The calculation of nominal and effective rates of assistance and related measures is based on a number of assumptions which are discussed in detail in Appendix 1. These assumptions enable the many forms of assistance to be reflected in a single measure which is relatively easy to understand.

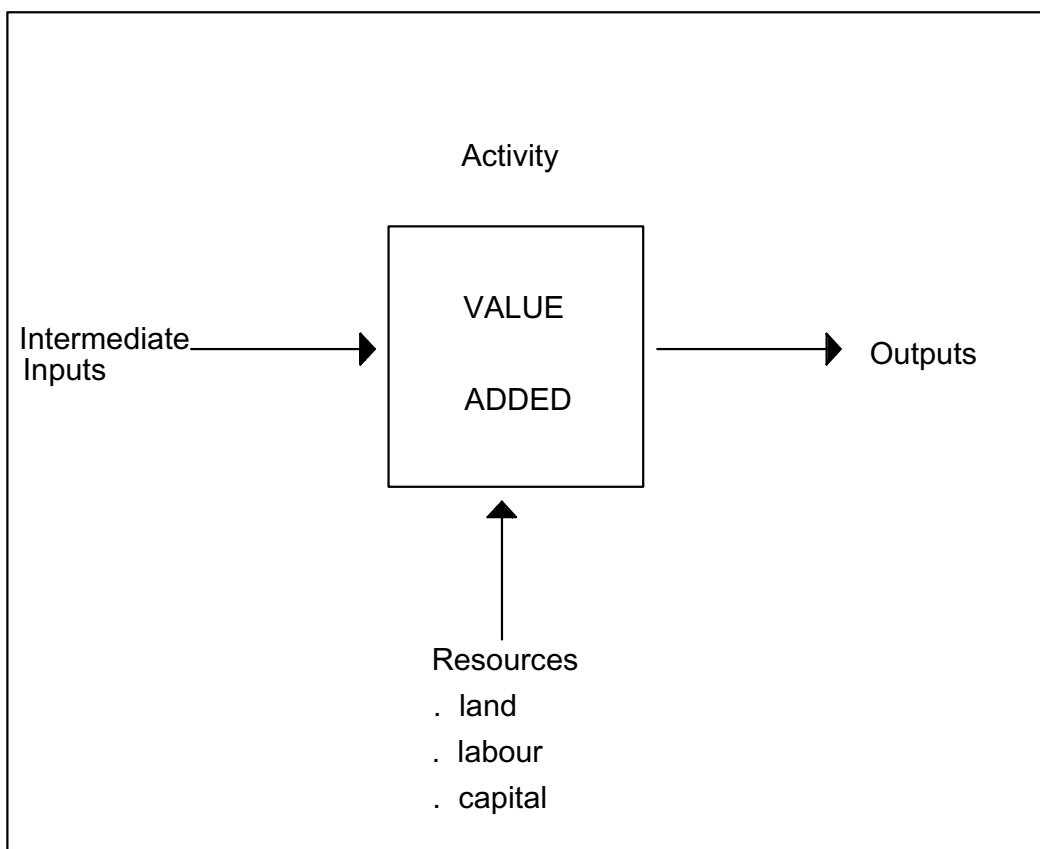
## **Underlying concepts**

Underlying the effective rate of assistance concept is a recognition that the production of goods and services, for either domestic consumption or export, is the result of separate economic activities in which purchases of intermediate inputs (either produced domestically or imported) are used together with scarce

national resources to produce the activity's output. The production of goods and services is undertaken within individual firms. Industries, industry groups, subdivisions and divisions of industries, are various levels of groupings of the firms that produce similar goods and services.

The net contribution of each activity or industry to the economy is the value added to the intermediate inputs by the use of resources in that activity or industry. This value added basis of economic activity is illustrated in Figure 2.1.

**Figure 2.1**  
**Value added basis of economic activity**



The value added in an activity or industry may be measured directly from the returns received by land, labour and capital (that is, returns to value adding factors). Alternatively, it may be measured from the difference between the returns received from sales of goods and services and costs paid for intermediate inputs used to produce those goods and services.

The specific interventions used to implement government trade and industry policies, such as tariffs and subsidies, typically operate on goods and services markets so as to change unit returns and/or costs. However, the decision to use resources in an activity depends on the returns achieved in that use relative to others. The incentive to use resources in a specific activity can be changed by intervention that alters any one of three things, namely:

- (i) the returns received from outputs;
- (ii) the cost of intermediate inputs used to produce those outputs; and
- (iii) the returns to the specific use of resources (that is land, labour and capital) in the activity.

Typical examples of measures that have been used by Australian Governments which alter output returns are:

- tariffs;
- quantitative import restrictions;
- domestic pricing arrangements;
- export subsidies or taxes;
- export facilitation arrangements;
- local content schemes; and
- production subsidies.

Typical examples of interventions that alter intermediate input costs are:

- tariffs;
- commodity taxes;
- input subsidies; and
- local content schemes.

Examples of interventions that directly alter returns from using resources in particular activities are:

- concessional credit;
- income tax concessions;
- special depreciation allowances; and
- special employment allowances.

## Associated measures

The potential for the assistance structure to distort decisions depends heavily on the extent to which it provides disparate levels of assistance between activities and commodities. Consequently, the potential distortion in resource use and the associated losses to resource-use efficiency will be greatest where wide disparities in levels of effective assistance exist between activities. Similarly, wide disparities in nominal rates on output resulting from price distortions are indicative of efficiency losses in consumption.

The Commission publishes standard deviations of nominal and effective rates as an indicator of the degree of dispersion in rates. The standard deviation measures how far from the average the individual activity rates are located, thereby measuring the extent of variation in the distribution.

Estimates of gross and net subsidy equivalents, tax on materials and the consumer tax equivalent of the assistance are also published by the Commission.<sup>1</sup> These express nominal and effective rates of assistance as sums of money. As such, they measure the income transfers from final consumers, intermediate users and taxpayers (through paying higher prices for goods and higher taxes) to producers due to assistance.

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<sup>1</sup> The gross subsidy equivalent is an estimate of the change in producers' gross returns from assistance. It is the notional amount of money, or subsidy, necessary to provide an activity with a level of assistance equivalent to the nominal rate of assistance on its output.

The net subsidy equivalent is an estimate of the change in returns to an activity's value added due to assistance. It is the notional amount of money, or subsidy, 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 any assistance to inputs or value-adding factors, minus the tax equivalent of protection on intermediate inputs used in the production process.

The tax on materials is an estimate of the net change to user industries' input costs due to government assistance altering the prices paid for intermediate inputs.

The consumer tax equivalent is the value of the transfer from consumers paying higher prices due to assistance. The transfers accrue to the domestic producers of assisted goods, importers of quota-protected goods and the Commonwealth through tariffs levied on imports. It is the sum of the gross subsidy equivalent of forms of assistance which raise the price of goods consumed during the period and the tariff revenue on imports (plus, in the case of quota-protected industries, the quota-rents), adjusted to exclude those goods which are consumed by other industries as intermediate inputs. Consumer tax equivalent calculations prior to 1984-85 included the transfers from both final consumers and intermediate users due to assistance-induced price increases. Consequently, the estimates of consumer tax equivalents in this paper, which cover only transfers from consumers of final goods, cannot be compared with these earlier estimates.

However, these measured income transfers, which make some people in the community better off at the expense of making other people worse off, *do not* give an accurate indication of the economic or welfare costs to the community of assistance. Such costs depend upon the extent to which the provision of assistance results in a mis-allocation of resources and changes in consumption patterns — something dependent upon the behavioural responses of producers and consumers to the measured price distortions. Measurement of these costs requires considerable data on elasticities of supply and demand. Ideally, the welfare costs of assistance should be measured within a general equilibrium framework. The ORANI model provides such a framework and, as noted in Chapter 1, has been used by the Commission to indicate the effects of assistance.

When aggregating individual activities or industries (the level at which assistance has been measured) into groups of activities/industries or the sector as a whole, care should be taken in interpreting the gross subsidy equivalents and tax on materials where one or more of the industries produce inputs used by another industry of the group. This is because the output and material inputs of the group will be less than the sum of outputs and inputs of individual industries as a result of internal usage of materials by industries within the group. Consequently, the gross subsidy equivalent and tax on materials of the group will also be less than the sum for individual industries. This problem of aggregating estimates of assistance is important in manufacturing where, for many groups of industries, the outputs of some industries are used by other industries as intermediate inputs. It is much less of a problem in agriculture where outputs of agricultural activities are generally not used as inputs by other agricultural activities. The problem does not arise with the net subsidy equivalent or the consumer tax equivalent as these measure aspects of assistance on a net basis at the individual industry level. Being net measures, they are not affected by the source of the input or destination of the output when industries are aggregated.

### **Choice of benchmark prices**

Measurement of assistance requires an assessment of the price at which products would sell for on the domestic market if the assistance arrangements (eg tariffs and import restrictions) were removed. For an internationally traded good, the domestic price of a perfect substitute produced domestically would be either import parity (the landed-duty-free price of the imported equivalent) or export parity (the free-on-board value of the exported equivalent), depending upon whether the good would be imported or exported if the assistance arrangements were removed.

In the case of the manufacturing sector, the assistance estimates have been derived using import parity as the appropriate benchmark. This reflects the manufacturing sector's predominant orientation towards import replacement. This is because, in the absence of assistance, a large proportion of manufactured goods would be sold in competition with imports.

For a number of agricultural commodities (such as sugar and rice), export parity has been used as the appropriate benchmark since it is reasonable to expect these industries to continue exporting major proportions of their output if not assisted. Exports of these agricultural commodities are sold at prices determined by world markets and, in the absence of regulation, domestic competition would act to ensure they do not receive any direct assistance through import protection measures such as tariffs. Not all agricultural commodities, however, are assumed to be export competing. Tobacco, citrus and wine grapes, for example, have been treated in the agricultural estimates as import competing.

The measurement of assistance also involves the choice of an appropriate point in the production to consumption chain at which to measure assistance. For manufacturing, where possible measurement has been made on an ex-factory basis, the point most comparable to the landed-duty-free price of imported products. Similarly, for agriculture, measurement has been made as far as possible at the farm-gate level. On the input side, costs are measured on a cost to manufacturer and cost to farmer basis.

Many of the interventions that penalise and benefit industries do not operate directly at the factory or farm level. Thus, it is necessary to translate the effect of such interventions into returns and costs at the factory or farm.

## **Comparisons of assistance**

Comparisons of levels of effective assistance between activities are a relatively simple means of measuring the extent to which the relative incentives to use resources in particular activities (as measured by the net returns to value-adding factors) have been changed by government intervention. Nevertheless, caution is required when drawing inferences about the allocation of resources from such comparisons of effective rates between different activities.

To begin with, comparisons of effective rates provide information in a static framework. An evaluation of the impact of such variations in the incentives environment, on the allocation of the community's resources, goes well beyond the scope of the effective rate measure. This would require account to be taken of the manner in which assistance alters production and consumption decisions. For example, some forms of assistance involve limitations on levels of output and/or

entry to particular activities. In these cases, regulation and control of an activity may mean that, although there are substantial income transfers to incumbent producers, the extent to which assistance enables the activity to expand is limited.

In preparing its estimates, the Commission is mindful of the need to define value added consistently between manufacturing and agricultural activities. However, the use of different data sources precluded this in a number of areas. For example, the treatment of traded capital items (eg plant and machinery) differs between the agricultural and manufacturing estimates. For agriculture, data from ABARE farm surveys were used to include depreciation of tradeable capital items as tradeable inputs to be deducted from value added. No similar data are available for manufacturing and, consequently, manufacturing estimates include depreciation of tradeable capital as part of an activity's value added. The effect of this difference in treatment of capital appears to be relatively minor.

In making intersectoral comparisons of assistance, the following points need to be recognised:

- for manufacturing, the estimates are at various levels of aggregation within the Australian Standard Industrial Classification (ASIC). In each series, production patterns and materials to output ratios observed in a base year have been applied to the assistance estimates for all years included in the series. The estimates for agriculture are by major commodity or commodity group. They are calculated using the actual production weights in each year. However, within each series, materials are assumed to constitute a fixed proportion of the value of output in assisted prices;
- the Commission's measures of assistance to agriculture and manufacturing do not incorporate all forms of intervention which discriminate between industries and sectors. The coverage is largely confined to measures involving the Commonwealth Government which discriminate directly between activities. The emphasis in measuring assistance has been to identify the major interventions that differentially assist industries in each sector and measure these at the most disaggregated level practicable within the sector. Reflecting their relative importance and data limitations, the forms of assistance measured are broader in agriculture than in manufacturing; and
- both sectors have a large and increasing proportion of output which is relatively lightly assisted and a small proportion of output which is highly assisted. Consequently, naive comparisons of sectoral levels of assistance should be avoided as they hide far greater differences in assistance levels between activities in each sector. These differences are likely to be more important sources of loss in community welfare.

## **Coverage of forms of assistance**

The emphasis in the Commission's estimates has been on assistance provided by the Commonwealth Government and on consistency of treatment between activities especially within each sector. Excluded from the estimates are measures that apply generally to activities in all sectors, such as income tax, or that apply to all activities within a sector. For example, the tax deductibility of certain expenditure on research and development that is available to all industries is not included in the assistance estimates. In general, the Commission has chosen to restrict coverage of forms of assistance for its annual sectoral estimates to those for which soundly-based estimates can be made on a continuing basis.

The coverage and treatment of forms of assistance has improved with each new series. The main interventions currently included in the estimates are tariffs, quantitative import restrictions, production bounties, certain export incentives, local content schemes, discriminatory domestic pricing arrangements for agricultural commodities, marketing support arrangements, input subsidies, By-law (or Commercial Tariff Concession Orders), duty-drawback and excise. A general discussion of the treatment of different forms of assistance is contained in Appendix 3.

A number of other measures are excluded due to their relative sectoral importance, data limitations or because they are particularly difficult to quantify. Some of the measures excluded are anti-dumping procedures, government purchasing preferences, offsets and partnerships for development programs and budgetary outlays on research and development (included for agriculture) which may influence the structure of relative incentives and could be important for some industries. Any assistance (positive or negative) which may arise from the Commonwealth or State Governments' provision of infrastructure is not included. This is due to the difficulty in quantifying the level of assistance involved in activities where there is no clear alternative benchmark price. Also assistance afforded by State and Local Governments through budgetary outlays and tax expenditures is not included. However, State Government interventions that have an impact on the prices of agricultural commodities nationally have generally been included in the estimates.

Sensitivity analyses indicate that the inclusion of these alternative measures could have a significant effect on the measured assistance to some industries. While such assistance has not been included in the Commission's regular economy-wide estimates, it has been included in some detailed industry specific measures for particular industry inquiries.

The coverage of forms of assistance has traditionally been broader in agriculture than for manufacturing with the inclusion in the agricultural estimates of



assistance to value-adding factors (eg income tax concessions, research and development incentives and concessional credit). These forms of assistance have tended to be less important for manufacturing industries. However, the latest (1989-90) series of estimates does include, for the first time, some assistance to value-adding factors for TCF industries; namely certain capital grants and loans at concessional rates of interest. The inclusion of this assistance did not have a significant impact on the effective rate estimates for these industries.

An additional measure which has been included in the last two series of manufacturing estimates is excise tax levied on the usage of intermediate inputs. Excise penalises user industries by raising the cost of inputs in much the same way as tariffs on competing imports. The assistance to producers of excisable commodities is not affected by these arrangements since excise taxes apply to imports (as part of the tariff duty) as well as to locally produced goods.

In manufacturing, the inclusion of excise taxes on intermediate inputs as a penalty to user industries did not have a significant effect on the sectoral average effective rate of assistance. However, the effective rate estimates for a few industries which are heavy users of petroleum products (eg Alumina) were significantly reduced.

In the agricultural sector, a diesel excise rebate operates, which largely removes the penalty incurred by farmers on their major petroleum input. As a consequence, agricultural estimates are derived on the simplifying assumption that farmers incur no penalty on petroleum inputs. For further details on the treatment of excise, see Appendix 3.

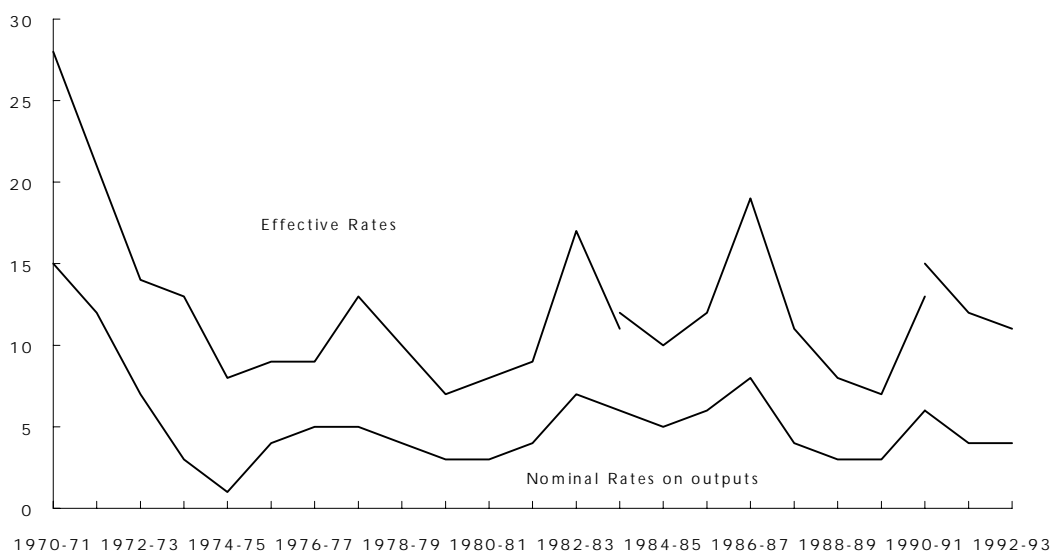
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### 3 AGRICULTURAL ASSISTANCE

Agricultural assistance levels vary considerably between years. Over the period 1970–71 to 1992–93 the average effective rate of assistance provided to agricultural commodities has fluctuated from a high of 28 per cent in 1970–71 to a low of 7 per cent in 1979–80. In recent years, assistance to agriculture has been relatively high compared with the late 1970s and early 1980s, with the effective rate of assistance rising to 16 per cent in 1990–91. Estimates for 1992–93, the latest available year, show a decline in effective assistance to 11 per cent. Nominal rates of assistance to output display similar volatility to effective rates. Over the decade ending 1992–93, nominal rates of assistance to output ranged between 8 and 3 per cent (see Figure 3.1).

This variability in assistance reflects a number of factors including changes in assistance policy, and the counter-cyclical nature of many of the forms of assistance. Assistance to agriculture is often provided on a specific purpose basis; when the conditions which gave rise to the assistance improve, the assistance is removed.

**Figure 3.1**  
**Average nominal and effective rates of assistance to agriculture:**  
**1970–71 to 1992–93 (per cent)**



## Forms of assistance

### Domestic marketing arrangements

Domestic marketing arrangements are by far the most important form of assistance received by agricultural commodities. These arrangements predominantly involve the existence of Statutory Marketing Authorities with the power to vest or compulsorily acquire produce as well as administer prices. For exports, the arrangements are two-priced schemes which permit the exercise of price discrimination between the domestic and export markets and, in some cases, the payment of a pooled price to producers. The arrangements usually involve the setting of higher domestic prices than export prices. Appendix 3 provides more details on how domestic marketing arrangements can assist industry.

Domestic marketing arrangements were recently terminated for tobacco, but still operate for dairy, sugar, rice and eggs.<sup>1</sup> Although these commodities continue to receive relatively high levels of assistance, the dominance of domestic marketing arrangements has declined over the period. For example, in 1983 domestic marketing arrangements also operated for deciduous canning fruits, dried vine fruits, cotton, bananas and wheat. In addition to the termination of these arrangements, the potential for assistance to be afforded by the current schemes is progressively declining in line with government policy to reduce assistance to the sector. The current marketing arrangements for dairy, sugar and eggs illustrate the declining potential for assistance to be provided.

The dairy industry has traditionally received a high level of assistance from both Commonwealth and State marketing arrangements. Under Commonwealth arrangements, levies on farm production fund market support payments to exporters of manufactured milk products. Revisions to the Commonwealth dairy assistance arrangements, which came into effect in July 1992, were designed to lead to phased reductions in the market support payments on exports of dairy products. Commencing in 1993–94, the maximum rate that may apply to these payments was to be phased down from a ceiling of 22 per cent of average

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<sup>1</sup> On 1 January 1995 imports of tobacco leaf, manufactured tobacco and tobacco products were made free of tariffs and the Tobacco Industry Stabilisation Plan and Local Leaf Content Scheme ceased to operate. To ease the restructuring process, manufacturers have agreed to enter into five year contracts with growers and to provide \$10.8 million to facilitate adjustment. The Queensland, NSW and Victorian Governments are matching this subsidy.

export returns to a maximum of 10 per cent of export returns in 2000.<sup>2</sup> However, as a result of the Uruguay Round of trade negotiations, the Government has announced the termination of the current Market Support Arrangements for dairy products from 30 June 1995. These were determined to be an export subsidy and were therefore subject to provisions requiring a reduction in subsidies of 36 per cent in expenditure terms and 21 per cent in volume terms between 1995–96 and 2000–01. The new market support arrangements are based on an input levy on milk used in the manufacture of dairy products. This levy is to be paid by the manufacturers to the Australian Dairy Corporation (ADC). The ADC will then use the levy funds to rebate exports. The balance of the levy is to be paid as support to manufacturing milk products. Fresh milk producers will continue to pay a levy in order to reduce the incentive to supply manufacturing milk to the higher priced fresh milk market.

Up until 1 June 1989 an embargo on raw and refined sugar imports applied. As a result of the statutory marketing arrangements for sugar, substantially higher returns were achieved from domestic sales of raw sugar than were obtained from export sales, with about 80 per cent by volume of raw sugar exported. In the absence of the statutory arrangements and with competition between millers, it could be expected that arbitrage between the domestic and export markets would act to ensure domestic net returns were similar to export unit returns, other things being equal. On this basis it is possible to indicate the degree to which domestic prices have been supported by the marketing arrangements, that is, to estimate price distortions. The domestic price distortion for raw sugar, when domestic price controls and the sugar import embargo applied, was estimated by comparing average unit returns from exports and domestic sales over a given period. The embargo on imports of sugar was removed in 1989 and replaced by a specific tariff. Although the domestic marketing arrangements ostensibly remained unchanged, the removal of the embargo and its replacement with a tariff limits the potential price differential between domestic and export prices. However, for estimates since 1989–90, the Commission has used a revised benchmark for export prices. The levels of export returns in a particular year are influenced by sales under long term contracts which do not necessarily reflect the prevailing world price of sugar. As sugar under contract cannot be redirected to the domestic market, the more appropriate benchmark for measuring assistance to the sugar industry is the prevailing world price (IC 1992, p. 253). The domestic marketing arrangements for sugar will be reviewed in 1995–96 (Crean 1993).

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<sup>2</sup> These market support payments have two major effects on the domestic industry. First, the level of domestic production channelled into exports increases. Second, the domestic price of manufactured dairy products is raised above the unassisted export return. The higher returns to milk used in manufactured dairy products also set a floor price for milk sold on the fresh milk market.

Domestic marketing arrangements for the wheat industry ceased in 1989. These marketing arrangements provided for the domestic price to be set administratively and for there to be a minimum return to growers. Whilst these arrangements operated, from time to time they assisted or penalised feed-intensive rural activities such as poultry and pig production, depending on whether the domestic price was above or below the export price. The effective rate of assistance to the pig industry was particularly sensitive to the subsidy or tax effects of the domestic wheat pricing arrangements. In 1973–74 and 1974–75, for example, pig production was heavily assisted due to the substantial implicit subsidy on feed prices in those years.

## **Tariffs**

Tariffs on agricultural commodities play a relatively small part in assistance to the agricultural sector. In 1991–92 for example, tariff assistance accounted for less than 5 per cent of the total assistance to output (see Table A5.1). However, tariff assistance in conjunction with domestic pricing arrangements allows domestic prices of export oriented commodities to rise to the tariff inflated import parity price. In the absence of the marketing arrangements the tariff would be redundant.

The tariff penalties associated with assistance to intermediate inputs, primarily manufactured goods, are in sharp contrast to the assistance provided by tariffs on agricultural commodities. As shown in Table A5.1, the cost of manufacturing assistance to the agricultural sector was particularly high in 1970–71. In that year, the tariff penalties associated with materials and plant and machinery were 52 per cent of the total assistance afforded the sector by tariffs and domestic marketing arrangements. The cost of manufacturing sector tariff assistance has progressively declined and by 1990–91 tariff penalties equated to 34 per cent of the total assistance from domestic pricing arrangements and tariffs. This decline reflects the 25 per cent across the board tariff reduction in 1973 and, more recently, the phased reductions in tariff assistance arising out of the Commonwealth Government's microeconomic reform agenda (see Chapter 4).

## **Counter-cyclical assistance measures**

### *Tax concessions*

Various taxation concessions applying over the last two decades have discriminated directly in favour of primary producers. These concessions can be grouped into three broad categories:

- those which reduce tax paid by allowing primary producers to make special deductions which are not authorised under general income taxation provisions;
- those which defer tax payments by allowing primary producers to deduct the cost of items of plant over shorter periods than is the case for taxpayers generally; and
- other concessions, such as income averaging provisions and income equalisation deposits, which may reduce tax paid by primary producers.

Assistance provided by taxation concessions has varied considerably over time. Taxation concessions accounted for around 50 per cent of assistance to value adding factors in the agricultural sector for much of the 1970s, but for only 29 per cent by 1983–84. This share rose again to over 50 per cent in the late 1980s before dropping to 7 and 8 per cent in 1990–91 and 1991–92 respectively. However, it increased again to 22 per cent in 1992–93.

These changes mainly reflect the nature of the income averaging scheme. More tax is paid (so that less assistance is received) when income is less than average income and vice versa. For example, wool farmers using income averaging are likely to have paid lower taxes on high incomes earned during the wool boom. Following the collapse of the Reserve Price Scheme, many of these farmers earned lower incomes and, because of the averaging arrangements, paid tax at relatively higher rates based on the average of their previous incomes. For details on how assistance is measured for tax concessions, see Appendix 3.

In addition to the variability in assistance from the income averaging scheme, changes in tax concession arrangements have had an impact on the estimates. Depreciation arrangements were included up until 1982–83, when the accelerated depreciation provisions became available to all sectors. An investment allowance was also available to primary producers up until 1 January 1976, when it became available to all industries. Income equalisation deposits are still available to primary producers, but have provided only relatively minor levels of assistance over the years.

### *Assistance to wool*

In the past, the major forms of assistance to the wool industry were Government contributions to the Australian Wool Corporation (AWC) for wool promotion and research, and assistance provided to selected growers facing financial difficulties through the Rural Adjustment Scheme. Prior to 1989–90, the grower funded Reserve Price Scheme did not require any backing other than the legislation required to implement the scheme. Any deficits incurred by the AWC from the operations of the stock holding scheme were fully self-financed by wool growers through the market support component of the wool tax. Funds in excess

of requirements were redistributed back to wool growers. As a result, the estimates of assistance to wool growers were based on the assumption that the market support component of the wool tax, and the Reserve Price Scheme it maintained, only led to a smoothing of the value of output and therefore had a neutral effect over time. Assistance to the wool industry had therefore remained relatively low prior to 1989–90. Between 1983–84 and 1989–90 nominal rates were around 1 per cent and effective rates around 3 per cent.

Following the collapse of the Reserve Price Scheme in 1990–91, the Australian Wool Realisation Commission was established to manage the AWC's debt and stockpile of wool. This responsibility was taken over by Wool International in December 1993. (Research and promotion activities are now the responsibility of the Australian Wool Research and Promotion Organisation.) The higher rates of assistance to wool since 1989–90 are a result of four new forms of assistance introduced to support the industry after the collapse of the Reserve Price Scheme. These were:<sup>3</sup>

- *Government guarantee of AWC borrowings*  
This provides assistance to the wool industry by enabling the AWC to obtain loans at lower rates of interest than would be available to similar private firms;
- *Credit facilitation*  
A rollover credit facility of \$400 million for 240 days was established to finance sales of Australian agricultural commodities to the former USSR, predominantly for the purchase of wool. The credit facility associated with sales to the USSR affected assistance estimates for 1990–91 and 1991–92. By the end of June 1991, \$216.8 million of the credit had been drawn. The minimum value of the assistance implicit in the credit facility was estimated to be \$2.5 million in 1990-91;

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<sup>3</sup> For full details of the methodology used to measure these new forms of assistance, see McLachlan et al. (1991).

- *Supplementary payments scheme*  
This measure was introduced to make up the difference between the market price received for wool and the minimum reserve price of 700 cents per kilogram, following suspension of the Reserve Price Scheme. Payments were jointly funded by growers from the wool tax and a Government contribution of \$300 million. Although the Government's contribution was spread over two years, the full amount was included in the 1990–91 estimates. This was because the supplementary payments were designed to make up the difference in returns to wool growers selling their wool in the period following the suspension of the Reserve Price Scheme, that is, between February 1991 and the end of June 1991. The Government's contribution to the supplementary payments scheme accounts for much of the high assistance estimated for that year; and
- *Loan subsidy*  
As part of the new arrangements, the Government provided an annual grant of \$22.5 million to the Wool Realisation Commission for the two years 1991–92 and 1992–93. These grants were intended to cover the interest payable on a \$200 million loan and represented a direct subsidy to the wool industry. As all wool industry borrowings are guaranteed by the Government, assistance was also provided by the Government guarantee on this \$200 million loan.

These new forms of assistance have been incorporated into the Commission's assistance measures. Tables A5.1 to A5.3 show their impact on the estimates. However, assistance to wool is expected to fall from 1992–93 levels with the end of the loan subsidy and the removal of funding for wool promotion after 1993–94.

#### *Price stabilisation and underwriting: wheat*

Price stabilisation funds have provided assistance for the production of certain agricultural commodities. These funds generally have involved producer and government contributions to support prices. In the late 1970s and early 1980s, stabilisation funds were largely replaced by price underwriting arrangements. Generally, minimum prices were set by a formula, and the Commonwealth accepted a liability to increase returns to the specified minimum.<sup>4</sup>

Underwriting arrangements have been in operation for apples and pears, dried vine fruits, certain dairy products, wheat and wool. Other than for wool, where the minimum prices were supported by a levy on growers, all other arrangements

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<sup>4</sup> For price underwriting arrangements, except wool, the formulas were based upon percentages of moving averages of realised and expected prices for the commodities.



were supported from consolidated revenue. The discussion below focuses on the arrangements for wheat.

The *Wheat Marketing Act 1989* introduced a number of changes to the marketing arrangements for wheat. In particular:

- the domestic marketing arrangements were deregulated;
- the underwriting which guaranteed growers a minimum payment per tonne was removed; and
- an explicit Commonwealth Government guarantee of certain Australian Wheat Board (AWB) borrowings was introduced.

The AWB has sole exporting rights for Australian wheat and makes initial payments to growers prior to realising the proceeds from sales. To finance these initial payments to growers, the AWB borrows funds on domestic and international markets. These loans are then repaid from export receipts. The Government guarantees these loans, but has limited its annual guarantee to less than estimated revenue. The guarantee limit was 90 per cent in 1989–90 and was phased down to 80 per cent in 1993–94.

Prior to 1989–90, the Commission’s measurement of the assistance attributable to the price underwriting scheme for wheat was restricted to recording underwriting payments made by the Government. However, the underwriting of wheat prices also provided an implicit guarantee for AWB borrowings — and essentially transferred the risk component of the interest rate from the AWB to taxpayers. Hence, in addition to providing support in the form of occasional underwriting payments, assistance was provided annually through increased net returns to the wheat industry as a result of lower interest charges.

The introduction of the explicit Commonwealth Government guarantee on AWB borrowings in 1989–90 led the Commission to reassess its methodology for evaluating assistance to wheat growing. The approach used is similar to that used for measuring assistance from the Government guarantee on Australian Wool Corporation borrowings. Assistance from the Government guarantee has been estimated for the AWB’s 1989–90 to 1992–93 wheat pool borrowings. These estimates are based on actual AWB borrowings and projections of future borrowings over the expected life of each pool. The assistance attributable to the Government guarantee on 1989–90 and 1992–93 wheat pool borrowings is estimated to be in the order of \$28 million and \$38 million respectively.

Inclusion of assistance from the loan guarantee since 1989–90 has significantly increased the estimated nominal and effective rates of assistance to wheat. The nominal rate of assistance increased from 0.4 per cent in 1988–89 to around 10 per cent in 1990–91. The effective rate increased from 2 per cent in 1988–89 to

26 per cent in 1990–91. However, the 1989–90 and 1990–91 estimates are clearly not comparable with estimates for earlier years.

### *Adjustment assistance*

Adjustment assistance has been provided through the Rural Adjustment Scheme (RAS) and previous related schemes. Under this scheme, introduced in January 1977, concessional finance is provided to primary producers who can show that their enterprises have reasonable prospects for long term viability and cannot obtain such finance from normal commercial sources. The scheme has been subject to a number of revisions. Since 1 January 1989 it has comprised three major parts:

- Part A: providing assistance in the form of interest subsidies, loans or training grants to farmers to improve farm performance through structural adjustment;
- Part B: providing assistance in the form of short-term interest subsidies to farmers experiencing short-term downturns caused by factors beyond their control; and
- Part C: assisting farmers without prospects to leave the farm through household support payments and re-establishment assistance.

In recent years, funds provided to the agricultural sector through the RAS have been increasing. Payments totalled \$157.3 million in 1991–92 and \$168.9 million in 1992–93, compared to \$62.5 million in 1990–91. The funding for 1992–93 included \$16.5 million for drought support in Queensland and New South Wales. Drought assistance, formerly provided under natural disaster relief arrangements, was transferred to the RAS in 1989–90.

A revised RAS was introduced on 1 January 1993, focussing on productivity improvement measures, training in farm management skills and the use of expert advice and land trading to facilitate adjustment (Crean 1992). ‘Exceptional circumstances’ provisions provide for interest subsidies of up to 100 per cent in periods of prolonged drought or commodity price collapse. Re-establishment support was made available to assist farmers to leave the industry and responsibility for administration of the farm household support measures was transferred to the Department of Social Security. Assistance provided through the re-establishment and household support arrangements is not included in the assistance estimates.

### **Other assistance**

Assistance afforded by State and local governments through budgetary outlays and tax expenditures is not included in the assistance estimates. However, State Government interventions that have an impact on the prices of agricultural commodities nationally have generally been included.

Research has shown that, for agriculture, the inclusion of State Government budgetary outlays would substantially increase the estimated levels of assistance (IAC 1988). For 1990–91, the latest year for which information is available, the inclusion of State Government budgetary outlays to the sector would increase the measured ERA for agriculture from 16 per cent to 23 per cent. No comparable analyses have been made for manufacturing. However, in view of the size of manufacturing industries and relevant budget outlays, State Government assistance is likely to be relatively less important.

Including budgetary expenditure as assistance to agriculture implicitly assumes that the goods and services are provided efficiently and that none of the outlays are appropriated by other sectors. To the extent that this is not the case, budgetary outlays, and hence assistance estimates, overestimate the assistance received by agricultural commodities.

### **Sources of change**

The variability in measured assistance for agriculture over time reflects not only the nature of assistance provided to the sector, but also the sector's export orientation and certain aspects of the assistance measurement methodology.

For some agricultural commodities, assistance is largely derived from domestic pricing arrangements and varies automatically with changes in the relationship between domestic and export prices. Consequently, seasonal changes and differential price movements between years have significantly influenced measured assistance for individual industries over time.

Changes in the export orientation of agricultural industries in particular years have also influenced measured assistance to the sector. Effective rate estimates for some individual production activities are calculated by averaging the assistance received over all sales for a given year. Almost all assistance is derived from domestic sales under the existing arrangements and, as a result, any change in the proportion of output that is exported between years will affect the estimated effective rate for the sector. Thus, the effective rate can rise as a result of a poor export year without there being any change in domestic and export prices.

The variability of agricultural assistance is also related to the methodology used to estimate assistance to this sector. The Commission's agricultural assistance estimates are calculated using actual production weights (local farm-gate values) in each year. Hence, changes in measured assistance to agriculture between years may not only reflect changes in the level of assistance afforded individual production activities over time but also changes in the physical size of particular activities. For example, assistance to agricultural commodities rose in 1990–91 but the value of output declined. If the previous year's higher values of output and value added had applied in 1990–91, the effective rate for the sector would have been 2 percentage points lower.

The influence of particular industries on the sectoral average effective rate is determined by their contribution to total value added. The extent to which the contributions of individual industries have fluctuated over time — both in assisted and unassisted terms — is highlighted in Table 3.1. The shares of assisted value added accounted for by the major industries have varied considerably over the period. The share of assisted value added accounted for by dairying has declined, however, mainly due to the reduced contribution of manufacturing milk production.

These fluctuations over time, in both the size of agricultural output and in the assistance afforded individual industries, are reflected in the shares of unassisted value added for particular production activities in different years. For example, the share of total unassisted value added for the Extensive Cropping group, which covers wheat and other cereal crops, increased from 19 per cent in 1971–72 to 34 per cent in 1983–84. In more recent years, however, the contribution of these activities has declined. Extensive cropping accounted for 16 per cent of total unassisted value added in 1990–91, slightly increasing again in 1992–93 to 20 per cent.

Although the changing values of production are taken into account within each series, materials are assumed to constitute a fixed proportion of the value of output in assisted prices. Hence, variations between series may reflect changes over time in materials to output ratios. For most commodities, ABARE Farm Survey data or ABS Agricultural Finance Survey data have been used to construct the materials to output ratios. These ratios are revised periodically to reflect changes in the cost structures associated with producing agricultural commodities. The current series of estimates for agriculture covers the years 1990–91 to 1992–93 and overlaps with the previous series which covered the period 1983–84 to 1990–91. The first series of estimates for this sector covered the period 1970–71 to 1983–84.

The impact of all the above factors on the variability in agricultural assistance estimates means that year to year comparisons should be treated cautiously.

As indicated in Table 3.1, materials totalled 50 per cent of agricultural output in 1983–84, compared with 40 per cent in earlier years. For 1990–91 and 1992–93, this ratio was 55 per cent. This increase reflects both changes within the production structures of individual agricultural activities over time and changes in the method used to derive the materials to output data. If the proportion had remained at 40 per cent in 1983–84, then the measured effective rate for the sector would have been 2 percentage points lower.

### **Disparities in assistance**

The structure of assistance to agriculture over time has also been characterised by wide disparities in assistance levels across commodities, although the extent of these disparities has fluctuated considerably between years. As measured by the standard deviation, the disparities in effective assistance within the agricultural sector fell sharply in 1972–73, but remained above those in manufacturing in the 1970s. Whereas disparities in manufacturing assistance trended upwards from the mid-1970s, disparities in agricultural effective assistance trended downwards to a low of 17 percentage points in 1981–82. However, assistance disparities within the agricultural sector increased sharply to 41 percentage points in 1984–85, largely reflecting the increased assistance afforded certain activities (especially the dairy industry) by domestic pricing arrangements.

Disparities then declined from 1986–87 onward, but began to rise again in the early 1990s. Disparities in effective assistance to agricultural commodities increased from 22 percentage points in 1990–91 to 29 percentage points in 1991–92, but decreased to 25 percentage points in 1992–93 (see Tables A5.2 and A5.3 for more details).

Table 3.1

**Effective rates of assistance and relative weightings based on assisted value added (AVA) and unassisted value added (UVA) for agricultural commodity groups<sup>a</sup>: selected years (per cent)**

<i>Commodity group</i>	<i>Measure</i>	<i>1971-72</i>	<i>1974-75</i>	<i>1977-78</i>	<i>1983-84</i>	<i>1990-91</i>	<i>1992-93</i>
<b>Extensive Grazing</b>							
Sheepmeat	ERA	5	7	5	5	9	5
	AVA	7	4	6	5	2	4
	UVA	8	4	7	5	2	4
Wool	ERA	26	7	5	4	26	18
	AVA	22	21	24	16	24	15
	UVA	22	21	26	16	22	14
Beef	ERA	3	13	26	10	4	3
	AVA	19	9	17	19	24	23
	UVA	23	8	15	17	26	25
Total	ERA	13	8	12	7	14	8
	AVA	47	33	48	39	50	42
	UVA	53	33	48	38	51	43
<b>Extensive Cropping</b>							
Wheat	ERA	42	-9	7	3	12	6
	AVA	12	24	14	22	9	13
	UVA	11	29	15	23	10	14
Barley	ERA	4	3	4	-1	..	1
	AVA	3	5	3	4	3	4
	UVA	4	5	4	5	3	4
Other	ERA	2	3	2	-1	2	1
	AVA	4	4	4	4	3	3
	UVA	4	4	4	4	3	3
Total	ERA	25	-6	6	1	8	4
	AVA	19	33	21	30	15	20
	UVA	19	38	22	34	16	21
<b>Intensive Livestock</b>							
Pigs	ERA	-17	124	-8	-11	2	4
	AVA	2	2	2	1	3	2
	UVA	3	1	2	2	3	3
Poultry	ERA	-11	74	-4	-5	1	3
	AVA	2	2	3	3	1	1
	UVA	2	1	3	3	1	1

Table 3.1 (continued)

<i>Commodity group</i>	<i>Measure</i>	<i>1971-72</i>	<i>1974-75</i>	<i>1977-78</i>	<i>1983-84</i>	<i>1990-91</i>	<i>1992-93</i>
Eggs	ERA	103	>250	43	176	20	3
	AVA	2	2	2	2	1	1
	UVA	1	1	2	1	1	2
Manufacturing Milk	ERA	138	60	84	72	43	20
	AVA	8	6	4	5	7	9
	UVA	4	4	3	3	5	8
Market Milk	ERA	61	127	>250	191	129	154
	AVA	5	4	5	4	4	5
	UVA	4	2	1	1	2	2
Total	ERA	62	100	39	58	42	32
	AVA	18	15	13	15	16	19
	UVA	14	8	11	10	13	16
<b>Extensive Irrigation and High-Rainfall Crops</b>							
Sugar	ERA	20	-19	-8	10	27	9
	AVA	6	10	8	3	4	4
	UVA	7	14	9	3	4	4
Cotton	ERA	6	32	14	8	-4	-2
	AVA	1	1	1	3	3	3
	UVA	1	..	4	3	4	3
Rice	ERA	75	26	43	50	11	11
	AVA	..	1	1	1	1	1
	UVA	..	1	1	..	1	1
Total	ERA	20	-16	-2	11	10	5
	AVA	8	11	10	7	8	8
	UVA	8	15	11	6	8	8
<b>Horticulture</b>							
Total	ERA	58	50	28	22	7	8
	AVA	7	8	8	8	12	12
	UVA	6	6	7	7	12	12
<b>Total Agriculture</b>	ERA <sup>a</sup>	25	9	15	12	15	11
	AVA	100	100	100	100	100	100
	UVA	100	100	100	100	100	100
Materials as a proportion of output		39	39	39	50	55	55

.. Between -0.5 per cent and 0.5 per cent.

a The ERA for total agriculture is a weighted average of the commodities using the unassisted value added (UVA) as the weight.

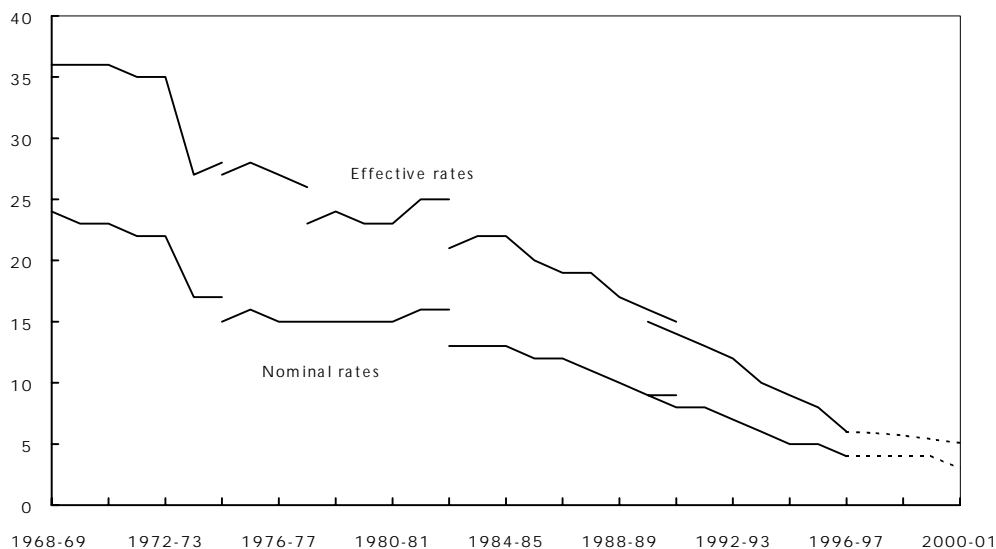
Source: Commission estimates.

## 4 MANUFACTURING ASSISTANCE

The manufacturing sector has undergone substantial declines in Commonwealth Government assistance between 1968–69 and 1993–94 (see Figure 4.1). Projections of assistance indicate that this trend will continue through to 2000–01. At that stage the program of assistance reductions announced in the March 1991 Statement will be fully implemented. By 2000–01 nominal rates of assistance will be 3 per cent — a 21 percentage point reduction from 1968–69. The effective rate will be 5 per cent at the completion of the phased reductions in assistance — a 31 percentage point reduction from 1968–69. Details of effective rates for 2 digit ASIC manufacturing industries are reported in Table 4.1. More disaggregated estimates for nominal and effective rates are reported in Appendix 6.

These manufacturing assistance estimates are based on detailed industry data made available from the Australian Bureau of Statistics (ABS) censuses of manufacturing establishments. Using these censuses, five separate series of assistance estimates have been produced. Production patterns in each series reflect the patterns of production in the base years. The base years are all years for which the ABS has produced detailed materials usage data.

**Figure 4.1**  
**Average nominal and effective rates of assistance for the manufacturing sector<sup>a</sup>: 1968–69 to 2000–01 (per cent)**



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



The most recent materials usage data available were for 1989–90 and the production patterns for that year are the basis of the current series of estimates and projections. The previous series of estimates, which covered from 1982–83 to 1989–90, was based on 1983–84 patterns of production. The other three series covered the periods 1968–69 to 1974–75 using 1971–72 production patterns, 1974–75 to 1977–78 using 1974–75 production patterns and 1977–78 to 1982–83 using 1977–78 production patterns (IAC 1976a, 1976b, 1980, 1985 and 1987). The periodic rebasing of the manufacturing assistance estimates allows the effects of changes in the structure and composition of industries to be incorporated in the assistance estimates.

Given the methodology used to derive the assistance estimates, there are two aspects to the decline in measured assistance to the sector. These are the changes in measured assistance within each series of estimates which reflect the direct impact of particular government decisions, and the changes in measured assistance between series which reflect the impact of structural change.

### **Major government decisions affecting assistance to manufacturing industries, 1968–69 to 1993–94**

Given the difficulty in determining the exact sources of change in measured assistance between each series of manufacturing estimates, it is useful to examine the extent to which particular government decisions have influenced the level of measured assistance within each series of estimates. However, the impact on assistance levels attributed to particular policy changes reflects only the first round effects. Second round effects resulting from these decisions, such as the effects of changes in the size and composition of industries on levels of assistance, are not taken into account.

Since 1968–69 numerous government decisions have affected the level of assistance afforded manufacturing. Some of the more important of these have included:

- the 25 per cent tariff cut in July 1973;
- the introduction of quota assistance in 1974 and its incorporation into sectoral assistance policies;
- the widespread tariff reductions, introduced in January 1977, following the devaluation of the Australian dollar and Multilateral Trade Negotiations;
- the increased use of export incentives and bounties as forms of assistance from 1977–78;
- the program of general tariff reductions announced in the May 1988 Economic Statement;

- the continuation of the general tariff reduction program announced in March 1991; and
- various government decisions on Industries Assistance Commission and Industry Commission recommendations for assistance to individual industries.

Other policy changes, such as the introduction of a 2 per cent revenue duty on some imports in May 1979 and the restructuring of domestic pricing arrangements for certain agricultural products during the 1970s, have also affected the manufacturing sector average over time.

The *July 1973 across-the-board tariff cut* applied to all goods except those subject to excise duties (mainly tobacco products and alcoholic beverages). This measure stands out as a major initiative in reducing manufacturing assistance levels. During the preceding five years, there had been little change to the structure and level of assistance. The 25 per cent tariff cut was responsible for a reduction of about 8 percentage points in the effective rate for manufacturing in 1973–74 (see Figure 4.1 and Table 4.1). As discussed in Chapter 3, tariffs are not a major form of assistance to agriculture; hence the across the board cut had a smaller impact on that sector.

This one off reduction in assistance to the manufacturing sector was reinforced by *further reductions in duty rates in January 1977*. These later reductions followed an IAC report on the Multilateral Trade Negotiations (MTN) applied to some 900 tariff items and were introduced as a response to the devaluation of the Australian dollar in November 1976. The changes were intended to minimise adverse effects on local industries and largely involved the removal of unused assistance from lightly-assisted, low-cost industries. The MTN reductions were estimated to have lowered the average effective rate for manufacturing by 3 percentage points during 1976–77 and 1977–78 (IAC 1979).

The downturn in economic conditions in 1974–75 was accompanied by a considerable increase in requests for temporary assistance. Much of the temporary assistance granted to manufacturing industries took the form of *quantitative import restrictions*. These import restrictions had not been imposed on a significant scale since import licensing ended in 1960. Textile, clothing and footwear (TCF) industries and the passenger motor vehicle (PMV) industry stand out as the major recipients of quantitative import restrictions. However, these restrictions also applied to a variety of items including fabricated structural steel products, refrigerators and other household appliances. Although the quotas applying to these other items were quickly removed, the quotas for TCF and

PMV became a long standing form of assistance to these industries.<sup>1</sup> As shown in Table 4.1, assistance to these industries has traditionally been higher than for other manufacturing industries.

The impact of the MTN tariff cuts and other assistance reductions was largely offset between 1974–75 and the mid 1980s by increases in quota assistance to the TCF and PMV industries. The assistance provided by volume quotas is inversely related to the domestic producers' ability to compete with imports.<sup>2</sup> As the competitiveness of TCF and PMV industries declined between 1974–75 and 1984–85, measured assistance to these industries increased dramatically. However, subsequent substantial depreciations of the Australian dollar, particularly against the Japanese yen, significantly improved the competitive position of local producers, especially for PMV production.

Increased assistance to the TCF and PMV industries added 4 percentage points to the sectoral average effective rate between 1974–75 and 1977–78 (series 2), 4 percentage points between 1977–78 and 1982–83 (series 3) and a further 2 percentage points between 1982–83 and 1989–90 (series 4). For the latest series, decreased assistance to the TCF and PMV industries will remove 4 percentage points from the sectoral average effective rate between 1989–90 and 2000–01. This can be partly attributed to quotas providing significantly less assistance in the latest series. Quota assistance is no longer available to the manufacturing sector, terminating for the PMV industry in April 1988 and for the TCF industries in March 1993.

The *May 1988 Economic Statement* announced a general program of phased reductions in maximum tariff rates for most imports (see Appendix 4). By 1 July 1992 tariffs above 15 per cent (with some notable exceptions, such as passenger motor vehicles and textile, clothing and footwear products) and between 15 and 10 per cent had been phased down in five equal steps to 15 and 10 per cent, respectively. The 2 per cent revenue duty on imports was also removed. The TCF quotas were scheduled to terminate on 1 July 1995 when out-of-quota penalty duties were to be reduced to zero.

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<sup>1</sup> A history of the assistance afforded the TCF and PMV industries can be found in IAC (1981a, 1986b).

<sup>2</sup> The variability of assistance afforded industries by volume quotas as economic conditions change is discussed in detail in IAC (1981b).

Table 4.1

**Average effective rates of assistance for manufacturing: selected years (per cent)**

<i>Subdivision</i>		<i>1971</i>	<i>1974</i>	<i>1977</i>	<i>1983</i>	<i>1989</i>	<i>2000</i>
<i>ASIC</i>	<i>Description</i>	<i>-72</i>	<i>-75</i>	<i>-78</i>	<i>-84</i>	<i>-90</i>	<i>-01<sup>a</sup></i>
21-22	Food, Beverages and Tobacco	19	21	10	6	4	2
23	Textiles	45	39	47	69	53	17
24	Clothing and Footwear	86	87	141	227	113	34
25	Wood, Wood Products and Furniture	23	18	18	18	15	4
26	Paper, Paper Products, Printing and Publishing	52	31	24	16	9	2
27	Chemical, Petroleum and Coal Products	32	23	19	12	8	3
28	Non-metallic Mineral Products	14	11	5	4	4	2
29	Basic Metal Products	29	16	10	10	9	4
31	Fabricated Metal Products	58	39	30	25	19	4
32	Transport Equipment	50	45	48	65	37	13
323	Motor Vehicles and Parts	49	54	73	129	52	19
33	Other Machinery and Equipment	44	24	20	22	19	6
34	Miscellaneous Manufacturing	32	27	30	26	20	7
<b>21-34</b>	<b>Total Manufacturing</b>	<b>35</b>	<b>27</b>	<b>23</b>	<b>22</b>	<b>15</b>	<b>5</b>

a Projection based on 1989-90 base year production.

Source: Commission estimates.

In its *March 1991 Industry Policy Statement* the Government announced the continuation of this program of tariff reductions beyond 1992, with most tariffs phasing down to 5 per cent by July 1996. The March 1991 Statement brought forward the termination date for TCF import quotas to March 1993 and substantially reduced tariffs applying to TCF and PMV. By July 2000, passenger motor vehicles and components and most textile and footwear industries will be assisted by tariffs of 15 per cent, while clothing imports will attract tariffs of 25 per cent.

The general program of phased tariff reductions which commenced in May 1988 and continued with the March 1991 policy announcements has significantly reduced assistance to the manufacturing sector. The effective rate for the sector declined from 19 per cent in 1987-88 to 10 per cent in 1993-94. At the conclusion of the program in 2000-01 the effective rate is projected to decline to 5 per cent, a 14 percentage point decline from the average effective assistance afforded manufacturing industry prior to the May 1988 Economic Statement.

In addition to these general tariff cuts, the Government has *varied assistance to individual production activities*, either in response to Commission inquiries or following other industry reviews. While the limited scope of some of these

references reduced the impact of decreases in assistance at the broad industry level, they have nevertheless collectively contributed to significant reductions in sectoral assistance levels and facilitated structural change within the sector. The PMV plan in April 1988 was particularly noteworthy. As a result of the 1988 amendments, PMV import quotas were abolished in 1988 rather than in 1992 and the tariff rate was immediately reduced from 57.5 per cent to 45 per cent. Although the import quotas on passenger motor vehicles had provided no additional assistance above the base tariff rate since 1986–87, their removal put a cap on the potential for higher assistance to be provided when the competitiveness of PMV declined between 1988 and 1992.

The increased use of *export incentives* since 1977–78 has raised the level of assistance to manufacturing. The Export Expansion Grants Scheme, which operated from 1977 to 1983, and other export assistance schemes that have operated since then, in particular the Export Market Development Grants Scheme and export facilitation arrangements for PMV, have significantly increased the assistance afforded manufacturing exports. However, because of the relatively low volume of eligible manufacturing exports, these schemes had a small impact on the average effective rate for the manufacturing sector. The inclusion of export incentives added 1 percentage point to measured effective assistance between 1975–76 and 1977–78 (series 2) (IAC 1979) and had a similar impact on the sectoral average between 1977–78 and 1982–83 (series 3). The export incentives included in the manufacturing estimates for 1989–90 added half a percentage point to the sector's effective rate.

The payment of *bounties* to producers in certain manufacturing industries contributed approximately one percentage point of the increase in the average effective rate between 1977–78 and 1982–83 (IAC 1987). Bounty payments to the sector peaked in 1989–90 at \$291 million and have subsequently declined in line with the phased reductions in tariff assistance.

*Domestic pricing arrangements* for certain agricultural commodities used as inputs into some manufacturing processes have also influenced changes in the sectoral effective rate within certain series of estimates. These arrangements, which operate by controlling the prices or quantities of the agricultural commodities sold on the domestic market (see Appendix 3), have the potential to alter the assistance afforded to manufacturers without there being any explicit change in government policy. This is because the assistance provided to, or the penalty imposed on, domestic manufacturers varies automatically with the difference between domestic and world prices for the agricultural commodity. As indicated in Chapter 3, the Commonwealth and some State Governments have been progressively reducing the assistance afforded agriculture by domestic marketing arrangements. For example, the embargo on sugar imports was

removed in 1989 and replaced by a tariff. This change limits the extent to which sugar directed to the domestic market can be priced above import parity. The domestic marketing arrangements for sugar are to be reviewed in 1996. Of all the domestic marketing arrangements, those applying to sugar have had the largest impact on assistance levels to manufacturing.

The changes in assistance between series also reflect changes in the composition of the sector, the individual industry materials to output ratios and changes in the methodology used to measure assistance. These and other factors influencing measured assistance are discussed in Appendix 2.

### **Consumer tax and subsidy equivalents**

The estimates of assistance can also be expressed in monetary equivalents. The gross and net subsidy equivalents, the tax on materials and consumer tax equivalents are reported in Appendix 6. These measures provide an indication of the income transfers resulting from the assistance structure. It is important to note that they do not indicate the economic welfare cost of assistance, which depends on the behavioural responses of producers and consumers, and is best measured within a general equilibrium framework.

Estimates based on the current series (series 5) indicate the consumer tax equivalent for the manufacturing sector has fallen from over \$8.6 billion in 1989–90 to \$6.5 billion in 1993–94 and is projected to decline to \$4 billion in 2000–01. The net subsidy equivalent estimates for the corresponding years were \$9.4 billion, \$6.6 billion and \$3.3 billion.

These estimates need to be interpreted cautiously as they are derived from 1989–90 base year production levels and, in the case of gross subsidy equivalents and taxes on materials, can involve an element of double counting.

### **Forms of assistance to manufacturing**

Although various assistance measures for manufacturing industries have been introduced or increased in importance over the period since 1968–69, tariffs continue to provide the majority of measured assistance to the sector. In 1983–84 tariffs accounted for over 80 per cent of total measured assistance to outputs. By 1989–90 they accounted for over 90 per cent of the sector's output assistance. Projections of assistance in 2000–01 show this trend will continue.

Table 4.2

**Assistance to manufacturing by form<sup>a</sup>: selected years**  
(\$ million)

	1983 –84	1989 –90	1992 –93	1996 –97	2000 –01
<i>Assisted value added</i>	38484	70401			
<i>Unassisted value added</i>	28619	61030			
<b>Assistance to outputs</b>					
Tariffs <sup>b</sup>	8205	13671	12725	6629	5562
Quantitative import restrictions	1248	505	46	–	–
Bounties <sup>c</sup>	139	208	124	50	47
Export incentives <sup>c</sup>	219	241	273	285	285
<b>Assistance to materials</b>					
Tariffs <sup>b</sup>	3604	5064	4918	2624	2274
Quantitative import restrictions	493	94	49	–	–
Excise taxes	8	97	100	100	100
<b>Assistance to value adding factors <sup>d</sup></b>	–	..	58	8	8

– Nil.

.. Less than \$0.5 million.

a Estimates for 1983–84 and 1989–90 are in 1983–84 and 1989–90 prices, respectively. Estimates for 1992–93, 1996–97 and 2000–01 are in 1991–92 prices. 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 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.

c Except for the base years 1983–84 and 1989–90 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 and 1989–90 production patterns respectively.

d The Commission's new series of estimates includes, for the first time, some assistance to value-adding factors; namely certain capital grants and concessional loans for TCF industries.

Source: Commission estimates.

Despite the continued dominance of tariff assistance, the quantum of output assistance, as measured by the gross subsidy equivalent for manufacturing industries, has fallen relative to assisted and unassisted values of the sector's output (see Table 4.2). For details of the various forms of assistance included in the assistance estimates, see Appendix 3.

### **Disparities in assistance**

Differences in levels of assistance between and within industries are an important indicator of the potential for resources to be misallocated as a result of the assistance they receive. 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. The Commission uses the standard deviation as a measure of the dispersion of assistance levels. The standard deviations for nominal and effective rates by ASIC subdivision are presented in Tables A6.7 and A6.8.

The standard deviation for the manufacturing sector's average effective rate of assistance remained constant at around 30 percentage points from 1968–69 to the early 1970s. This measure of disparities declined in 1973–74 and remained below the 1968–69 measure until 1975–76. The disparities in assistance to the sector widened with the introduction of quotas in the mid 1970s and peaked at 48 percentage points in 1984–85. The subsequent depreciation of the dollar saw the rate of assistance via quotas reduced, and thus disparities in assistance to the sector progressively declined. By 1992–93 the program of assistance reductions was well under way and disparities had fallen to 16 percentage points. Disparities will decline further to 7 percentage points in 2000–01, in line with the March 1991 program of phased reductions in assistance.

Another indication of the disparities in levels of assistance between industries within the manufacturing sector is provided in Figures 4.2 and 4.3. These show the distribution of output and value added (measured at prices that include assistance) by levels of nominal and effective rates of assistance, respectively.

The proportion of manufacturing output receiving a nominal rate of assistance of 5 per cent or less increased from 18 per cent in 1970–71 to 29 per cent in 1989–90. By 2000–01, 85 per cent of manufacturing output is projected to have a nominal rate of 5 per cent or less. At the other end of the scale, 72 per cent of output received assistance greater than 15 per cent in 1970–71. This had fallen to 24 per cent by 1989–90 and is projected to fall to 3 per cent by 2000–01.

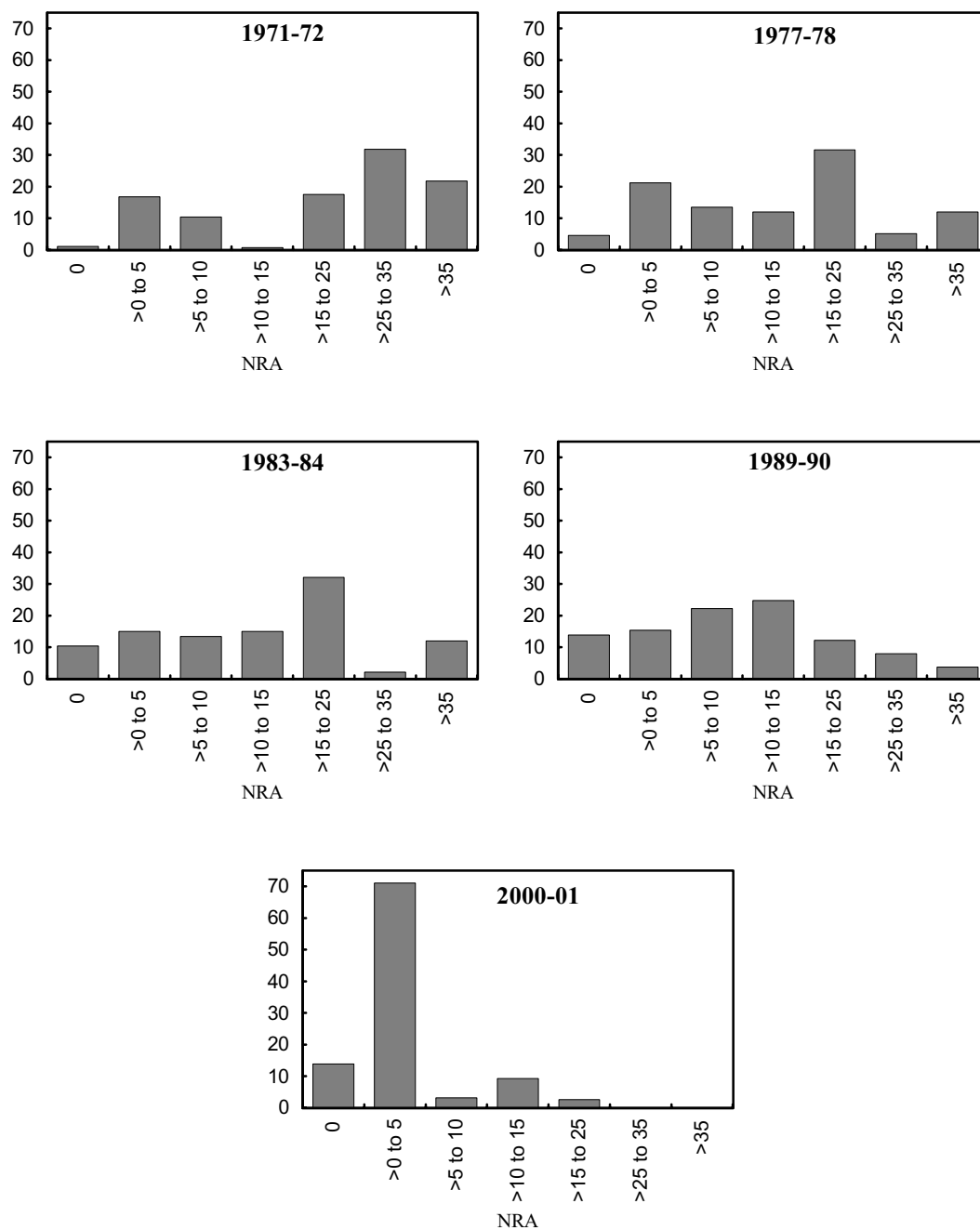
A similar trend is evident from an examination of the distribution of value added. In 1970–71 the proportion of value added receiving an effective rate of 5 per cent



or less was 9 per cent. This proportion has gradually increased since then to 37 per cent in 1989-90, and is projected to rise to 55 per cent by 2000-01. Over half of the manufacturing sector's value added received an effective rate greater than 35 per cent in 1970-71, but this had been reduced to 13 per cent in 1989-90 and will decline further to 3 per cent by 2000-01. These estimates indicate that disparities in assistance have been declining, especially over the last few years. However, in 2000-01 a significant proportion of value added will still be receiving assistance greater than 15 per cent, most notably the PMV and TCF industries.

Figure 4.2

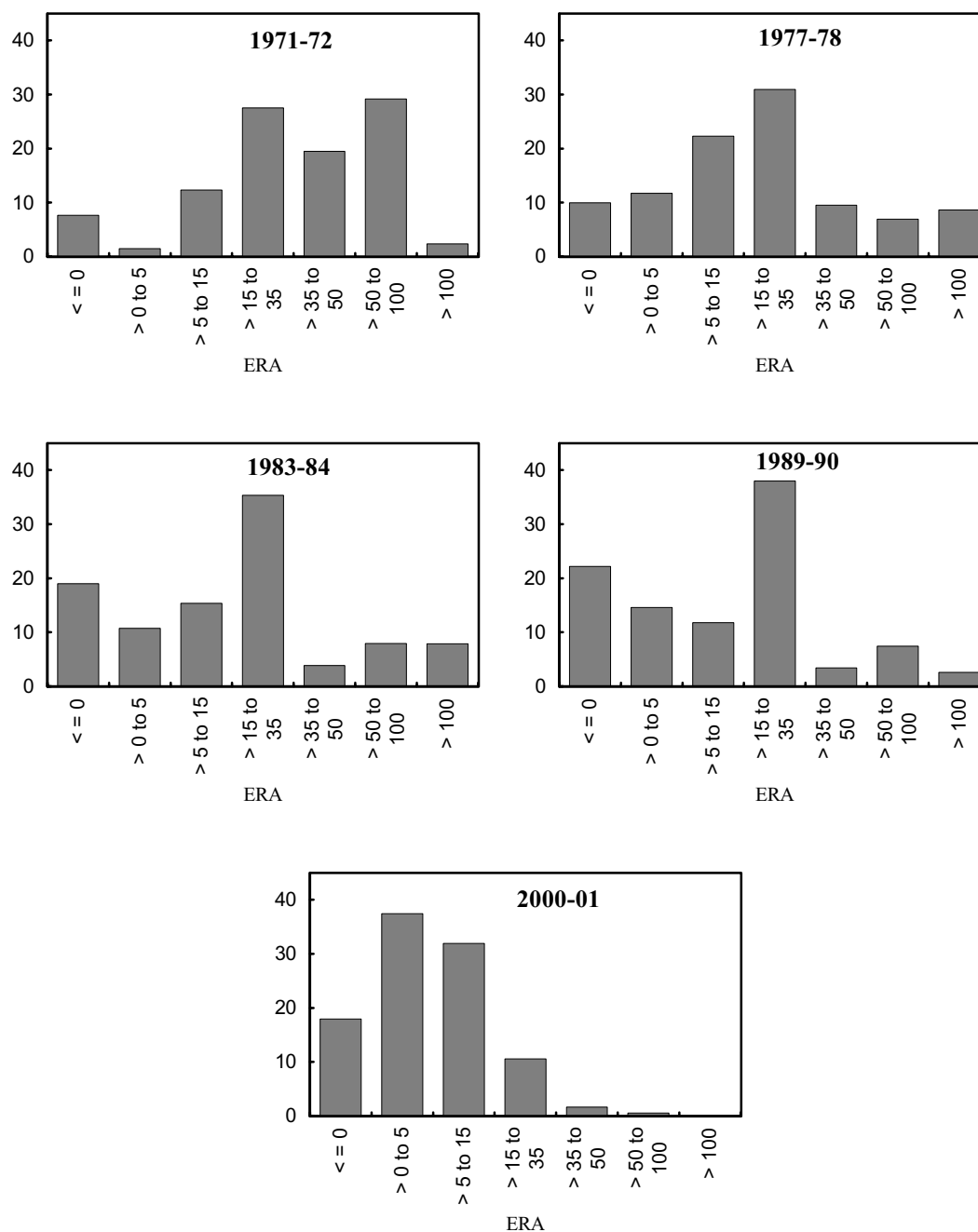
**Distribution of manufacturing value of output, by nominal rates of assistance: selected years (per cent)**



Source: Commission estimates.

Figure 4.3

**Distribution of manufacturing value added, by effective rates of assistance: selected years (per cent)**



Source: Commission estimates.

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## APPENDIX 1

# THE ERA AND ASSOCIATED MEASURES

### Measurement of assistance

For measurement purposes, it is convenient to summarise the various forms of assistance into three groups on the basis of their effects on output returns, intermediate input costs and value added. Separate measures have been developed for each (see separate boxes).

#### *Box A1.1: Output assistance*

The output assistance provided by Government interventions is the increase in the gross returns from production above that which would apply in the absence of assistance. The gross return from production with assistance is called the assisted value of production (AP). The (hypothetical) gross return from that production without assistance is called the unassisted value of production (UP). The increase in the gross returns is called the gross subsidy equivalent (GSE). It is the notional amount of money that would give the same amount of assistance to gross returns as is provided by the existing government interventions.

$$\text{GSE} = \text{AP} - \text{UP}$$

The Nominal Rate of Assistance on outputs (NRA) is the percentage increase in gross returns per unit of output, relative to the (hypothetical) situation of no assistance.

$$\text{NRA} = (\text{GSE}/\text{UP}) * 100$$

Some interventions assist by raising prices (for example, tariffs), while others increase returns without increasing prices (for example, production subsidies).

#### *Box A1.2: Intermediate input assistance*

Intermediate inputs are a cost of production. Government interventions, such as tariffs, typically raise these costs. The cost of intermediate inputs with assistance is called the assisted value of intermediate inputs (AM). The (hypothetical) cost of those intermediate inputs without assistance is called the unassisted value of intermediate inputs (UM). The increase in the cost of intermediate inputs is called the tax equivalent on intermediate inputs (TEM), or sometimes just tax on materials. It is the notional amount of tax that would increase the cost of intermediate inputs by the same amount as the existing government interventions.

**Box A1.2: Continued**

$$TEM = AM - UM$$

The Nominal Rate of assistance on intermediate inputs (or materials) (NRM) is the percentage increase in the cost of intermediate inputs per unit of input relative to the (hypothetical) situation of no assistance.

$$NRM = (TEM/UM) * 100$$

Some interventions raise the price of intermediate inputs (for example, tariffs) and some lower their cost (for example, subsidies to users). Measures which assist the production of intermediate inputs without altering their price to user industries (for example, production subsidies) are not included.

**Box A1.3: Value added assistance**

The assistance effects of government interventions that directly and specifically target land, labour or capital returns in particular activities may be measured as the notional amount of money, or subsidy equivalent, necessary to yield the same increase in returns to the land, labour or capital used in the activity or industry, as is provided by the assistance. This is called the Subsidy to Value Adding Factors (SVA). Interventions that apply generally to the use of resources throughout an economy (for example, income and value added taxes) are not included.

**Box A1.4: Net assistance and the effective rate of assistance**

The net assistance effect of government interventions on the use of resources in an activity, or industry, may be measured by the notional amount of money, or subsidy equivalent, necessary to provide the same increase in returns to value adding factors as is provided by the existing structure of assistance. The return to value adding factors, including the effect of assistance, is called the assisted value added (AVA). The (hypothetical) return to those value adding factors without assistance is called the unassisted value added (UVA). The increase in returns to value adding factors is called the Net Subsidy Equivalent (NSE) and may be derived by adding up output assistance and value added assistance, and subtracting the tax from intermediate input assistance.

$$\begin{aligned} NSE &= AVA - UVA \text{ or} \\ &= GSE - TEM + SVA \end{aligned}$$

**Box A1.4: Continued**

The Effective Rate of Assistance (ERA) is the percentage increase in returns, to an activity's, or industry's, value added per unit of output, relative to the (hypothetical) situation of no assistance.

$$\text{ERA} = (\text{NSE}/\text{UVA}) * 100$$

The net incentive effect of all forms of intervention on the use of resources in a particular activity is indicated by adding up their assistance effects. This net assistance is known as the Net Subsidy Equivalent (NSE) because, in principle in the absence of assistance, it is the amount of subsidy that would have to be paid to value-adding factors to provide them with the same returns as currently provided by the existing structure of industry assistance. Subsidy equivalents, including the NSE, depend on the size of the industry as well as the rate of assistance. The effective rate of assistance (ERA) expresses the NSE as a percentage of unassisted value added and can be used to compare levels of assistance between activities and over time to indicate the net incentive effect on the use of resources in different activities.

In the literature, the ERA has also been defined as follows:

$$g = (df - X.dm) / (1 - X)$$

where

$$g = \text{ERA}$$

$$df = \text{NRA, the nominal rate of assistance on outputs}$$

$$dm = \text{NRM, the nominal rate of assistance on materials}$$

$$X = \text{UM/UP} = \text{unassisted materials to output ratio}$$

$$\text{UP} = \text{unassisted value of output}$$

$$\text{UM} = \text{unassisted value of materials}$$

As shown below, this formula is equivalent to the formula provided in Box A1.4.

Ignoring direct assistance to value-adding factors, net assistance is assistance to outputs less assistance to intermediate inputs, ie:

$$\text{NSE} = \text{GSE} - \text{TEM}$$

where

$$\text{GSE} = \text{AP} - \text{UP}$$

$$= \text{UP} (1 + df) - \text{UP}$$

$$\text{AP} = \text{assisted value of output}$$

$$\begin{aligned}\text{and } \text{TEM} &= \text{AM} - \text{UM} \\ &= \text{UM} (1 + \text{dm}) - \text{UM}\end{aligned}$$

$$\text{AM} = \text{assisted value of materials}$$

$$\text{giving } \text{NSE} = \text{UP}.\text{df} - \text{UM}.\text{dm}$$

which when divided by UP yields

$$\text{NSE/UP} = \text{df} - \text{X}.\text{dm}$$

The unassisted value added

$$\text{UVA} = \text{UP} - \text{UM}$$

which when divided by UP yields

$$\text{UVA/UP} = 1 - \text{X}$$

$$\text{Thus, } \text{ERA} = \text{NSE/UVA} = (\text{df} - \text{X}.\text{dm}) / (1 - \text{X}) = g$$

An advantage of expressing the ERA as a formula in terms of nominal rates is that the following relations can be shown between nominal and effective rates:

$$\text{If } \text{df} = \text{dm}, \quad \text{then } g = \text{df} = \text{dm}$$

$$\text{If } \text{df} > \text{dm}, \quad \text{then } g > \text{df} > \text{dm}$$

$$\text{If } \text{df} < \text{dm}, \quad \text{then } g < \text{df} < \text{dm}$$

$$\text{If } \text{df} = \text{X}.\text{dm}, \quad \text{then } g = 0$$

$$\text{If } \text{df} < \text{X}.\text{dm}, \quad \text{then } g < 0$$

As indicated in Box A1.2, nominal rates of assistance may be calculated for intermediate inputs used in an activity as well as for outputs from an activity. It is usual, however, when mentioning nominal rates to be referring to the average nominal rate for an industry, group or sector. The ERA is the more complete measure of the net incentive effect of interventions on the use of resources in an activity.

The direct taxing effect on consumers, of government interventions to assist an activity, depends on the price effects of the output assistance provided to the activity and the importance of local supplies in total consumer expenditure. Forms of assistance, such as production subsidies, which raise producer returns without raising prices have no direct taxing effect on consumers. However, forms of assistance such as tariffs, which raise producer returns by raising prices, tax consumers. The tax on consumers may be significantly larger than the subsidy to producers if domestic production supplies only a small share of consumer

demand. This arises because the cost to consumers is made up of higher priced local products plus higher priced (tariff-inflated) imports.

Within a country, relatively high levels of effective assistance to an activity indicate that extra returns are provided to the use of resources in that activity. This encourages additional resources into the activity to expand output or, alternatively, allows resources to be retained in the activity when they could yield more wealth if they were used elsewhere in the community. This misallocation of resources will reduce the potential for economic growth and associated gains in community welfare. An important feature of measuring assistance is to indicate differences (disparities) in levels of assistance between and within industries. The larger the disparities in levels of effective assistance, the greater the potential for resources to be used in activities that do not maximise economic welfare. In addition, wide disparities in nominal rates between goods are indicative of the potential for losses of consumption efficiency.

### **Aggregation of industry assistance measures**

A feature of using a net measure like value added to indicate the net contribution of an activity to an economy is that the contribution of groups of activities, such as industries, and sub-divisions and divisions of industries, may be derived by simple addition. In like manner, the net subsidy equivalent of assistance to groups of industries may be derived by simple addition. Aggregated ERAs may therefore be derived from sub-totals and totals of net subsidy equivalents and unassisted value added or, as is more usually done in practice, from unassisted value-added weighted averages of individual ERAs. This means that the interpretation of net subsidy equivalents and ERAs is not influenced by the level at which the estimates are made.

The interpretation of output measures of assistance such as gross subsidy equivalents and input measures of assistance such as tax equivalents on intermediate inputs, however, is dependent on the level at which estimates are made. This is because with sales and purchases between industries within the group, the output and input of the group as a whole are less than the sum of individual industry outputs and inputs. Thus the gross subsidy equivalent of output assistance to, say, the textile and clothing industries as a whole is less than the sum of the individual industry gross subsidy equivalents. Only where there are no inter-industry sales within the group would the two coincide. By way of contrast, the net subsidy equivalent and ERA are net measures. The inter-industry effects of assistance have been netted out in their derivation.



## Underlying assumptions

While the concept of effective assistance is general, the practical application of that concept involves a number of simplifying assumptions. In particular, the ERA and associated measures are derived using static, partial-equilibrium assumptions. These focus attention on the initial impact of interventions on prices, costs and returns. This is both a source of strength and weakness. A strength is that they provide a comprehensive and coherent framework which minimises the data requirements for the measurement and amalgamation of the assistance effects of the many different forms of government intervention. A weakness is that they do not portray the behavioural responses of those initial impacts. For example, while the ERA and associated assistance measures indicate the income transfers associated with interventions, they do not indicate changes in supply and demand of particular commodities nor more general equilibrium effects, such as changes in the balance of payments, and the exchange rate. The data used to derive ERAs is only a small subset of the more comprehensive data required to portray such effects.

The major assumptions used in measuring ERAs are briefly outlined below. Violations of these assumptions do not necessarily invalidate ERAs as a measure of net assistance for comparative purposes, but they do emphasise the approximate nature of the estimates and that, for policy purposes, no great significance should be attached to small differences in estimates.

- (i) *Perfect substitution between domestic and foreign goods of the same description.* This assumption allows the assistance effects of border interventions, and other policies such as domestic pricing schemes, to be measured from comparisons of domestic or landed duty paid prices with landed duty free prices of similar goods for import-competing goods, and from comparisons of domestic with export unit returns for exported goods. To the extent that the similar goods chosen for the comparisons are less than perfect substitutes, the assistance effects of the interventions would be over estimated.
- (ii) *No substitution between nominally different goods.* To the extent that different goods substitute for each other, the assistance to one product can affect the level of assistance to another. For example, assistance which increases the price of a good will divert demand toward a close substitute. The substitute indirectly benefits from the assistance through this increased demand. Conversely, competition from close substitutes which may be unassisted can undermine the assistance to a particular product.
- (iii) *Infinite elasticities of export demand and import supply.* This is often called the ‘small country assumption’, and means that the demand for imports and the supply of exports do not affect the world price of goods. This

assumption does not hold if changes in the quantity of exports, or changes in the demand for imports, are large enough to alter the world price. This can be a serious limitation of once-only estimates. But when estimates are made regularly to monitor policy reform, there is an automatic adjustment to changes in benchmark prices, and hence to the estimates, as a result of such things as aggregate shifts in world trade supply and demand.

- (iv) *The direction of trade in the absence of assistance can be assessed, with import-parity prices forming the benchmark for goods assessed to be import competing and export-parity prices for export goods.* Often the stronger assumption of the existing trade orientation is used for assessing the direction of trade. In Australia's experience, the direction of trade assumption is likely to be a contentious issue for only a very few export commodities whose production has been highly assisted. Like the small country assumption, this is less of a problem if estimates are made regularly and responses to policy changes are incorporated.
- (v) *In the absence of assistance, prices of goods, services, and factors, represent their opportunity cost to the community.* This implies that there are no price or quantity distortions in the domestic market other than those included in the analysis. If major sources of assistance are excluded from the effective rate measure, then judgments as to the relative levels of assistance between industries can be biased.
- (vi) *Production relationships between inputs (that is, intermediate inputs and primary factors) are unchanged by the structure of assistance.* This can be a serious limitation, as high assistance to an activity is often provided to sustain existing operations so as to avoid the rationalisation of an industry to a more appropriate role in the economy using more appropriate technology. It is also unrealistic to the extent that a high tariff on a particular material input is likely to cause users to substitute toward the greater use of alternative, less highly assisted, materials. Nevertheless, it does emphasise the cost of maintaining existing production relationships. Changes in the relationships are incorporated automatically if estimates are made regularly to monitor progress and databases are updated as part of that process.

In agriculture, production relationships are typically unstable as a result of the influence of such things as climatic factors on yields. To reduce the impact of such fluctuations on ERA estimates, the production relationships in Australia have been derived from an average of up to 10 years production data (see Chapter 1). Also in agriculture, assistance has typically been provided in counter-cyclical forms. This has further reinforced the difficulty of drawing conclusions based on a single year's estimates and emphasised that it is more useful to look at the estimates for a number of years.

The use of import-parity and export-parity prices as benchmark prices essentially emphasises the opportunity cost of protecting certain domestic production. As such, it does not require the assumption of perfect competition in the world market, simply that the actions of a single country cannot influence world prices. In this situation, it does not matter whether world prices are influenced by fundamental market forces or the protective action of foreign governments. A country maximises its own resource-use efficiency by purchasing from the cheapest source, and selling at the world price. If countries individually pursued this objective, it would also automatically ensure enhanced global resource-use efficiency.

The subsidy and tax equivalent measures associated with effective rates indicate how some groups in the community benefit from assistance at the expense of others. However, as discussed in Chapter 1, they do not measure the economic or welfare costs to the community of assistance.

For changes that involve significant economy-wide effects, more complete assessment should preferably involve general-equilibrium models. For example, the removal of trade barriers is likely to lead, in the short run, to balance of payments deficits which would lead to a depreciation of the currency. This depreciation, by raising import and export prices in terms of the local currency, would partly offset the loss of assistance to exporting and import-competing industries. General equilibrium models can be used to illustrate these effects.

### **Tradeable and non-tradeable inputs**

Non-traded intermediate inputs are those goods and services which are produced and used exclusively in the domestic market. In practice, intermediate inputs are treated as tradeable or non-tradeable on the basis of the influence of world prices on domestic prices. The measurement of the assistance effects of government interventions has been limited to tradeable inputs, as the purpose of such interventions has been to isolate domestic activities in some way or other from full exposure to world trade. World trade prices provide accessible unassisted benchmark prices for measuring the assistance effects of domestic interventions. In principle, interventions that directly affect the availability and price of non-traded intermediate inputs to specific activities can be incorporated in the ERA framework. However, there is the practical difficulty of quantifying the extent of assistance provided.

In the theoretical literature there has been a discussion of the relative merits of alternative treatments of non-traded intermediate inputs. One initial method, associated with Corden (1977), was to treat non-traded intermediate inputs as a

component of value added. The other, associated with Balassa (1971), was to treat non-tradeable inputs as tradeables with a zero tariff. Both were subsequently modified to account for the effect on the user cost of non-traded intermediate inputs of assistance to their tradeable input content. In the case of Corden, this was done by including the tradeable content as traded input and the primary factor content of non-traded inputs with value added. In the case of Balassa, the modification was made by recognising the assistance provided to the tradeable input content of non-traded intermediate inputs. In effect, the Corden method measures the net incentive effect of the assistance provided relative to resources used both directly and indirectly in the activity, whereas the Balassa method measures it relative to the resources used in the specific activity alone.

Implicit in both methods is the view that the price to user industries of non-traded intermediate inputs reflects the full cost of the efficient provision of such goods and services. On this basis, the effect of intervention on the costs of traded inputs would be fully reflected in the prices of their output. In practice, many of the major non-traded intermediate inputs are provided by government business enterprises, such as postal, power and telecommunications services, and their prices may not reflect true costs of efficient provision.

The Commission's treatment of non-traded intermediate inputs in its manufacturing estimates has, in large part, been driven by the availability of data and the desire to keep it simple. The ABS census of manufacturing establishments, upon which the manufacturing system is based, does not provide a complete accounting for the value of output in terms of intermediate input costs and value added. Rather, inputs are recorded under selected items of expense. Value added is derived by identifying and deducting items of expense that are intermediate inputs from the value of sales and transfers out, as adjusted for changes in stocks and outward freight. The result has been that there is a separate identification of non-traded material inputs such as electricity, but there is no separate identification of non-traded non-material inputs such as accounting and advisory services. The Commission has treated non-traded intermediate inputs for which separate data are available like traded inputs and assigned a zero tariff to them. The balance of non-traded intermediate inputs has, by default, been treated as value added. This simplifies calculations. Sensitivity analyses and the small share of non-traded materials in total material inputs used by manufacturing industries suggest that the alternative approaches would not produce significantly different effective rate estimates, except for a few activities (for example, aluminium smelting).

For agriculture, the treatment of non-traded material inputs, such as electricity, has not been consistent between commodities. Electricity has been included as part of value added for most commodities. However, for others such as tobacco

and honey, it was included under services and assigned a zero tariff. Non-traded non-material inputs, such as accounting services, banking and legal expenses, telephone, and insurance etc., have generally been included as services and also assigned a zero tariff.

The methodology used to measure assistance to agriculture has changed over the last few years. Since 1990–91 (that is, the latest series), non-traded inputs have been treated as intermediate inputs and the average nominal rate on manufactured products has been assigned to the tradeable component of non-traded inputs. This is based on the assumption that the majority of traded components in non-traded inputs are sourced from the manufacturing sector.

### **Tradeable capital**

Capital inputs, such as plant and equipment, are often as tradeable as other intermediate inputs, such as raw materials. Government interventions can differentially assist activities by directly influencing the cost to user industries of such tradeable capital and, in theory, the effects of assistance to tradeable capital items should be included within the ERA framework.

This has been recognised by the inclusion of assistance to capital in measurement systems for the more capital-intensive agricultural and mining industries. In the first two series of assistance estimates for agriculture, the taxing effect of tariffs on capital items was accounted for by estimating the additional depreciation allowance associated with the increased cost of capital items. In principle, the same method could have been applied to manufacturing industries, however the necessary data has not been available.

A more complete method of accounting for the taxing effect of tariffs on capital items is to estimate the change such tariffs have on the user cost of capital of the items. This technique is used in the current series of agricultural estimates and also in the Commission's detailed study of assistance to coal mining, and is outlined in Appendix 3.

Sensitivity analysis indicates that, while the inclusion of tradeable capital can have a significant effect on the estimated ERA for some activities, it has little effect on the overall level and on the relative ranking of different industries. For example, the omission of the effect of assistance on tradeable capital was estimated to change the measured average ERA for the agricultural sector for 1989–90 from 8.4 to 9.2 per cent. Within the manufacturing sector, the exclusion will lead to an overstatement of effective rates of assistance for industries that use a relatively large proportion of tradeable capital in production. However, sensitivity analyses for this sector suggest the inclusion of assistance to tradeable

capital inputs in the estimates would have little impact on measured effective rates overall and virtually no effect on the ranking of industries.

### **Application of the ERA framework**

The practical application of the ERA framework for the measurement of industry assistance requires:

- detailed data on the sales and cost structure of industries;
- identification of the government interventions that alter output returns, intermediate input costs, or directly favour the use of resources in particular activities; and
- measurement of each intervention on a common basis so that it can be included in the calculation of ERAs.

### **Methodology and interpretation**

In estimating assistance to manufacturing, a system has been used which assumes constant production patterns for each year within a series. The use of fixed weights within each series focuses attention on changes in the relative incentives afforded industries by the Government. Generally, observed changes in the average effective rate for manufacturing within each series reflect only the direct impact of changes over time in the level of assistance afforded individual industries. Excluded are the effects of changes in production or resource flows which are induced by these changes in assistance or other factors such as improvements in technology or changes in consumer tastes.

Within the constraints of the effective rate model, the impact of changes in the structure or technological composition of the sector is incorporated into each new series of estimates via the revised production weights and materials to output ratios. The accuracy of effective rate estimates within a particular series depends upon the extent to which the production weights over the series have changed from the base year.

Unlike manufacturing, average effective rates for agriculture are calculated using the actual production weights in each year. However, within each series, materials are assumed to constitute a fixed proportion of the value of output in assisted prices.

Detailed materials usage data were derived using farm survey data from the Australian Bureau of Agricultural and Resource Economics (ABARE) and, for earlier years, from its predecessor the Bureau of Agricultural Economics (BAE). For the most recent series, these data were supplemented for some commodities

with data from the ABS Agricultural Finance Survey (ABS Cat. No. 7507.0). The first series of estimates was based, where possible, on average assisted materials to output data for the period 1970–71 to 1980–81. The second series of estimates was based, where possible, on average assisted materials to output data for the period 1979–80 to 1983–84. In the current series, for most commodities, ABARE Farm Survey data or ABS Agricultural Finance Survey data for the period 1981–82 to 1990–91 were used. For each commodity for each year, a notional value of materials used was derived by applying the average assisted materials to output proportions, derived from the survey data, to the local values of production from the ABS.

In the case of agriculture, differences in measurement between series of estimates have resulted in some significant differences in effective rate estimates for certain activities between series. In addition to updating the materials to output ratios between series, the definition of value added has been refined. With the introduction of the second series of estimates, certain service inputs previously included in value added were excluded. Included as inputs were expenses such as accounting and banking charges; telephone expenses; advisory services; and insurance. However, these were assumed to have a nominal rate of zero. In the current series, tariff penalties on inputs used by certain non-traded goods and services, such as mechanical and veterinary services, have also been included.

The objective of the methodology used to produce the Commission's sectoral assistance estimates presented in this paper is to facilitate consistent treatment across industries rather than detailed examination of individual industries. For this reason, estimates in this information paper for certain activities or industries that have been the subject of detailed reviews by the Commission, as part of its inquiry function, will not always be identical to the estimates published in the relevant inquiry reports. Assistance estimates calculated for inquiries are able to take account of additional industry-specific details.<sup>1</sup> For example, inquiry information may provide more recent detailed information on materials used in a particular activity. Furthermore, estimates at the 4-digit ASIC level are in many cases too aggregated to be useful in inquiries where much more disaggregated industries or goods are under reference.

The assistance estimates for manufacturing tend to provide a measure of available assistance because tariff assistance (the dominant form of assistance to manufacturing industries) is measured using the general rates of duty. This method will overstate nominal assistance on outputs in cases where tariffs are not fully used (ie the prices of the locally produced goods are not raised by the same

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<sup>1</sup> Differences between the Commission's more general estimates of assistance afforded industries and those obtained for inquiries can also arise due to minor differences in the methodology and the data sources used.

proportion as the prices of imported substitutes).<sup>2</sup> Similarly, the use of General tariff rates of duty may overstate nominal assistance in instances where import competition is almost entirely from preferential sources. The choice of tariff rates for use in ERA calculations is discussed further in Appendix 3.

The precise impact of these factors on effective rate estimates will depend upon their importance on outputs relative to inputs. For example, if partial usage on outputs is small compared with partial usage on inputs, effective assistance may well be higher than indicated by the estimates. For other forms of manufacturing assistance, such as the quantitative import restrictions formerly applying to passenger motor vehicles, clothing and footwear, the assistance estimates measure assistance used.

The assistance estimates for agriculture tend to measure only assistance used because of the nature of the major forms of assistance to agriculture (eg domestic pricing arrangements and income tax concessions). The provision of minimum price guarantees by the Government, for many of the agricultural industries, has the potential to provide very high levels of assistance should a slump occur in world prices. As these schemes may also provide an assurance element for future returns by reducing risk, they may influence the allocation of resources beyond that indicated by the measured levels of assistance. A similar element of assurance also applied to manufacturing industries protected by quotas where the level of assistance provided was open-ended.

The differences in readily available data at a disaggregated level have meant that the Commission has highlighted disparities in assistance between industries within sectors and suggested that caution should be used when making direct comparisons between individual industries in different sectors. This is because small differences in estimates could reflect differences in data bases and the scope of interventions included in the estimates, rather than real differences in the incentives to use resources in different activities.

### Calculation of an ERA: A worked example

The relationship between the main components of the ERA and the sources of data is illustrated in Box A1.5 by a worked example based on the Australian iron and steel industry as it was in the mid 1980s.

#### *Box A1.5: A worked example: Australian iron and steel industry*

<i>Calculation</i>	<i>Value (\$m)</i>	<i>Data source</i>
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<sup>2</sup> The existence of significant import competition for most tariff-assisted goods indicates that the tariff protection has generally been fully used in recent years.



Value of output	5174.0	Sales and transfers out (adjusted for selling and distribution expenses) for the 3-digit ASIC (Australian Standard Industrial Classification) 'Basic iron and steel' industry from the manufacturing census conducted by the Australian Bureau of Statistics (ABS).
• Production subsidies	19.3	Subsidies paid to producers of goods comprising the 3-digit 'Basic iron and steel' industry. Data taken from government budget papers.
• Export incentives	1.6	Export incentives paid for market development and promotion to producers of 'Basic iron and steel'. Data from government budget papers and the Board responsible for administering the Schemes.
• Special labour adjustment	2.0	Payments made under special Government plan for restructuring the industry.
(1) Assisted value of output (AP)	5194.9	Value of output plus the value of subsidies and export incentives.
(2) Less inputs (AM)	3364.7	Materials and fuels used by 3-digit ASIC industry 'Basic iron and steel' from the manufacturing census conducted by the ABS.
(3) Assisted Value Added (AVA)	1832.2	$AP - AM + SVA = AVA$

**Box A1.5: A worked example: Australian iron and steel industry (cont'd)***Output assistance*

•	Tariffs	406.2	The subsidy equivalent of tariffs derived from General tariff rates applying to competing imports of 'Basic iron and steel'. Requires the construction of a concordance between 'Basic iron and steel' product groups (used by the ABS to collect manufacturing census data) and the Customs tariff — the GSE for each product group is derived by subtracting from each group's value of output, its 'unassisted' value. The unassisted value is estimated by deflating each group's assisted value of output by its average nominal tariff rate. The GSE for the 'Basic iron and steel' industry is the summation of each product groups' GSE.
•	Production subsidies	19.3	(from above)
•	Export incentives	1.6	(from above)
(4)	Gross Subsidy Equivalent (GSE)	427.1	Subsidy equivalent of tariffs + Production subsidies + Export incentives.
(5)	Unassisted Value of Output (UP)	4767.8	$AP - GSE = UP$

*Nominal rate of assistance on output (NRA)*

$$NRA = 100 * (4) / (5) = 9.0 \text{ per cent}$$

*Intermediate input assistance*

•	Tariffs on materials	208.3	The TEM of tariffs derived from General tariff rates (adjusted for concessional tariff entry of imported inputs) applying to competing imports of material and fuel inputs used in the 'Basic iron and steel' industry. Requires the construction of a concordance between 'Basic iron and steel' material group (used by the ABS to collect manufacturing census data) and the Customs tariff.  The TEM for each material group is derived by subtracting from each group's assisted value of
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**Box A1.5: A worked example: Australian iron and steel industry (cont'd)**

materials and fuels used, its 'unassisted' value (estimated by deflating each group's assisted value by its average nominal tariff rate). The TEM for the 'Basic iron and steel' industry is the summation of each material group's TEM.

(6)	Tax Equivalent on Intermediate Inputs (TEM)	208.3	
(7)	Unassisted value of Intermediate Inputs (UM)	3156.4	(2) – (6) AM – TEM = UM

*Nominal rate of assistance on intermediate inputs (NRM)*

$$NRM = 100 * (6) / (7) = 6.6 \text{ per cent}$$

*Value added assistance*

(8)	Subsidy to value added (SVA)	2.0	Payment for special labour adjustment. Data from government budget papers.
(9)	Unassisted Value Added (UVA)	1611.4	(5) – (7) UP – UM = UVA
(10)	Net Subsidy Equivalent (NSE)	220.8	(3) – (9) or (4) – (6) + (8) AVA – UVA or GSE – TEM + SVA

*Effective rate of assistance (ERA)*

$$ERA = 100 * (10) / (9) = 14 \text{ per cent}$$

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## APPENDIX 2

# SOURCES OF CHANGES IN MANUFACTURING ASSISTANCE

Some of the more important government decisions which have affected the level of assistance afforded manufacturing industries were highlighted in Chapter 2. This appendix examines the major factors that can influence measured assistance and discusses the sources of change in the level and structure of effective assistance over the period covered by the estimates.

### Factors influencing measured assistance

Effective rates for the manufacturing sector are an average of the effective rate estimates for individual 4-digit ASIC industries, weighted by each industry's share of the sector's total value added (expressed in unassisted prices). Thus, changes over time in measured sector averages represent the combined effects of changes in the three components of the effective rate calculation. These are:

- changes in the level of assistance to the outputs and inputs of individual industries or production processes;
- changes in the structure of individual industries as measured by adjustments to their material to output ratios; and
- changes in the structural composition of sectors as reflected in changes in the share of value added accounted for by individual industries.

Measured assistance levels have also been influenced by changes over time in the methodology used to estimate effective rates. With each new series, the Commission has improved the coverage and measurement of certain forms of assistance and the treatment of certain items of outputs and materials. Changes in coverage were often necessary following the introduction of new forms of assistance, such as the introduction of import quotas during 1974 and 1975. The impact of these methodological changes is incorporated into the assistance estimates through changes in one or more of the components of the effective rate calculation outlined above.

In any discussion of longer term levels of assistance and the relative impact of individual factors on these levels, it is important to recognise the influence which government policy can have on the process and rate of structural adjustment. Most changes in the structure of particular industries or sectors occur in response to market forces which reflect changes in the long term patterns of demand and

supply and the relative prices of individual goods, services and resources. However, government policies and, in particular, the assistance arrangements afforded individual industries, influence the economic environment in which industries and firms operate. Therefore, government decisions on assistance policy may not only affect the way in which market-induced changes are absorbed through the economy, but also act to promote (or restrict) structural change within the economy.

## **Sources of change**

### **Sector composition**

Within the manufacturing sector, the influence of the assistance afforded individual industries on the sector average effective rate is determined by each industry's relative share of unassisted value added. Changes in industry shares of unassisted value added can arise from two general sources, namely:

- changes in the size of each industry, as resources flow into or out of the industry, thus changing its relative share of assisted value added; and
- changes in the levels of assistance afforded outputs of and materials used in each industry. These assistance levels are used to express each industry's outputs and material inputs, and hence value added, at world (unassisted) prices rather than local (assisted) prices.

An indication of the impact of these factors on the levels of measured assistance to manufacturing may be obtained from Table A2.1.

Table A2.1 summarises the relative contributions of individual manufacturing subdivisions to total value added in both assisted and unassisted prices for 1971–72, 1974–75, 1977–78, 1983–84 and 1989–90, the base years for each series of estimates. The data indicate that structural adjustment within manufacturing, in response to both changing market conditions and the longer term effects of changes in government assistance policies, has been on-going and has influenced sector levels of measured assistance.

For example, of the 20 percentage point decline in the sectoral average effective rate between 1971–72 and 1989–90, 3 percentage points can be associated with changes in the relative shares of unassisted value added of individual industries. Significantly, between 1971–72 and 1983–84, the contribution of the highly protected textiles, clothing and footwear, and motor vehicles and parts industries to the sector average was halved when measured in unassisted terms (from 14 to 7 per cent) but declined by less than a quarter when measured in assisted terms (from 17 to 14 per cent). With sharp reductions in assistance for these industries

between 1983–84 and 1989–90 (especially for Clothing and footwear and Motor vehicles and parts, where effective rates of assistance fell by more than half over the period), the contribution of these industries to the sector continued to decline when measured in assisted terms (from 14 to 12 per cent), but increased when measured in unassisted terms (from 7 to 10 per cent).

Similar analyses could be made using the base year weightings of any two series. However, when making and interpreting such analyses of changes in the contribution of individual industries to the sector average effective rate, it should be remembered that improvements in the treatment and coverage of measures of assistance between series will also have influenced the results.

**Table A2.1**  
**Effective rates of assistance and relative weightings based on assisted value added (AVA) and unassisted value added (UVA) for ASIC subdivisions: selected years (per cent)**

Industry		Base year					
ASIC code	Description	Measure	1971 -72	1974 -75	1977 -78	1983 -84	1989 -90
21-22	Food, Beverages and Tobacco	ERA	19	21	10	6	4
		AVA	20	19	20	20	18
		UVA	22	20	23	23	20
23	Textiles	ERA	45	39	47	69	53
		AVA	4	3	3	3	2
		UVA	4	3	3	2	2
24	Clothing and Footwear	ERA	86	87	141	227	113
		AVA	6	5	5	5	3
		UVA	4	3	3	2	2
25	Wood, Wood Products and Furniture	ERA	23	18	18	18	15
		AVA	5	6	6	6	5
		UVA	6	6	6	6	5
26	Paper, Paper Products, Printing and Publishing	ERA	52	31	24	16	9
		AVA	8	7	7	10	10
		UVA	6	7	7	10	10
27	Chemical, Petroleum and Coal Products	ERA	32	23	19	12	8
		AVA	7	8	9	10	10
		UVA	8	8	9	11	11
28	Non-metallic Mineral Products	ERA	14	11	5	4	4
		AVA	6	6	6	5	5
		UVA	7	7	7	6	6

Table A2.1 (continued)

<i>Industry</i>		<i>Base year</i>					
<i>ASIC code</i>	<i>Description</i>	<i>Measure</i>	<i>1971 -72</i>	<i>1974 -75</i>	<i>1977 -78</i>	<i>1983 -84</i>	<i>1989 -90</i>
29	Basic Metal Products	ERA	29	16	10	10	9
		AVA	11	13	10	9	11
		UVA	11	14	11	10	12
31	Fabricated Metal Products	ERA	58	39	30	25	19
		AVA	9	8	9	8	7
		UVA	7	8	8	8	7
32	Transport Equipment	ERA	50	45	48	65	37
		AVA	9	8	7	9	10
		UVA	8	7	6	7	9
	323 Motor vehicles and parts	(ERA	49	54	73	129	52)
		(AVA	7	6	5	6	7)
		(UVA	6	5	4	3	6)
33	Other Machinery and Equipment	ERA	44	24	20	22	19
		AVA	12	12	12	11	11
		UVA	11	13	13	11	10
34	Miscellaneous Manufacturing	ERA	32	27	30	26	20
		AVA	5	6	6	5	5
		UVA	5	6	5	5	5
<b>21-34</b>	<b>Total</b>	ERA <sup>a</sup>	35	27	23	22	15
	<b>Manufacturing</b>	AVA	100	100	100	100	100
		UVA	100	100	100	100	100
	Materials to output ratio (unassisted)		58	61	59	65	63

a The ERA for total manufacturing is a weighted average of the commodities using the unassisted value added (UVA) as the weight.

Source: Commission estimates.

## Structure of individual industries

The value added of industries is likely to vary over time as they develop and adjust to changes in the economic environment. Such changes in materials to output ratios can also influence the level of measured effective assistance at both the industry and sector level.

Whilst changes at the sectoral level have generally not been great, there have been significant changes in assisted and/or unassisted materials to output ratios between series for particular industries/subdivisions. Some of the largest changes in effective rates of assistance in the latest series, for example for a number of the clothing industries (ASIC Industry group 245), are explained mainly by changes

in the unassisted materials to output ratios. Also, changes in measured assistance within the Motor vehicles and parts industries group (ASIC Industry group 323) occurred with the updating from 1983–84 to 1989–90 base years (see Table A2.1). These were largely the result of a significantly lower (assisted) materials to output ratio and higher value added in 1989–90 compared with 1983–84.

The data indicate that overall, in unassisted terms, materials constituted a similar proportion of output (between 58 and 65 per cent) in each of the base years. The largest change, an increase in the proportion of materials to output from 59 per cent in 1977–78 to 65 per cent in 1983–84, would have increased the measured sector average by around 2 percentage points. However, as this increase was largely due to improvements in the methodology and materials usage data for the later series of estimates, care should be exercised when making conclusions from such movements.

### **Assistance afforded industries**

Some of the more important government decisions which have affected the levels of assistance afforded manufacturing were highlighted in Chapter 4. With the exception of the substantial fall in the effective rate in 1973–74, there was relatively little movement in the average effective rate for manufacturing *within* the first three series of estimates. The major fall in assistance between 1972–73 and 1973–74 was due to the 25 per cent tariff cut in July 1973. The significant falls in assistance occurring in the 1983–84 series were due mainly to government decisions on Commission inquiry reports and the commencement in 1988 of the Government's general program of tariff reductions. In the current 1989–90 series, which includes projections through to 2000, there are substantial falls in assistance reflecting the implementation of the program of tariff reductions announced in the Government's May 1988 Economic Statement and March 1991 Statement.

### **Changes in treatment and methodology**

The changes to assistance between series can be attributed to a number of factors. This section discusses the major changes that have occurred as a result of changes in the methodology or treatment of a particular assistance measure. At the sector level, methodological changes between series have had a significant impact on both the extent of the observed change in measured assistance and on the apparent contributions of particular factors to these changes.

As mentioned above, there have been structural changes in a number of industries. These changes have affected the levels of unassisted value added for particular industries. The changes are partly the result of improved treatment of



*advertising income and work done on commission* (work manufactured on commission by manufacturing industries for non-manufacturing enterprises from materials owned and supplied by those enterprises) in measuring an industry's output and materials in the 1983–84 and 1989–90 series. This largely accounts for the increase in the shares of value added attributed to the Paper, paper products, printing and publishing, and Chemical, petroleum and coal products industry subdivisions in these series. These changes also affected the measured effective rate for these (and other) industries by reducing their derived nominal rates on outputs, because advertising and work done on commission is unassisted. As a result, while the relative contributions to value added of such industries have been understated in previous series of estimates, their measured assistance levels may have been overstated. Consequently, care should be exercised when comparing estimates between series. Other components of operating revenue, such as repair and service revenue, were also included as output in the latest two series of estimates.

Other changes that have occurred reflect the improved measurement of various forms of assistance. This is due mainly to more extensive data being available.

The latest series of estimates for manufacturing is based on a fully revised concordance between commodity codes, used by the ABS to classify manufacturing census data, and tariff items, used by Customs to classify imports. As with the previous series of estimates, the duty applicable to each commodity was taken as the General tariff rate from the Customs Schedule, rather than being calculated implicitly from import data as was done for the three earlier series of estimates.

Since the introduction of *import quotas* in Australia in 1974, the measurement of the tariff equivalents of quantitative import restrictions has been based on two approaches. For the first three series, the tariff equivalent was estimated by the direct measurement of the price differences between locally produced products and equivalent imported products. For the latest two series, it was measured by including the value of quota when put out to tender by the Government. At the time that direct price comparisons were made, and before the introduction of tender sales by Government, estimates also involved gathering data on transfer prices for quotas sold in the extensive unofficial market that had developed (for more details on quota measurement, see Appendix 3). Quotas have not been included in the latest series for passenger motor vehicles as they expired on 1 January 1989. For the Textile, Clothing and Footwear industries the assistance estimates cover quotas up until 1992–93, as they no longer operated after 1 March 1993.

The estimates of assistance to manufacturing have included the effects of *domestic pricing arrangements* for most agricultural commodities since 1977–78.

However, the effects of the domestic pricing arrangements for sugar have been included in the manufacturing assistance estimates since 1974–75, while the arrangements for dairy products were included for the first time in the 1983–84 series. The domestic pricing arrangements for these commodities assisted manufacturing in some years when domestic prices were below buoyant export returns, and taxed manufacturing industries in other years when domestic prices were above depressed export returns. In the current series of estimates, the domestic pricing arrangements have had a taxing effect on manufacturing.

The allocation of *bounty payments* has also been improved by taking into account the broader coverage of certain bounty schemes that were announced in the March 1991 Statement. The treatment of assistance under the TCF plan has also been improved, with certain structural adjustment assistance provided through the Industry Development Strategy being incorporated in the measures for the first time and the Yarns Bounty Capitalisation Grants scheme being included on a more appropriate basis. The revised ASIC industry allocation of the capitalisation grants, compared to the bounty payments in the old series, provides an explanation of changes in effective rates of assistance for certain industries between series.

Until recently, *local content schemes* had operated in Australia since the mid-1960s. A local content scheme operated for the passenger motor vehicle industry until 1 January 1989 and for tobacco until 1995. Measurement of both schemes improved with each new series of estimates, as more data became available.

Prior to the 1983–84 series of estimates, total *export incentive* payments to manufacturing were allocated among individual subdivisions on the basis of information supplied by the Export Development Grants Board. This information gave the distribution of payments to manufacturing subdivisions. The only method available to the Commission for allocating incentive payments to industries within each subdivision was to assign the activities of the firms receiving export incentives, covering the grant year (base year in series estimates), to the various industry classes. There were inherent difficulties in such an exercise, particularly where recipients of the export incentives were involved in various activities belonging to different industry classes. For the latest two series, the methodology was refined as more extensive data became available. Grants were matched with the Australian Export Commodity Classification and, from this, the Commission was able to match the data to the 4-digit ASIC activity. This methodological change had no impact on the sectoral average between series, although it may have influenced estimates at the 4-digit ASIC industry level.

Changes in measured assistance within the *Motor vehicles and parts* industries group, primarily Motor vehicles (ASIC Industry 3231), are largely the result of a

significantly lower materials to output ratio and higher value added in 1989–90 compared with 1983–84. However, the changes are also partly a function of the improved treatment in the new series of estimates of the export facilitation and automatic duty free by-law entitlement arrangements.

On the materials used side, *repair and maintenance expenses* and *motor vehicle running expenses* have been included for the latest two series, in addition to the *usage of electricity and fuels*. As a result of these changes, the assistance estimates for 1982–83 in the 1983–84 series differ substantially for some manufacturing industries from those made under the earlier series of estimates. However, whilst the levels changed between the two series of estimates, the ranking of levels of assistance was not statistically different.

The treatment of *By-laws and Commercial Tariff Concession Orders* (CTCOs) within the effective rate estimates has been improved since the 1977–78 series of estimates. This is due mainly to more detailed data being available. The effects of By-laws and CTCOs are discussed more fully in Appendix 3.

The inclusion of *excise taxes* on intermediate inputs as a penalty to users, from the 1983–84 series, had an insignificant effect on the sector average. However, estimates for industries which are heavy users of excisable commodities, such as certain minerals processing industries, were significantly reduced when the taxing effect of excise on inputs was included in the estimates.

The preceding discussion indicates that caution must be exercised when comparing levels of manufacturing assistance over time, particularly between different series of estimates.

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## APPENDIX 3

### FORMS OF ASSISTANCE

As discussed in Chapter 1, the Commission's estimates of assistance cover a wide range of Commonwealth interventions. Estimates exclude a number of forms of assistance which, overall, are of less significance but could be important to some industries.

Forms of assistance are included in effective rate measurement in essentially two ways. First, by estimating the per unit change in the returns to the output of the industry. Second, by estimating a lump sum equivalent of the assistance provided, which is added to the gross subsidy equivalent for the industry as a whole.

The major forms of assistance taken into account in the Commission's assistance measures are analysed below.

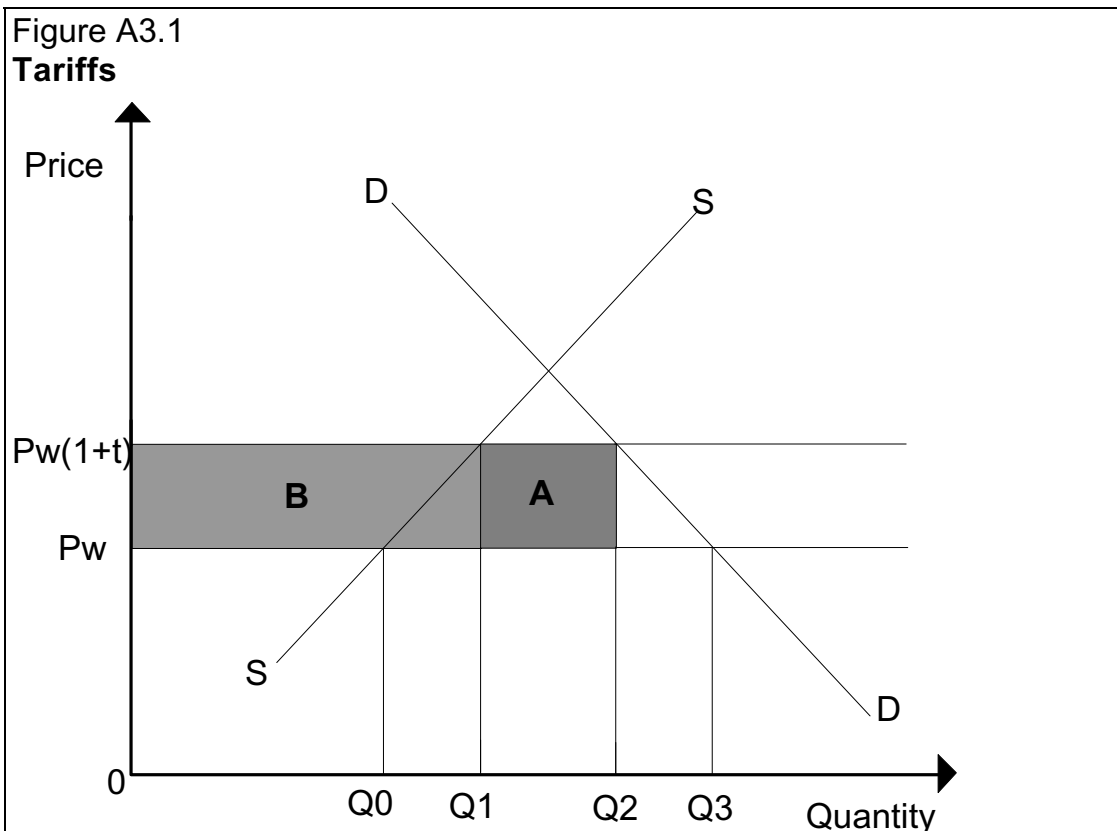
#### Tariffs

Figure A3.1 below presents the standard partial equilibrium market diagram for an import competing domestic industry. This diagram underlies the basic analysis of assistance measures for inclusion in the nominal rate of assistance on outputs. DD represents domestic demand for the product in question. SS is the domestic supply schedule. Implicit in this schedule is the assumption that additional domestic supply can only be obtained by offering a higher price.  $P_w$  is the world price (border price) of perfectly substitutable competing imports. Import supply ( $P_w$ ) is depicted as perfectly elastic under the simplifying assumption that local demand does not influence the world price. This is called the 'small country assumption' and is a reasonable presumption for a country such as Australia. Because this diagram is depicting an import competing product,  $P_w$  is the cife import price.<sup>1</sup> The rate of tariff is 't' levied on the cife import price.<sup>2</sup>

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<sup>1</sup> Cife stands for cost, insurance, freight and exchange. It represents the price of imports arrived, but not unloaded, at the importing country's border.

<sup>2</sup> Tariffs in most countries are levied on the cife import price. However, in Australia, tariffs are levied on the free on board (fob) import price. For conversion to nominal rates, Australia uses the cife import price as its benchmark for nominal rates, both for those derived from tariffs and those from price comparisons. This is because the cife price is more closely equivalent to the domestic ex-factory price.



The consequence of the tariff is that the price of the imported product is higher than it would be with free trade. In response to the higher price, domestic production expands, from 0– $Q_0$  to 0– $Q_1$ . Imports contract from  $Q_0$ – $Q_3$  to  $Q_1$ – $Q_2$ . Total demand contracts from 0– $Q_3$  to 0– $Q_2$ .

The domestic price is higher than the border price of imports by the extent of the tariff. The domestic price is equivalent to the duty paid price of the import, that is,  $P_w(1+t)$ .

The shaded area marked A represents the tariff revenue accruing to government, while the shaded area marked B represents the gross subsidy equivalent.

Estimates of prices of imports and domestic products are not, in practice, sought when measuring the nominal rate of assistance provided by a tariff. It is assumed that the observed value of domestic production fully reflects the price increase allowed by the tariff. The unassisted value of domestic production is estimated by deflating the observed (assisted) value of production by the rate of tariff ‘ $t$ ’. In the absence of other forms of assistance, the rate of tariff is the nominal rate of assistance to output.

Thus:  $UP = AP/(1+t)$

where:

UP = unassisted value of production.

AP = assisted value of production.

t = the ad valorem rate of tariff.

The rate of tariff is expressed as a decimal, that is, a tariff of 20 per cent translates into  $t = 0.2$ . In this situation, 't' is the decimal equivalent to the nominal rate of assistance on output (NRA).

### **Incorporating tariff assistance in the manufacturing estimates**

Fundamental to the incorporation of tariff assistance is the construction of concordances between the classification of commodities used by Customs, for tariff purposes, and the commodity code classifications used by the ABS, in its census of manufacturing to record data on articles produced and materials used. Two concordances are constructed; one for articles produced codes and one for materials used codes.

Concordances are constructed by matching the descriptions of the significant commodity codes with tariff classification descriptions from the Customs Tariff Schedule. Concordances are established initially for the base year and updated for tariff history changes that occur in each year within a series.

Where a commodity code is concorded with a number of tariff items, relative weights are assigned based on domestic production patterns for output and domestic usage patterns for material inputs, rather than on the composition of imports. As tariff rates are being reduced to more uniform levels as part of the Government's program of general reductions in assistance, the average commodity code nominal rates have become less sensitive to the relative weights assigned to individual tariff items. In the extreme case of all tariff items in the concordance for a particular commodity code having the same tariff rate, the relative weights assigned to each item will have no bearing on the average nominal rate for the commodity, except where there are differences in value for duty (vfd)/cife ratios used to convert tariff rates to nominal rates. Such differences are usually quite minor.

Some tariffs may not be fully used (ie prices of domestically produced equivalents may not be raised by the same proportion as import prices). In such cases, the assistance estimates may overstate the assistance used. This is particularly the case for major export industries and therefore tariff rates are set to zero for these industries (see below). Conversely, if there is partial usage of

tariffs on inputs, the assistance estimates could understate the net protection provided.

### *Converting tariff rates to nominal rates*

The tariff depicted in Figure A3.1 above is presented in terms of an ad-valorem rate, that is, as a percentage of the cife price of the import. Because the cife price is the border price used to estimate the assistance provided to an import competing product, the tariff rate is also the nominal rate of assistance.

Tariffs in Australia are levied on the free-on-board (fob) price of imports, that is, before insurance, freight and other importing costs are added. Tariff rates do not therefore show the extent to which protection has increased the landed price of imports and hence do not properly indicate the degree of nominal assistance afforded producers. Consequently, tariff rates are deflated to a landed duty free (ldf) basis by multiplying each tariff rate by the vfd/cife ratio.

$$\text{NRA} = t \cdot \text{vfd/cife}$$

The value for duty is equivalent to the fob value whilst the cost, insurance, freight and exchange value is taken to be approximately equivalent to the landed duty free value. For most manufactured imports, the vfd/cife ratio has been in the range 0.8 to 0.95.

### *Specific tariff rates*

Where tariff rates are set in specific terms, such as dollars per kilogram, the nominal rate is taken as the ad-valorem equivalent of the specific rate. This can be determined either by dividing the specific duty by the average fob import price, or alternatively by dividing duty paid by the value for duty.

In the Commission's first three series of manufacturing estimates, ad valorem equivalents for specific rates were estimated automatically since all tariff rates (ad valorem and specific) were calculated implicitly from import data. This involved dividing the duty collected on imports from General (that is non-preferential) country sources by the corresponding fob value of imports. For the two most recent series of estimates, which have used tariff rates from the Customs Schedule, ad valorem equivalents for specific rates were also calculated by dividing duty paid by value for duty.

### *Preferential tariff rates*

Australia's System of Tariff Preferences has provided preferential (lower) tariff rates for goods sourced from developing countries, and some near neighbours in the Pacific. Since nominal rates attempt to measure the extent to which domestic prices have been raised relative to the situation of unrestricted trade, the choice of

tariff rate is dependent upon where imports are expected to be sourced from after the removal of tariffs. If the existing tariff preferences are only trade diverting (that is, they alter the source of imports rather than the total level), they do not alter the assistance environment faced by local producers. In these cases, the non-preferential duty rate is likely to be the most appropriate indicator of assistance levels. This is because, if assistance were to be removed, imports would be cheapest from the non-preferential source and it is against such imports that the local industry is being protected. However, if preferential tariffs are trade creating (that is, they increase the overall level of imports), the protective incidence of the tariff will be less than that implied by the rate of duty applying to General source imports.

For its annual assistance estimates, including the estimates presented in this paper, the Commission has used concessional tariff rates to estimate nominal rates only when imports are overwhelmingly from the concessional source. The use of General rates of duty where imports from General sources are significant is consistent with the assumption, underlying the effective rate model, of perfect substitutability between imported and domestically produced goods. It is also consistent with the professed aims of the previous Australian System of Tariff Preferences, namely, to lower duties on selected imports from developing countries to help offset the competitive disadvantages faced by industries in those countries competing with major industrial countries for a greater share of Australia's import trade, without impairing the protection afforded domestic industry. For individual industries, this rule of thumb may not be sufficient, and knowledge of individual industries can allow adjustments in more detailed industry estimates.

While quite large duty concessions were available for some goods from developing countries, imports from these sources accounted for a major share of total imports for only a few items where preferences applied. From 1 July 1986, a revised preference system, which provided for a uniform margin of preference of 5 percentage points, applied to imports from developing countries. More recent changes in Australia's tariff preference arrangements are discussed in Appendix 4.

### *Excise taxes*

Excise is treated differently for materials and products. Since excise taxes can only be levied on domestic production, tariffs on imports competing directly with locally produced goods subject to excise are considered to contain an equivalent excise component. This excise component is subtracted from the General rate and only the protective component is included in the estimates of output assistance. The treatment of excise taxes on intermediate inputs is discussed in the relevant section below.



### *By-law and commercial tariff concessions*

Policy By-laws and Commercial Tariff Concessions allow concessional entry (usually duty free) for certain imports which are used as inputs for further production.

It is difficult to construct a reliable pattern of the usage of concessions by each industry as no direct data is available. In the manufacturing system a complex procedure is used to estimate, at a 4-digit ASIC industry level, the savings in duty as a result of By-law, commercial tariff concessions and duty drawback. This procedure is based on the difference between the average tariff rate applying to imported materials from General sources used by an industry and the average concessional rates where applicable, multiplied by the value of concessional imports in the base year. This saving in duty is deducted from the total tax on materials calculated for each industry based on General tariff rates.

Concessional rates are mainly relevant for estimating nominal rates of assistance on materials because the concessional entry usually applies where no goods serving similar functions are being produced in Australia (that is, where there is no domestic production to assist). However, certain policy By-laws allow concessional entry of intermediate inputs that are produced locally. In Australia, for example, domestic production of certain textile yarns is assisted by a production bounty and nearly all imports of textile yarns enter duty free under a policy By-law. These arrangements were designed so as not to penalise user industries. In such cases, the relevant rate used for assistance measurement is therefore the free concessional rate, rather than the General tariff rate.

### *Duty drawback*

Under the duty drawback scheme, exporters receive a rebate of import duty on imported raw materials used in making goods which are subsequently exported. If the duty drawback scheme covered all possible inputs, export activities would suffer no cost penalty on inputs as a result of the tariff system. Exporters would be able to buy all inputs at free trade or border prices. In practice, however, duty drawback schemes are rarely so comprehensive and some inputs will not be covered.

In its effect on the domestic market, the duty drawback scheme acts as an export subsidy. It will raise the domestic price of the final product above the world price by the amount of import duty saved. This is because producers will only be willing to sell on the domestic market if they get a premium above the world export price, equal to the rebate which they would have to forgo if they produced for the domestic market rather than for export. In practice, however, this particular effect of duty drawback is minor and is not included in the assistance estimates.

## Quantitative import restrictions

Quantitative import restrictions (QRs) involve restricting imports, not by tariffs, but by direct quantitative control. This may take the form of a limit on the quantity of imports that may occur, or it may be a limit on the total value of imports.

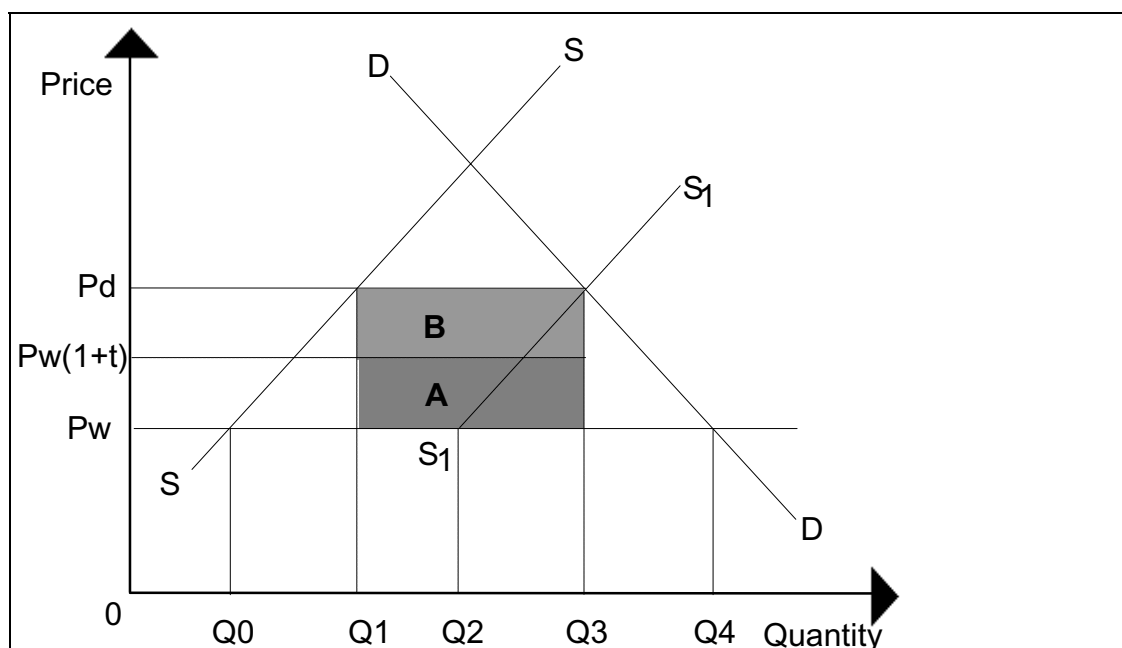
Quantitative import restrictions, in the form of tariff quotas and global quotas, became an important element of government assistance to Australian manufacturing industries from the mid-1970s. The main industries afforded quota assistance were clothing and footwear, passenger motor vehicles (PMV) and certain textile industries. Quota assistance was removed for PMV in April 1988 and for textiles, clothing and footwear (TCF) in March 1993. The sugar and cheese industries have also been assisted by QRs. Up until 1990 an embargo applied to raw and refined sugar imports and the cheese industry currently benefits from a tariff quota.

The effect of a volume import restriction on prices, and thus on estimates of nominal rates of assistance, is depicted in Figure A3.2. At the world price  $P_w$ , local supplies would be  $0-Q_0$  and imports  $Q_0-Q_4$ . For the moment the tariff is ignored. An initial quota of  $Q_0-Q_2$  is set, leaving a shortage on the domestic market of  $Q_2-Q_4$  at the initial import price. As a result of this shortage, prices on the domestic market are bid up until an equilibrium is reached at price  $P_d$ . This equilibrium is made up of increased domestic production — from  $0-Q_0$  to  $0-Q_1$  and reduced total demand — from  $0-Q_4$  to  $0-Q_3$ . Imports are  $Q_1-Q_3$ , which is equal to the original quota of  $Q_0-Q_2$ .

The shortage of imports created by the quantitative restriction generates a higher return from importing. This is called the quota rent. Imports can be sourced at world prices and sold at the higher domestic price. In the absence of a tariff, the quota rent enjoyed by those importers lucky enough to be allocated scarce imports is shown by the shaded areas A and B.

If there was a tariff, part of the quota rent would be appropriated by government as tariff revenue — the shaded area A. Note that the tariff is not additional to the quota in terms of protective incidence. The quota overrides the tariff, which simply serves to reduce the quota rent for the quota holders.

**Figure A3.2**  
**Quantitative import restrictions**



### Measuring the effect of quantitative import restrictions

The measurement of the nominal rate (or tariff) equivalents of QRs has been undertaken using two approaches: first, the direct measurement of the price differences between locally produced products and equivalent imported products; second, by including the value of quota when put out to tender by the Government. At the time that direct price comparisons were made, and before the introduction of tender sales by Government, estimates also involved gathering data on transfer prices for quotas sold in the extensive unofficial market that had developed.

#### *Price comparisons*

The Commission's estimates of the assistance afforded the TCF industries by quotas were derived using the price comparison technique until 1978–79. When estimating nominal assistance from direct price comparisons, it is assumed that the observed differences in domestic and border prices reflect the assistance provided by the trade restrictions, and that the price differentials also incorporate the assistance provided by any tariff on the import of these goods. Practical aspects of making price comparisons include:

- Ensuring that the individual products for which comparisons are made are representative of the main items of local production. Typically, a number of comparisons will be made for representative products from within a particular category of domestic production, and the average of these

comparisons will be used as the nominal rate of assistance for that category of domestic production;

- Ensuring that the products being compared are as near to identical as possible;
- Ensuring that the prices used refer to the same point of sale and include the same ancillary services or conditions of sale; and
- Attempting to put a value on any differences that exist, so that crude price comparisons can be adjusted. For example, experience with the textile clothing and footwear industries suggested that buyers generally required imported products be 10 to 15 per cent cheaper than local equivalents before they would consider importing, even if all other 'physical' characteristics were the same. This was to cover a range of uncertainties associated with importing, and because of the ease of contacting local suppliers if difficulties arose. Observed price differences were discounted by this margin when estimating nominal rates.

When making price comparisons for import competing products, the prices used were the domestic manufacturer's ex-factory price (that is, the price to wholesalers including profit but excluding selling and distribution costs) and the cife price of the imported product.

Alternatively, a comparison could be made of the free into store price of the imported product and the delivered (into store) price of the locally produced product. However, price comparisons at other than the ex-factory level, such as at the into store, wholesale or retail level, present problems. This is because it is not possible to be sure how much of the observed price differences reflect differences in the distribution chain and because of the need to adjust for government taxes and charges in the distribution system.

Confirmation of the value of QRs was obtained by gathering data on the extensive unofficial market that had developed for the transfer of the use of QRs between importers (see below).

A measurement problem exists where products are locally produced but, as a result of stringent import barriers, such as embargoes, there are no imports of competing products. This was the case until recently for raw and refined sugar which were prohibited imports into Australia. In such cases, however, local wholesalers may be aware of the price at which they could import a competitive product if imports were possible. Alternatively, cife prices into neighbouring countries may provide an indication of the potential border price.

Price comparisons present an additional problem not faced when measuring assistance provided by a tariff system. Unless changed, an ad valorem tariff provides a constant level of assistance over time. This is not the case where

assistance is provided by way of quantitative import restrictions. The level of assistance will change from year to year as a result of a variety of factors including: exchange rate changes; changes in the world price; changes in the level of local competitiveness or demand; and changes in the level of the QR itself. This is particularly a problem in the agricultural sector where significant year to year changes in the world price are a common feature of the market. The market for manufactures is more stable. However, in estimating assistance for the quota protected manufacturing industries in Australia, the Commission has found the changes were sufficiently large to justify annual updating of the estimated tariff equivalents of the QRs, and the separate reporting to government of changes in the value of quotas.

### *Quota transfer sale price*

Under the arrangements applying in Australia in the late 1970s and early 1980s, there was provision for the transfer of quota entitlements between importers. The prices paid for these quotas represented an unofficial measure of the scarcity value of the quota at a particular point in time. If the transfer market for quota operated perfectly, this transfer price in dollars per unit would equal the quota rent on goods actually imported (that is, the price paid would reflect the constraint imposed by the quota in addition to any tariff imposed). Referring to Figure A3.2, the transfer price is equal to the difference between  $P_d$  and  $P_w(1+t)$ . Therefore, by treating the transfer price as a 'specific' duty and adding it to the base duty, an estimate of the total assistance afforded by quota can be derived for goods of a given value.

Estimates of the value of QRs applying to the TCF industries in 1979–80 and 1980–81 were obtained by gathering data on the extensive unofficial market that had developed for the transfer of the use of QRs between importers. A few major 'quota brokers' had developed who were familiar with the 'going rate' for particular types of quota. As most prices were in terms of dollars per unit of imports, the data were treated as specific tariffs and converted to ad valorem equivalents on the basis of average import prices. Data on the sale value of quotas were available in two forms. The first, and most useful, figure was the cost of 'hiring' the use of the quota for one year — the 'one-year price'. The second was the price of the purchase of the right to the quota for the remainder of the expected quota life, that is, 'permanent sale'. If data on the latter were all that were available, it would be necessary to estimate the annual equivalents based on estimates of the appropriate discount rates. These could be estimated from cases where both the one-year price and the permanent-sale price were available.

### *Out-of-quota rates of duty*

The simplified model above suggests that there would be no imports, above the quota level, if the out-of-quota duty rate plus the base duty rate was set above the ad valorem protective incidence of the quota. If, however, the rate applying to out-of-quota imports resulted in a price below Pd, then above-quota imports would be observed. Usually the out-of-quota duty was set so high as to virtually prohibit imports outside of quota. However, there were instances when firms imported at these rates (eg in order to fulfil contractual obligations, or where the items entered under penalty were substantially differentiated from within quota imports).

Out-of-quota rates of duty are only relevant in assessing assistance levels if there are substantial above-quota imports. From inquiries into the TCF industry, it was clear that above-quota imports were not running at substantial levels. Hence out-of-quota duty rates have not been used as a basis for the assistance estimates.

### *Quota tender sale premiums*

Assistance estimates for the TCF industries between 1980–81 and 1992–93 were based mainly on the clearing premium bids for quota at the official quota sales held annually. TCF quotas were abolished on 1 March 1993. Measurement of assistance to local producers of passenger motor vehicles was also based on tender premiums, from the mid 1980s up until the QRs were removed. Although PMV quotas ceased in April 1988, the assistance afforded the industry had been equal to the base rate since 1986–87 because the quota was not fully used in 1987–88.

Bids were in terms of a tariff rate, in ad valorem terms, that the bidder was willing to pay, in addition to the base tariff already existing. The measurement technique assumes that the successful premium bid in each quota category represents the difference between the base tariff rate and the tariff rate that would be required to yield the same volume of imports in the absence of quotas.

The average nominal rate of assistance was derived using the formula:

$$\text{NRA} = (\text{TPB} + \text{BD}) \times \text{vfd/cife}$$

where:

NRA = nominal rate of assistance on output

TPB = tender premium bid at sale

BD = base duty rate

vfd/cife = the ratio of vfd and cife prices of competing imports.

Table A3.1

**TCF and PMV base plus tender premiums: 1982 to 1992 (per cent)**

<i>Tender category descriptions<sup>a</sup></i>	<i>1982</i>	<i>1983</i>	<i>1984</i>	<i>1985</i>	<i>1986</i>	<i>1987</i>	<i>1988</i>	<i>1989<sup>b</sup></i>	<i>1990</i>	<i>1991</i>	<i>1992<sup>c</sup></i>
Knitted or crocheted coats, jumpers, cardigans, sweaters and the like, tube tops	84	80	90	135	91	71	60	73	78	59	61
Shirts and blouses and knitted or crocheted tops	86	105	105	155	90	147	na	na	na	na	na
Knitted shirts and blouses	na	na	na	na	na	na	205	117	135	75	74
Woven shirts and blouses	na	na	na	na	na	na	122	125	125	83	66
Woven coats and jackets; sets of men's garments, including suits	87	150	151	70	72	70	80	99	76	55	58
Leather coats and jackets	55	92	81	75	50	50	67	86	95	63	60
Trousers, jeans and overalls	70	103	113	100	60	55	62	75	88	75	64
Shorts and male swimwear	62	102	86	100	50	50	50	77	105	75	68
Women's, girls' and infants' swimwear	75	101	110	133	110	70	50	55	55	55	51
Certain children's wear	71	90	91	150	96	50	51	57	70	70	54
Men's woven pyjamas	74	80	85	105	81	150	na	na	na	na	na
Dresses, dressing gowns, adult nightdresses and nightshirts, other outer garments and other sleepwear	74	105	105	121	50	50	na	na	na	na	na
Dresses, other outerwear, pyjamas							51	67	76	64	62
Other undergarments for men and boys; other undergarments for women, girls and infants	90	90	70	82	69	115	87	86	90	86	70
Brassieres; corsets, girdles and the like	84	120	120	140	180	131	50	86	91	84	61
Garments of plastic material, of rubber, or the like	60	70	65	82	84	52	55	55	55	55	51
Tights and pantyhose less than 4.4 tex	76	60	50	70	101	110	126	132	55	55	51

Table A3.1 (continued)

<i>Tender category descriptions<sup>a</sup></i>	<i>1982</i>	<i>1983</i>	<i>1984</i>	<i>1985</i>	<i>1986</i>	<i>1987</i>	<i>1988</i>	<i>1989<sup>b</sup></i>	<i>1990</i>	<i>1991</i>	<i>1992<sup>c</sup></i>
Socks and the like; tights											
pantyhose 4.4 tex or more	76	60	62	83	75	56	50	55	75	72	59
Footwear with leather uppers	71	100	116	118	40	71	63	90	95	68	50
Other footwear	90	115	141	166	40	70	65	65	85	81	41
Parts for footwear	55	52	60	91	99	91	63	48	61	50	10
Terry towelling, towels, babies' napkins and the like	81	85	85	91	90	80	80	80	84	75	61
Bed linen, including quilt covers and bed ruffles	60	48	51	56	50	60	56	77	80	75	52
Fabric suitable for use as bed sheeting and the like, or in the making up of bed linen	48	49	51	55	57	60	72	60	58	40	37
Woven fabric of man-made fibres	70	75	70	96	80	63	72	80	80	47	45
Curtains	50	47	40	43	40	40	40	—	—	—	—
Sleeping bags having a customs value not exceeding \$30 each	25	35	25	35	25	25	25	—	—	—	—
Motor vehicles	na	na	na	94.5	81.5	57.5	57.5	—	—	—	—
<p>— Nil.</p> <p>na Not applicable.</p> <p>a The descriptions for some categories changed on 1 January 1988 and again in March 1989.</p> <p>b In 1989 the base duty for most categories increased from 50 per cent to 55 per cent. The exceptions were Footwear with leather uppers and Other footwear, where the base duty increased from 40 per cent to 45 per cent; Parts for footwear fell from 40 per cent to 35 per cent; Bed linen fell from 55 per cent to 40 per cent; Woven fabric of man-made fibres was constant at 40 per cent; and Fabric suitable for bed sheeting went from tariffs ranging from 0 to 40 per cent to a base rate of 40 per cent. In addition, a surcharge of 5 per cent was added to quota not allocated by tender.</p> <p>c In 1992, the base duty rates were reduced in preparation for the removal of quota in the following year. For most items, the rates reduced from 55 per cent to 51 per cent. Footwear with leather uppers and other footwear were reduced from 45 per cent to 41 per cent. Parts for footwear were reduced from 35 per cent to 10 per cent. Fabric suitable for use as bedsheets and Woven fabric of man made fibres were reduced from 40 per cent to 37 per cent.</p> <p>d From March 1993, quotas ceased to apply to imports of TCF items, and the tariff rate was set at 47 per cent for most items. Footwear with leather uppers, and other footwear were set at 37 per cent. Parts for footwear were set at 10 per cent. Fabric suitable for use as bedsheets and woven fabric of man-made fibres were set at 34 per cent.</p>											

While it is possible to give broad guidelines for the method of estimating assistance provided by QRs, there are likely to be differences depending on particular circumstances or on particular aspects of legislation or procedures.



These can only be analysed on a case-by-case basis to determine whether the particular situation would result in different estimates or need significant qualification of the results. For example, the auctioning of TCF quotas had a number of characteristics that influenced the reliability of results.<sup>3</sup>

## **Production subsidies**

In Figure A3.3, a production subsidy (or bounty) is depicted as a shift in the domestic supply schedule from  $S$  to  $S_1$ , that is, by a reduction in the costs of domestic production. The degree of the shift represents the level of subsidy per unit of output 's'. The subsidy allows local suppliers to increase their market share, from  $0-Q_0$  to  $0-Q_1$ . At  $Q_1$ , local producers can sell at the import parity price, while their underlying cost structure remains higher to the extent of the subsidy. The total cost of the subsidy is the shaded area. The subsidy has the same effect for local producers as a tariff, with the total value of the subsidy being equivalent to the gross subsidy equivalent. However, the subsidy does not increase the cost to consumers who continue to purchase goods, both locally produced and imported, at the world price  $P_w$ .

The nominal rate is measured as the total value of subsidy divided by the observed value of production. In this situation (unlike the tariff case), and in the absence of other forms of assistance, the observed value of production is also the unassisted value of production. The assisted value of production is estimated by adding the value of bounty assistance to the observed value of production.

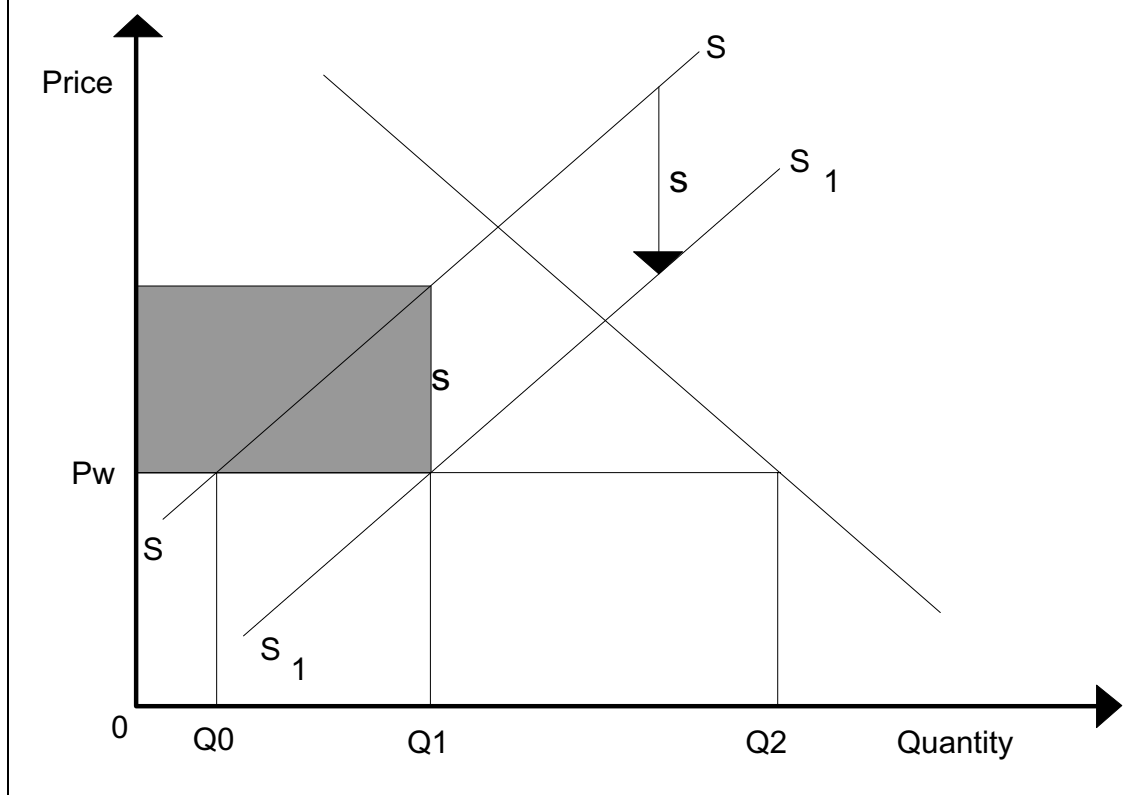
Bounties paid on the production of import-competing goods can be designed to be conditional, so that assistance accrues primarily to the producer of materials used as inputs to the production process. The incidence of the benefits of the bounty will depend on the forms of bounty provided for in legislation.

Production bounties paid on the basis of local value added can provide substantial assistance to component suppliers through the manufacturer paying higher input prices. To the extent that the benefits of the bounty are appropriated by input suppliers, the effective assistance afforded the production process will be reduced, while the manufacturer's nominal assistance will remain unaltered. Bounties based on value added, and/or with local content provisions, have included those for agricultural tractors, injection moulding equipment and metal working machine tools (still in operation).

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<sup>3</sup> For a discussion of this issue in detail, see IAC (1985, Appendix 2).

**Figure A3.3**  
**Production subsidy**



The methodology for measuring assistance where local content requirements apply is explained in more detail in the relevant section below.

### Input subsidies

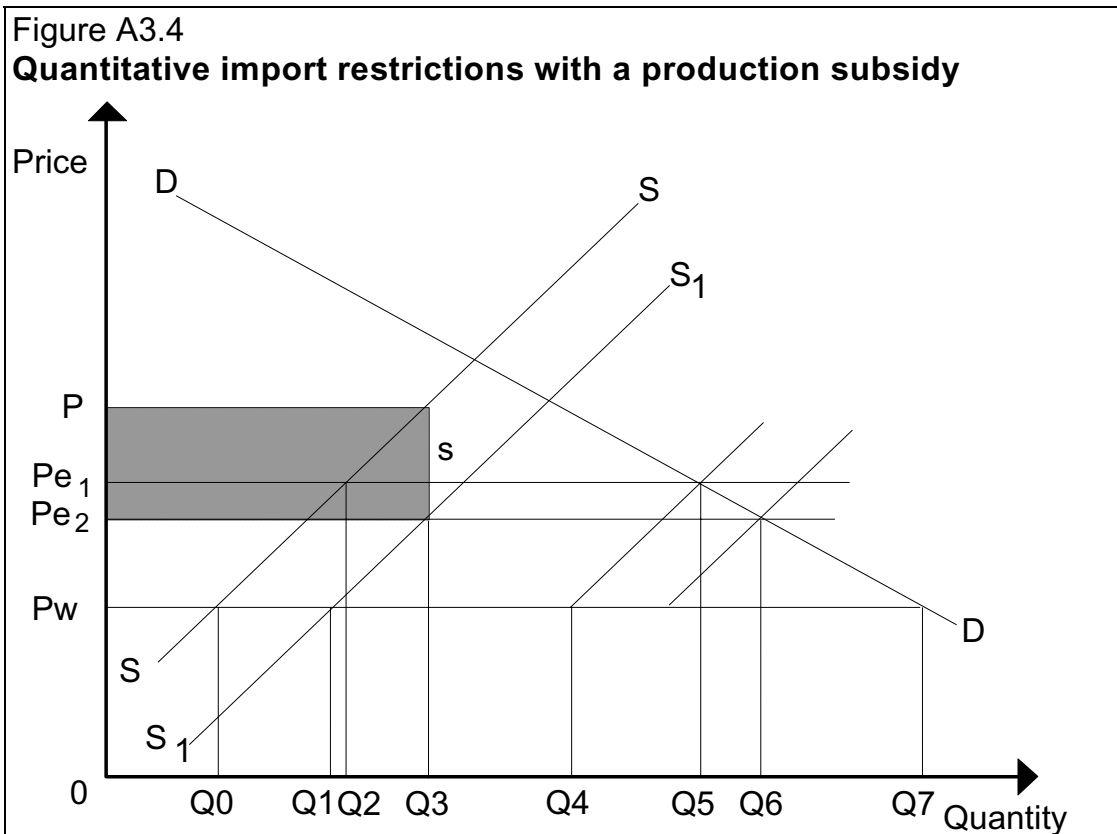
In the past, fertiliser subsidies have been provided in Australia. At one time these were paid on the purchase of fertiliser irrespective of the source of the input.

In the perfect competition model outlined for nominal rate estimates, no assistance is received by the domestic supplier of fertiliser if the subsidy is available on both imported and domestically sourced materials. The input cost to users, however, is reduced. The observed value of fertiliser input costs represents the assisted value of materials, while the unassisted value is estimated by adding the total value of subsidy to the observed value of fertiliser costs. The input subsidy is included in effective rate estimates as a negative tax on materials.

### Quantitative import restrictions with a production subsidy

The discussion on quantitative import restrictions above concluded that assistance provided by QRs and tariffs is not additive. The situation is different with subsidies to an industry already assisted by QRs. In Figure A3.4 below, at the world price  $P_w$  local production is  $0-Q_0$  with imports of  $Q_0-Q_7$ . An initial import quota of  $Q_0-Q_4$  becomes (in the absence of any subsidy)  $Q_2-Q_5$  at the equilibrium price of  $P_{e1}$ . Local supply is  $0-Q_2$ .

The introduction of a production subsidy is depicted by a shift in the domestic supply schedule from  $SS$  to  $S_1S_1$ . As a consequence, local production increases from  $0-Q_2$  to  $0-Q_3$  at the lower equilibrium price of  $P_{e2}$ . The shaded area is the total amount of subsidy paid.



Importantly, unlike the situation depicted in Figure A3.3, the introduction of a subsidy where import quotas already exist results in a decrease in the price paid by the user. In this situation, the nominal rate on materials for a user of this product would be the observed price disadvantage  $(P_{e2} - P_w)/P_w$ , while the nominal rate on the production of the product would be the observed price disadvantage plus the per unit value of the subsidy.

The essential methodological issue is that the assistance provided by QRs and subsidies is additive, while assistance provided by QRs and tariffs is not.

## **Export subsidies**

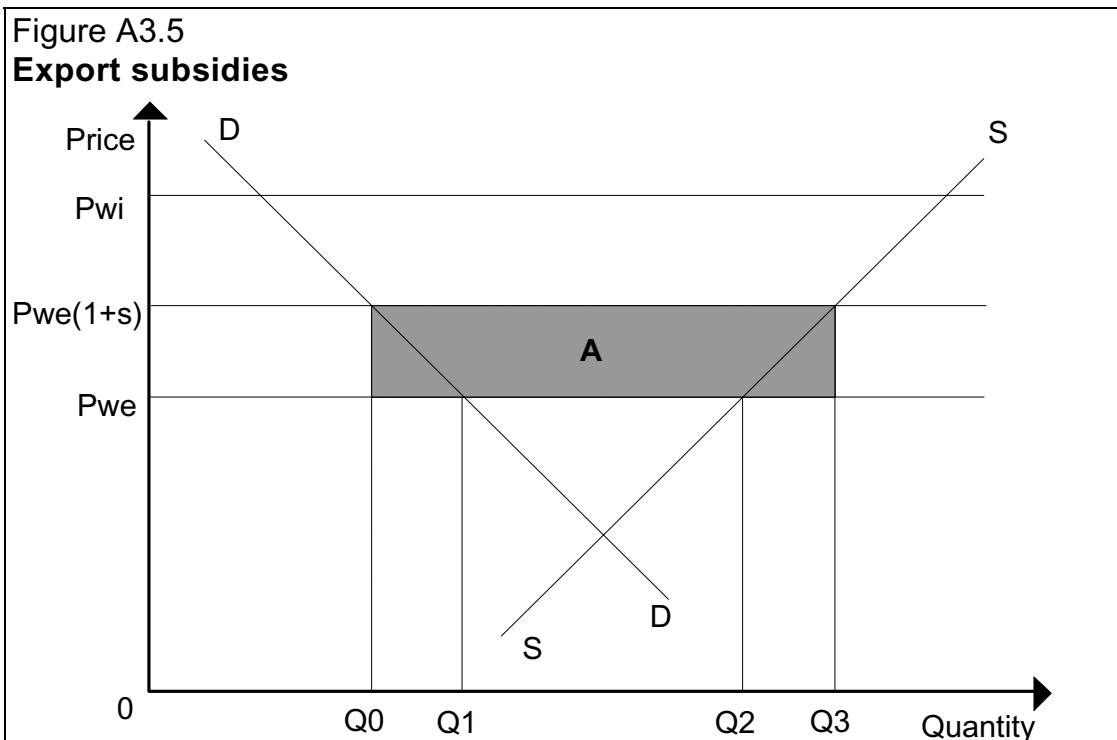
All previous figures have been drawn for import competing industries where the appropriate border price is the import parity (cife) price. For an exporting industry, the world price which determines the level of production is the export parity price.

The underlying model assumes that an export industry's costs are geared to the export parity price and that, in the absence of intervention in the market by government, domestic competition would result in the export price being available to local buyers.

There are two direct ways the government can intervene in the marketing of export industries. These are through providing export subsidies or through imposing export taxes. The case of an export subsidy is presented diagrammatically in Figure A3.5 below. Only coal exports have been subject to an export tax in Australia and so this measure is not considered further.

In Figure A3.5, in the absence of any export subsidy or tax, the price in the domestic market would be the export parity price ( $P_{we}$ ) with 0–Q1 supplied to the local market and Q1–Q2 exported.

The introduction of an export subsidy 's' increases the returns on the export market to  $P_{we}(1+s)$ . This is depicted as an upward shift in the export parity price. Because returns on the export market are increased, prices on the domestic market will also need to increase, otherwise all production would be exported. The domestic price also increases to  $P_{we}(1+s)$ . Domestic demand contracts to 0–Q0 and exports expand to Q0–Q3. This implies that an export subsidy extends assistance to all production, both exported and sold domestically. Unlike the subsidy on domestic production, the level of the export subsidy is included in the tax on material costs of domestic users because of the influence on domestic prices. The cost of the export subsidy is the shaded area A.



Export subsidies have not been a major form of assistance in Australia, and the information necessary to measure the assistance provided has rarely been available at an industry level. Data on the provision of direct assistance under export assistance programs have only been available on the basis of the individual firm. The inclusion of this information into industry average nominal rates has involved allocating firms which received export grants to industries on the basis of the firm's predominant activity. The value of subsidy was assumed to relate to the principal activity and was thus allocated to the relevant industry. The value of subsidy was added to the industry's value of production to add to the estimate of the assisted value of that industry's output. Because of the negligible nature of export subsidies in Australia, their effect on domestic prices indicated by the theoretical analysis has not been estimated or included in results.

### Discriminatory sales taxes

As long as sales taxes are levied equally on locally produced and imported products, they do not enter calculations of the nominal rate of assistance on output. Discriminatory sales taxes, that is, different sales tax rates on local and imported products, are rare in Australia. Where they have occurred, the difference in the rates (usually higher on the imported product) is treated as an additional tariff and included in the nominal rate of assistance on output. Because

sales taxes are levied on wholesale prices, which also include any tariffs paid, the sales tax margin to be included in the nominal rate is converted to a tariff rate equivalent for inclusion in assistance estimates using the following formula:

Tariff rate equivalent of the sales tax =  $(1+t) \times 1.2 \times \text{sales tax rate}$

Where:  $t$  = tariff rate

The multiplier of 1.2 is used because the Australian Customs Service estimates wholesale prices for sales tax purposes by inflating the unlanded duty paid price of the imported product by a standard 20 per cent.

Thus, if the tariff rate is 10 per cent and the sales tax rate on imports (above that applying to the local product) is 20 per cent, the tariff rate equivalent of the sales tax is 26.4 per cent; that is  $(1 + 0.1) \times 1.2 \times 0.2 = 0.264$ .

The total nominal rate is equal to the tariff rate equivalent of the sales tax plus the tariff rate. In the example above, the nominal rate would be  $0.1 + 0.264 = 0.364$  or 36.4 per cent.

The treatment of sales taxes on inputs into the production process is outlined in the relevant section below.

## **Tax concessions**

The inclusion of taxation concessions in assistance estimates only became a significant issue when estimates were extended to cover agriculture and, later, the mining and minerals processing industries.<sup>4</sup> Tax concessions have never been included in assistance afforded to the manufacturing sector.

The two main forms of tax concessions that are included in the assistance estimates for the agricultural sector are accelerated depreciation and income averaging provisions.

Accelerated depreciation does not allow any greater total deduction over the life of the asset than do the normal depreciation provisions of the income tax law. Rather it allows a deferment of tax which involves a benefit, namely the provision of an interest free loan, to the taxpayer concerned. The value of the accelerated depreciation allowance to taxpayers depends on the value and length of the tax deferment and the interest rate which would have been paid if a similar loan were obtained commercially. To estimate the value of accelerated depreciation provisions for the agricultural sector, the Commission assessed the difference between the concessional rates of depreciation and the normal rates

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<sup>4</sup> For details on the measurement of tax concessions to the mining industry, see Plunkett et al. (1992, Attachment 2).

which otherwise would have operated, and applied standard discounted cash flow techniques to the future stream of allowable tax deductions under the two alternative depreciation rates. Assistance via accelerated depreciation has not been measured since the concession became available to all sectors in 1982–83.

Income averaging for primary producers could be seen as a means of ensuring period equity, that is, that their tax burdens are not increased simply as a result of fluctuations in income levels due to volatile production and prices. However, because of Australia's progressive personal income taxation system, the averaging provisions have the effect of reducing the total tax liability of primary producers and hence altering the incentives they face. The Commission treats the income averaging provisions available to primary producers as assistance to value-adding factors — because the provisions increase the after tax incomes of the eligible taxpayers, and hence increase the returns to the value-added product of the activity. Before any assistance from the income averaging provisions can be quantified, an 'unassisted' point of reference or benchmark must be identified. The effects of the provisions can be compared against this benchmark. The measure of assistance afforded will depend largely on the choice of benchmark.

In the case of primary producer income averaging, the Commission has traditionally used a conditional neutrality benchmark. This benchmark is based on horizontal equity — the similar taxation treatment of similarly placed activities or classes of taxpayers. Due to their selective availability, income averaging provisions for primary producers are considered to provide assistance. If income averaging were available to all taxpayers who earned unstable incomes, it would not be treated as assistance under this benchmark. Given the confidential nature of taxation data, the conditional neutrality benchmark has the advantage of being relatively easy to evaluate as the Department of Treasury regularly provides estimates of revenue forgone through income averaging.

### **Excise taxes on intermediate inputs**

Excise taxes are levied on domestic production of certain alcoholic, tobacco and petroleum products. Whilst excise taxes can only be levied on domestic production, tariffs on imports competing directly with locally produced goods subject to excise include an excise component, either explicitly or implicitly. Since the excise is not discriminatory between domestic and imported products, the excise component of the tariff is deducted for assistance measurement purposes. Thus, only the protective component is included in the estimates of nominal rates of assistance on output for the manufacturing sector.

Excise taxes on intermediate inputs penalise user industries by raising the cost of inputs in much the same way as tariffs on competing imports (IAC 1986,

Appendix K). However, only the current and previous series of manufacturing assistance estimates include excise in the calculation of nominal rates of assistance on materials. The inclusion of excise taxes on intermediate inputs as a penalty to users, from the 1983-84 series, had an insignificant effect on the sector average. However, estimates for industries which are heavy users of excisable commodities, such as certain minerals processing industries, were significantly reduced when the taxing effect of excise on inputs was included in the estimates.

The most significant excisable products are refined petroleum products. The diesel excise rebate to farmers, which was introduced on 17 August 1982, largely removed the penalty incurred by farmers on their major petroleum input. Consequently, since then the agricultural estimates have been derived on the simplifying assumption that farmers incur no penalty on petroleum inputs as a result of excise taxes. Prior to the introduction of the current diesel excise rebate scheme, farmers could purchase diesel fuel as an intermediate input free of excise under the Diesel Fuel Exemption Certificate Scheme. The assistance estimates do not take into account the relatively minor penalty incurred by farmers on diesel between 23 August 1982 and 1 November 1985, when the current rebate scheme provided for only a partial (over 70 per cent) rebate of the excise. Similarly, the estimates take no account of the relatively minor penalty incurred by farmers paying excise on petroleum products other than diesel used as intermediate inputs.

In principal, the same situation applies for sales taxes levied on inputs into the production process. However, there are extensive exemptions of sales taxes when goods are used as inputs into the production process. In addition, the industries which are generally not eligible for exemptions are service industries for which estimates of effective rates of assistance have not been made.

### **Domestic pricing arrangements for agricultural commodities**

Domestic pricing arrangements for major agricultural export industries have been the principal form of assistance for agriculture. These arrangements are two-price schemes which essentially involve the exercise of price discrimination between the domestic and export markets and the payment of a pooled price to producers (IAC 1983, Appendix 4). This typically involves the setting of higher domestic prices than export prices.

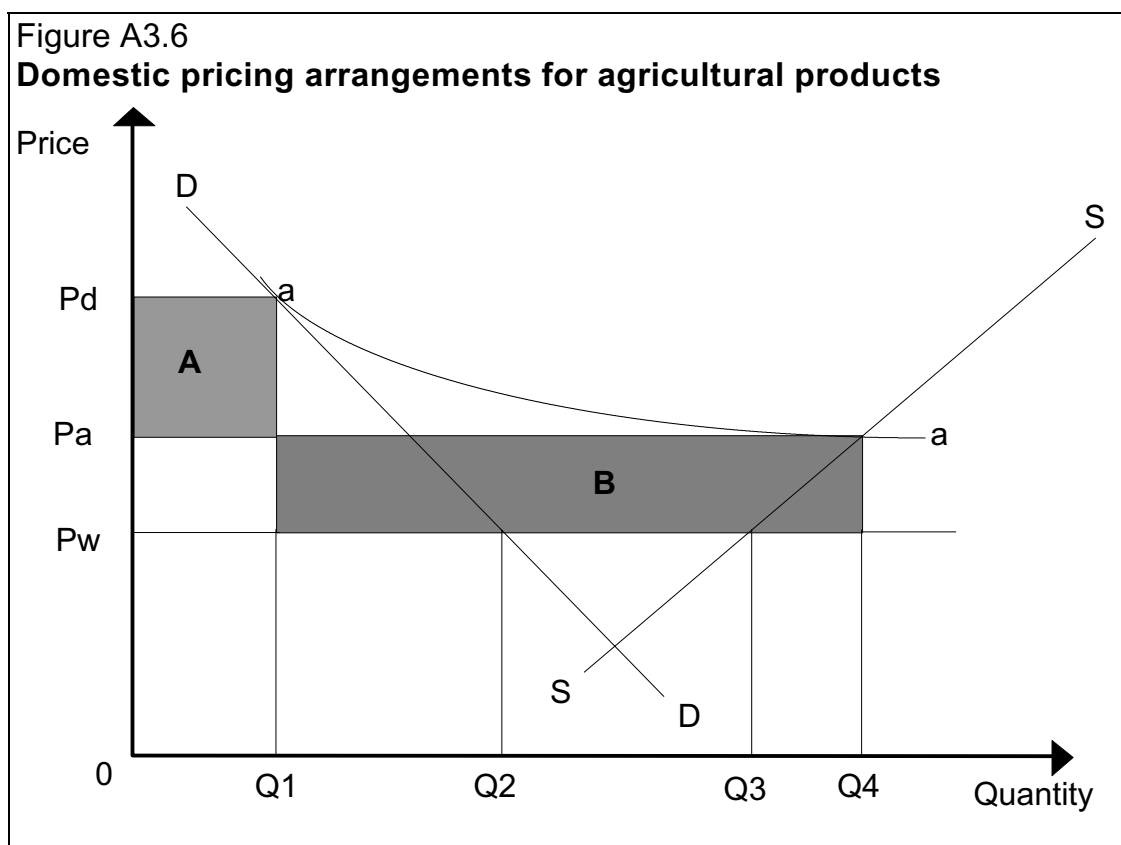
The implementation of this system usually rests with a statutory marketing authority for the particular product which has the right to compulsorily acquire and act as the sole selling agent on both the domestic and export markets. The authorities generally operate under a charter to maximise the returns to growers and, to do so, increase the domestic price, usually to a level equivalent to the



import parity price of potential imports, including any tariff assistance if applicable.

In most cases, returns from domestic and export sales are pooled and payments to growers are an average of the domestic and export prices, although this is not always the case. In the Australian sugar industry, until recently, returns from the domestic market (and other premium markets) were paid separately and were not dependent on the total level of output. This avoided the dissipation of the 'surplus' from the domestic market to 'subsidise' additional production for export, an inherent outcome in an average return system.

Figure A3.6 presents diagrammatically the situation of domestic price support and the pooling of returns.



In Figure A3.6,  $P_w$  represents the export parity price, DD domestic demand and SS domestic supply. In a competitive market, both the export and domestic price would be  $P_w$ , with 0– $Q_2$  supplied to the domestic market and  $Q_2$ – $Q_3$  exported. With a monopoly domestic supplier, the domestic price can be increased to  $P_d$ , equivalent to (at its maximum) the price of potential imports including any tariff.

Domestic demand would contract to 0–Q1. Under a price pooling and averaging system, the average price would be  $P_a$ . In Figure A3.6, the two shaded areas A and B are equal. By increasing the effective price observed by producers, the pooling arrangement increases exports from Q1–Q3 to Q1–Q4.

The additional amount paid by domestic consumers for a commodity above the comparable export price is called the producer transfer, and is included in the gross subsidy equivalent of assistance for the agricultural industry.

In some cases, the domestic pricing arrangements involve the setting of domestic prices by formula and, because of the variability of world agricultural prices, domestic prices can be lower than export returns. In those years, the domestic pricing arrangements provide assistance to the users of the agricultural product and act as a negative gross subsidy to domestic producers.

The Commission's manufacturing assistance estimates endeavour to take account of the extent to which these types of assistance arrangements, applying to agricultural commodities, influence producer returns and material costs in the food processing industries and, in the case of cotton, the cotton ginning industry.

### **Local content schemes**

Local content schemes have operated since the mid-1960s in Australia. Put simply, if a local manufacturer reached a specified local content level of  $x$  per cent (measured by value or volume), the remaining component could be imported at concessional rates or duty free. Until 1 January 1989 a local content scheme operated for the PMV industry. The local content arrangements for the tobacco industry, as part of the marketing arrangements for growers, terminated on 1 January 1995.

In determining whether to comply with a local content scheme, producers face a trade-off between the value of the concessional imports and the additional cost of sourcing components locally (IAC 1984). This trade-off is illustrated in snap-shot form in Figure A3.7.

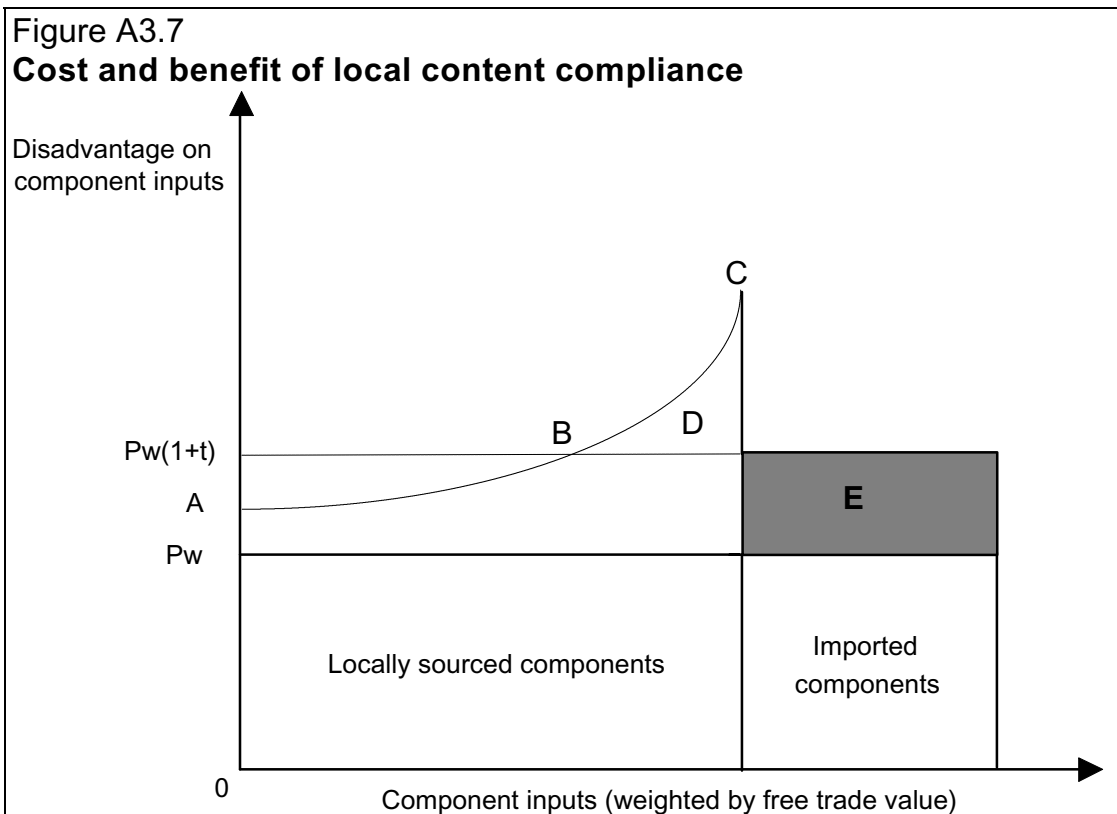
In Figure A3.7, the line segment AC shows the disadvantages on the various components sourced locally under the content scheme. The line has been drawn on the basis that components are ranked from the most competitive on the left to the least competitive on the right. For the purpose of measuring local content, the value of locally produced component production is equal to the area under the disadvantage curve. If ' $t$ ' is the tariff on imported components (drawn on the simplifying assumption that only one tariff rate applies to all imported components), the duty saved by adhering to the content requirement is equal to the shaded area E. Compliance with the content scheme involves additional costs

equal to the area D (above the dotted line and below the curve AC). Compliance will continue as long as area D is less than area E.

Measuring assistance provided by a local content scheme usually involves price comparisons between local and potentially importable components, that is, the empirical measurement of the curve AC.

## Export facilitation

A later addition to the assistance arrangements for the passenger motor vehicle industry was the export facilitation program introduced in March 1982 and later refined in January 1987. In its simplest form, vehicle manufacturers earn the right to import additional components duty free if they export an equal value of vehicles or components.



When export facilitation was introduced in 1982, a local content scheme operated to protect domestic component production. Given the then binding requirement on vehicle producers to source 85 per cent of the value of their vehicles locally, export facilitation allowed vehicle producers to re-source high cost local components to duty free imports through the export of relatively lower cost automotive products. Thus, the scheme served to reduce assistance disparities

within the industry — not only by providing assistance to exports, but also by removing assistance to high cost local component production.

With the termination of the local content scheme in 1988, however, the impact of export facilitation is somewhat different. There are now no restrictions placed on the volume of components which vehicle producers may import. Rather, imported content in excess of 15 per cent of the producer's value of production is dutiable at the same rate as vehicle imports.

The cost of producing in Australia many of the components (and vehicles) currently sourced duty free using export credits would almost certainly exceed the duty paid price of the imported equivalents. In the absence of export facilitation, it would be rational for vehicle producers to continue to import these items duty paid. Thus, in the tariff regime now applying in the industry, the effect that export facilitation used to have in forcing out high cost import competing automotive production has been significantly reduced and, potentially, removed altogether. Export facilitation is therefore now virtually identical in its effects to a straight export subsidy.

A summary of the current industry plan for the passenger motor vehicle industry, and the assistance it provides to Australian production, is contained in the Commission's 1992-93 Annual Report (IC 1993, pp. 123-8).

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## **APPENDIX 4**

### **TARIFF ASSISTANCE**

Tariffs on competitive imports have long been, and still are, the most important form of assistance to manufacturing industry in Australia. Over 95 per cent of measured assistance to manufacturing in 1992–93 was provided by tariffs (see Table 4.1).

This appendix describes the current structure of tariff assistance and the phasing schedule of tariff rates announced in the March 1991 Statement. Average tariff rates for ASIC manufacturing subdivisions between 1968–69 and 1992–93 are presented in Table A4.3. Trends in these rates and changes in the structure of the tariff over this period are examined.

#### **Tariff phasing arrangements**

In May 1988, the Government announced a general program of tariff phasing. With a few exceptions, tariffs greater than 15 per cent were phased to 15 per cent, and those between 15 and 10 per cent to 10 per cent by 1992. In addition the 2 per cent revenue duty was removed from 1 July 1988.

The changes announced in the March 1991 Statement continued the program of phased reductions in tariffs and certain other assistance beyond 1992, and are still in the process of implementation. With the exception of tariffs on certain imports covered by the industry plans for PMV and TCF, and also tariffs on some agricultural products (sugar, tobacco, and certain vegetable and dairy products), the maximum tariff rate is being phased down to 5 per cent by 1 July 1996. A summary of the phasing arrangements is provided in Table A4.1.

#### **Passenger motor vehicles**

Quantitative import restrictions on PMV were removed in April 1988, and a schedule of tariff phasing was announced. The March 1991 Statement continued that rate of tariff phasing, so that tariffs on PMVs and their derivatives, and original equipment components for those vehicles, are scheduled to fall to 15 per cent by 1 January 2000. Tariffs on items which are capable of being used as replacement components for motor vehicles are to remain at their July 1992 rate of 15 per cent (DPM&C 1991).

Tariffs on non-derivative light commercial and four wheel drive vehicles, and original equipment and replacement components for use in those vehicles, are

being reduced to 5 per cent (from a rate of 15 per cent in 1992) by 1 July 1996, in accordance with the general reductions in tariffs.

### Textiles, clothing and footwear

All TCF quotas were abolished in March 1993 and tariffs on TCF imports are being significantly reduced under the schedule announced in March 1991. By 1 July 2000, footwear and most textile industries will be assisted by tariffs of 15 per cent, while clothing imports will attract tariffs of 25 per cent. TCF phasing arrangements for each category of good are included in Table A4.1.

**Table A4.1**  
**Tariff phasing arrangements (per cent)**

<i>Item</i>	<i>1990</i>	<i>1991</i>	<i>1992</i>	<i>1993</i>	<i>1994</i>	<i>1995</i>	<i>1996</i>	<i>1997</i>	<i>1998</i>	<i>1999</i>	<i>2000</i>
	<i>1-Jul</i>										
<b>General rates</b>			15	12	10	8	5	5	5	5	5
			10	9	8	7	5	5	5	5	5
	<i>1-Jan</i>										
<b>PMV &amp; OE components</b>				32.5	30	27.5	25	22.5	20	17.5	15
<b>TCF</b>	<i>1-Mar</i>										
	<i>1-Jul</i>										
Apparel & certain											
finished textiles	55	55	51	47	43	40	37	34	31	28	25
Footwear	45	45	41	37	33	30	27	24	21	18	15
Cotton sheeting &											
woven fabric	40	40	37	34	31	28	25	22	19	17	15
Other fabrics	35	35	32	29	26	23	20	17	14	12	10
Footwear parts	35	35	32	29	27	25	23	21	19	17	15
Existing non-quota TCF	25	25	23	21	19	17	15	13	12	11	10
Other	15	15	15	as per general manufacturing							

*Source: DPM&C (1991).*

The bounties on textile yarns, bed sheeting and printed fabrics are to be phased out by 1 July 1995. The TCF policy By-laws will generally be maintained at their current rate wherever they continue to provide concessional entry. The By-law on textile yarns, however, 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. The duty on imports entering under By-law item 40D (bed sheeting and fabrics in the grey) is to phase to 15 per cent by 1 July 2000, in line with the tariff for cotton sheeting and fabrics.

### **Agricultural products**

In July 1989, the domestic pricing arrangements for sugar were changed with the embargo being lifted and replaced with a specific tariff of \$115 per tonne, which was to phase to \$70 per tonne in 1992. This rate was, however, reduced in the March 1991 Statement and a tariff of \$55 per tonne has applied since 1 July 1992. In February 1993, the Minister for Primary Industries and Energy announced that the current rate would remain in place until 30 June 1997, with a review planned for 1995–96 (Crean 1993).

The current dairy arrangements include a tariff quota on imports of cheese. The tariff quota is an integral part of the arrangements to maintain domestic cheese prices at levels higher than duty paid imports. Market support payments made on exports of Australian cheese raise the domestic price of cheese above the world price and hence attract imports of cheese. The tariff quota arrangements limit the extent to which consumers can substitute imported for domestic cheese. As a result of the Uruguay Round, the cheese quota will be replaced with a tariff (for details see Chapter 3).

As a result of arrangements set in place before the March 1991 Statement, tariffs on certain vegetable products were being phased down to 10 per cent by 1 January 1994. Following the Statement, these are now phasing down to 5 per cent by 1 January 1998.

### **Developing country preferences**

Imports from Developing Countries (DCs) have received preferential treatment under the Australian System of Tariff Preferences (ASTP). Until recently, the DC tariff rate has been set at 5 percentage points below the general rate, when the general rate is 5 per cent or higher. In the March 1991 Statement, the Government announced that the preferential tariff arrangements for Singapore, Taiwan Province, Hong Kong and the Republic of Korea would be phased out. Rates of duty applying to imports from these sources were frozen at the 1 July

1992 rates until the general tariff rate falls to the level of the DC preference rate. Thereafter the general rate of duty applies to imports from these sources.

The most recent changes to the DC preference arrangements were announced by the Prime Minister in May 1994. DC preferences are to be phased out or removed for all but the least developed countries, which include some South Pacific countries. The decision will not involve any explicit tariff increases for developing countries, as their tariff rates will be held constant until they fall into line with the general tariff rates applying to imports from other sources.

### **CTCOs**

Concessional entry for imports has been available as long as tariffs have operated. The system consists of two elements, a Commercial Tariff Concession Order (CTCO) and a By-law system. A CTCO provides for duty free entry of goods for which there are no domestically produced goods 'serving similar functions'. The By-law system provides for concessional entry in a number of situations in which there may be competing local production. As tariff levels decline, the CTCO and By-law systems will become less important.

### **Changes in the structure of the tariff**

Despite our historically high tariffs, most imports enter duty free. For example, most items in the first five sections of the tariff — Animal products, Vegetable products, Animal or vegetable fats, Prepared foodstuffs, and Mineral products — are free of duty. In addition, imports from New Zealand, Papua New Guinea and the Forum Islands, and some imports from Developing Countries (especially where the general rate is 5 per cent or less), enter duty free. Many items normally subject to duty also gain duty-free entry under a By-law or CTCO. The value of imports entering duty free has remained fairly constant at about 70 per cent since 1977–78.<sup>1</sup>

The proportion of imports entering at various tariff rates has shown a gradual change over the period covered in Table A4.2. As the Government's program of tariff phasing has come into force since 1988, the proportion of items entering at medium to high tariff rates has declined. For example, imports at rates higher than 30 per cent accounted for 11 per cent of imports in 1983–84, but only 4 per cent in 1989–90. Parallel with this, imports at lower rates have increased. The proportion of imports with tariff rates between 10 and 20 per cent increased from

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<sup>1</sup> Between 1979–80 and 1987–88, this includes imports subject to the 2 per cent revenue duty which was removed in May 1988.



6 per cent in 1983–84 to 19 per cent in 1989–90, then to 22 per cent in 1992–93. Between July 1979 and May 1988, a 2 per cent revenue duty applied. During that period many of the imports in the zero to 10 per cent category included imports at this rate.

## Trends in average tariff levels

A number of methods can be used to calculate average tariff rates. Various studies have, for example, weighted tariff rates by number of tariff lines, value of imports, domestic production (assisted or unassisted values) or consumption. The Commission's nominal rates of assistance employ production values (net of assistance), in a base year, as weights to derive average tariff rates. The average tariff rates shown in Table A4.2 are, however, import weighted.

Production weighting will tend to give a greater weight to commodities with high tariffs, because high tariffs will tend to encourage domestic production but discourage imports of the goods concerned. Import weighting, however, tends to understate the assistance provided by a high tariff regime. In the extreme case in which a tariff is so high that it excludes imports, the commodity concerned would receive a zero weight under the import weighting method, but it could receive a substantial positive weight under the production weighting method. Conversely, if the tariff on a particular commodity is very low, there may be no domestic production of that commodity but there may be substantial imports.

**Table A4.2**  
**Distribution of value of imports, by tariff rate<sup>a</sup> (per cent)**

	1968-69	1971-72	1977-78	1983-84	1989-90	1992-93
0	57	52	68	39	67	69
>0 to <10	16	16	1	31	3	3
10 to <20	4	4	5	6	19	22
20 to <30	6	7	10	14	7	..
30 to <40	4	6	7	5	1	3
40 to <50	4	4	2	..	..	1
50 to <60	2	2	2	3	1	..
60 and over	..	..	..	..	1	..
other <sup>b</sup>	8	8	5	3	1	1
	100	100	100	100	100	100

.. Less than 0.5 per cent.

a Ranges are for ad valorem rates.

b Specific rates.

Source: ABS Cat. No. 5427 and Commission estimates.

It should also be noted that the average tariff rates in Table A4.3 include the excise (non-protective) component of general tariff rates where applicable. As discussed in Appendix 3, whilst excise is only levied on domestic production, the tariff rate applying to equivalent imports is considered to have an excise component either explicitly or implicitly and, for nominal rate estimates, only the protective component is included. It has not been possible to obtain data on tariff rates net of excise prior to 1981–82 and so, to present a consistent time series, average tariff rates have been calculated based on total tariff rates. As excise taxes are only levied on certain alcoholic, tobacco and petroleum products, only the estimates for ASIC subdivisions 21 (Food, beverages and tobacco) and 27 (Chemical, petroleum and coal products) are affected. In the case of subdivision 21, average tariff rates would be considerably lower if excise had been netted out. For example, the average tariff rate in 1992–93 for subdivision 21 excluding excise is 4 per cent compared to 25 per cent including excise.

In general, Table A4.3 shows a gradual decline in tariff rates across all categories since the general program of tariff reductions commenced in 1988. The exceptions are Textiles, and Clothing and footwear, which show increases through to 1991–92. For some categories, the decline in average tariffs has been marked, such as for Fabricated metal products (12 per cent in 1987–88 to 6 per cent in 1992–93). Similarly, the average tariff for Other machinery and equipment fell from 7 to 3 per cent over the same period and for Basic metal products from 7 to 2 per cent.

Over the period 1968–69 to 1987–88, most tariffs remained fairly constant. The exceptions were the Clothing and footwear and Transport equipment subdivisions. Average Clothing and footwear tariffs varied between 30 and 44 per cent over the period 1968–69 to 1988–89, before rising to 49 per cent in 1990–91, prior to the phased reduction in out-of-quota duty rates and the termination of quotas in March 1993. The average tariff on Transport equipment rose slowly from around 10 per cent in the early years, to about 20 per cent in 1984–85, before the Button plan came into operation. Since then, the average tariff has declined, and was 10 per cent in 1992–93. Overall, the average tariff rate for total manufacturing has steadily declined from 14 per cent in the early 1970s to only 6 per cent in 1992–93.

**Table A4.3**  
**Average tariff rates, for manufacturing subdivisions, 1968-69 to 1992-93 (per cent)**

<i>Industry</i>		1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
<i>ASIC</i>	<i>Description</i>	-69	-70	-71	-72	-73	-74	-75	-76	-77	-78	-79	-80	-81
21	Food, beverages and tobacco	43	43	42	45	45	41	44	55	46	40	44	39	40
23	Textiles	13	13	13	13	12	9	11	10	10	9	10	9	10
24	Clothing and footwear	41	41	40	41	44	31	32	33	31	30	36	36	34
25	Wood, wood products and furniture	15	14	15	15	14	11	12	13	12	12	11	11	11
26	Paper, paper products, printing and publishing	4	4	5	5	5	4	3	4	4	4	4	4	4
27	Chemical, petroleum and coal products	6	7	7	5	7	3	2	2	2	2	2	3	2
28	Non-metallic mineral products	19	19	18	19	18	12	12	12	11	10	10	11	11
29	Basic metal products	9	9	10	9	10	4	5	7	7	7	7	6	7
31	Fabricated metal products	18	19	19	19	20	16	15	15	15	14	14	14	14
32	Transport equipment	9	10	12	15	14	12	17	19	20	18	15	17	19
33	Other machinery and equipment	11	11	11	11	11	9	10	9	9	8	7	8	8
34	Miscellaneous manufacturing	20	21	20	20	20	16	14	15	16	16	16	16	14
21-34	Total manufacturing	12	13	13	14	14	11	12	13	12	11	11	11	11

Table A4.3 (continued)

Industry		1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
ASIC code	Description	-82	-83	-84	-85	-86	-87	-88	-89	-90	-91	-92	-93
21	Food, beverages and tobacco	36	34	29	28	29	27	29	29	29	28	26	25
23	Textiles	9	7	7	7	7	6	6	7	7	8	8	7
24	Clothing and footwear	36	39	42	42	40	38	34	43	47	49	43	33
25	Wood, wood products and furniture	12	12	11	12	12	11	9	7	7	6	5	4
26	Paper, paper products, printing and publishing	5	5	5	5	6	6	6	5	4	4	4	4
27	Chemical, petroleum and coal products	3	3	4	3	4	5	5	4	3	3	2	2
28	Non-metallic mineral products	12	12	11	11	11	11	12	11	10	9	8	7
29	Basic metal products	7	7	8	7	7	7	7	5	5	3	2	2
31	Fabricated metal products	13	14	13	13	13	13	12	11	10	9	8	6
32	Transport equipment	13	18	18	20	18	12	14	12	11	9	10	10
33	Other machinery and equipment	8	8	8	7	7	6	7	5	5	4	3	3
34	Miscellaneous manufacturing	14	14	13	13	13	13	13	12	10	9	8	7
21-34	Total manufacturing	10	11	11	11	11	10	10	9	8	8	7	6

Source: Commission estimates.

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## APPENDIX 5

# AGRICULTURAL ASSISTANCE ESTIMATES

This appendix contains the following information on assistance to agriculture:

- Assistance to agriculture, by form: 1970–71 to 1992–93 ( Table A5.1);
- Nominal rates of assistance to agriculture, by activity: 1970–71 to 1992–93 (Table A5.2);
- Effective rates of assistance to agriculture, by activity: 1970–71 to 1992–93 (Table A5.3);
- Producer transfers for agricultural commodities: 1970–71 to 1992–93 (Table A5.4);
- Price distortions for agricultural commodities: 1977–78 to 1992–93 (Table A5.5); and
- Gross and net subsidy equivalents for agriculture, by industry group: 1970–71 to 1992–93 ( Table A5.6).

Table A5.1

**Assistance to agriculture<sup>a</sup>, by form: 1970–71 to 1992–93 (\$million)**

	Series 1														Series 2										Series 3		
	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992			
	-71	-72	-73	-74	-75	-76	-77	-78	-79	-80	-81	-82	-83	-84	-84	-85	-86	-87	-88	-89	-90	-91	-92	-93			
Assistance to outputs																											
Domestic pricing arrangements <sup>b</sup>	183	124	143	17	-53	107	159	162	149	114	138	242	482	555	555	515	559	669	551	371	402	450	460	393			
Export incentives	-	-	-	-	1	1	2	2	2	3	3	7	8	8	8	3	1	1	18	2	2	1	1	3			
Export inspection <sup>c</sup>	10	13	14	16	21	24	30	34	37	24	30	37	45	55	55	29	40	48	37	67	59	37	8	9			
Local content schemes	28	28	29	37	38	37	29	24	23	27	27	22	23	26	26	17	15	9	19	23	23	21	22	30			
Marketing support	62	84	21	16	15	9	9	20	22	22	44	43	42	22	22	27	32	36	35	27	25	59	56	50			
Price stabilisation funds and underwritings arrangement	32	43	16	3	5	4	5	7	13	21	2	7	1	2	2	13	17	201 <sup>d</sup>	2	-	-	22	-	-			
Production bounties	47	43	29	19	9	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Tariffs	16	17	19	23	31	28	28	32	38	41	55	57	52	62	62	56	51	56	48	70	42	29	33	28			
Government guarantees	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	31	82	113	120			
Wool supplementary support payments	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	300	-	-			
Total	378	352	271	131	67	211	262	281	284	252	299	415	653	730	730	660	715	1020	710	560	584	1001	693	633			
Assistance to value adding factors																											
Adjustment assistance	3	15	18	23	18	25	23	25	25	20	23	29	28	29	29	33	51	65	58	60	72	68	139	106			
Agricultural extension services <sup>e</sup>	5	6	6	7	8	9	10	10	10	5	5	-	-	-	-	-	-	-	-	-	-	-	-	-			
Agricultural research	23	26	28	30	35	44	50	48	49	55	65	77	93	99	99	95	101	120	134	129	144	159	150	167			
Concessional credit	21	15	15	60	16	19	14	17	14	21	38	43	5	5	5	7	-	-	-	-	-	-	-	-			
Income tax concessions <sup>f</sup>	45	42	116	183	128	55	55	72	159	178	223	218	156	96	96	126	101	180	280	290	205	19	27	78			
Natural disaster relief <sup>g</sup>	7	4	3	6	3	3	4	6	8	8	35	24	166	102	102	43	38	39	30	36	14	9	5	4			
Total	104	108	186	309	208	155	156	178	265	287	389	391	448	331	331	304	291	404	502	515	435	255	321	355			

Table A5.1 (continued)

	Series 1														Series 2										Series 3		
	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992			
	-71	-72	-73	-74	-75	-76	-77	-78	-79	-80	-81	-82	-83	-84	-84	-85	-86	-87	-88	-89	-90	-91	-92	-93			
<b>Assistance to inputs</b>																											
Disease control <sup>h</sup>	2	3	5	5	2	3	2	89	36	3	3	3	7	11	11	18	14	18	14	9	10	11	8	5			
Fertiliser subsidies	51	56	67	80	43	34	52	57	60	62	51	49	47	49	49	52	52	-	-	-	-	-	-	-			
Stockfeed <sup>i</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-34	-9	..	-17	-	-	-	-			
Tariffs on materials <sup>j</sup>	-46	-52	-67	-67	-57	-60	-55	-57	-90	-102	-94	-106	-93	-134	-158	-185	-123	-96	-114	-122	-118	-100	-103	-105			
Tariffs on plant and machinery <sup>j</sup>	-71	-81	-102	-116	-87	-85	-93	-93	-116	-136	-136	-182	-150	-196	-204	-208	-196	-121	-147	-171	-129	-76	-68	-66			
<b>Total</b>	<b>-64</b>	<b>-74</b>	<b>-97</b>	<b>-98</b>	<b>-99</b>	<b>-108</b>	<b>-94</b>	<b>-4</b>	<b>-110</b>	<b>-173</b>	<b>-176</b>	<b>-236</b>	<b>-189</b>	<b>-270</b>	<b>-301</b>	<b>-322</b>	<b>-287</b>	<b>-208</b>	<b>-247</b>	<b>-301</b>	<b>-237</b>	<b>-165</b>	<b>-163</b>	<b>-166</b>			

- Nil.

.. Less than \$0.5 million.

a This table covers total assistance to the agricultural sector. A small amount of assistance is provided through general measures (eg income tax concessions) to activities for which nominal and effective rates have not been estimated.

b These estimates include the effects of any import restrictions which enable the domestic price to exceed the landed duty-free price of competing imports (eg tariffs on dried vine fruits and sugar).

c Since 1989-90 assistance has been based on shortfalls from 100 per cent cost recovery.

d 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.

e Prior to 1981, the Commonwealth made annual grants to assist state agricultural advisory services. The direct financing of agricultural extension services by the Commonwealth was withdrawn in 1981 following the Review of Commonwealth Functions.

f Includes assistance provided to primary producers through the income tax averaging provisions and the immediate deductibility of capital expenditure on water storage and farm reticulation systems (S.75B) and land degradation measures (S.75D). In 1984-85, minor assistance was also provided through the immediate deductibility of expenditure on fences for the control of bovine brucellosis and tuberculosis (S.75C). No assistance has been allocated to the agricultural sector by the optional special depreciation rates (20 per cent prime cost per annum, or for expenditure incurred from 20 July 1982 to 19 May 1983, 33.3 per cent) following the availability to all taxpayers of optional depreciation rates of 20 per cent or 33.3 per cent prime cost per annum from 20 July 1982.

g Includes assistance provided by the Drought Relief Fodder Subsidy Scheme and the Drought Relief Interest Subsidy Scheme, which operated from 1 September 1982 to 30 June 1983 and 31 December 1983 respectively.

**Table A5.1 (continued)**

- h Covers assistance provided by the Bovine Brucellosis and Tuberculosis Eradication Campaign.
- i The effects of domestic pricing arrangements, which ended on 30 June 1989, for stockfeed wheat used in pig, poultry and egg production. These arrangements could either tax or subsidise user industries.
- j The additional costs incurred due to assistance raising the prices of inputs. The latest series includes the effect of tariffs on materials used in non-traded inputs.

*Source:* Commission estimates.



Table A5.2

**Nominal rates of assistance<sup>a</sup> to agriculture, by activity: 1970–71 to 1992–93 (per cent)**

Activity/Commodity description	Series 1														Series 2										Series 3					
	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1983	1984	1985	1986	1987	1988	1989	1990	1990	1991	1992					
	-71	-72	-73	-74	-75	-76	-77	-78	-79	-80	-81	-82	-83	-84		-84	-85	-86	-87	-88	-89	-90	-91	-91	-92	-93				
<b>Horticulture</b>																														
Apples and pears	6	11	8	8	12	9	9	2	2	5	2	8	2	2		2	3	1	..	1	..	2	1	1	..					
Dried vine fruits	44	27	34	-	7	36	27	-	3	-3	4	19	31	45		45	21	18	17	25	22	18	18	19	16					
Wine grapes	52	53	51	50	50	36	30	17	17	17	21	21	21	16		16	16	16	16	18	21	16	15	15	14					
Citrus <sup>b</sup>	25	27	26	26	25	23	21	38	41	41	47	52	34	34		34	24	18	19	10	12	6	5	5	3					
Deciduous canning fruit <sup>c</sup>	8	8	12	7	3	5	4	2	2	1	8	47	74	41		41	16	23	28	1	1	1	..	..	..					
Bananas	na	na	na	na	na	na	na	na	na	na	4	7	7	5		5	1	1	-	1	..	..	..	..	-					
Tobacco	>250	>250	>250	>250	>250	>250	113	84	76	88	77	59	44	55		55	47	38	16	37	56	41	35	35	36					
Potatoes	8	8	8	6	6	6	6	8	8	8	8	8	8	8		8	8	8	8	na	na	na	na	na	na					
Onions	-	-	-	-	-	-	-	-	-	-	-	1	1	1		1	1	1	1	na	na	na	na	na	na					
Vegetables	na	na	na	na	na	na	na	na	na	na	na	na	na	na		na	na	na	na	-	-	..	..	..	..					
<b>Average</b>	na	na	na	na	na	na	na	na	na	na	15	19	18	12		12	10	9	7	5	6	4	4	4	3					
<b>Extensive cropping</b>																														
Wheat	20	22	12	-10	-8	-2	3	2	-2	-3	2	2	5	2		2	2	2	14	1	..	1	5	5	1					
Barley	-	-	-	-	-	-	-	-	-	-	-	-	-	..		..	-	-	..	..	..	..	..	..	..					
Oats	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	..	..	..	..	..	..	..					
Maize	-	-	-	-	-	-	-	-	-	-	-	-	-	-		..	-	-	-	-	..	..	..	-	..					
Sorghum	-	-	-	-	-	-	-	-	-	-	1	-	2	-		-	..	-	-	..	..	..	..	..	..					
Oilseeds	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	..	..	..	..	..	..					
<b>Average</b>	na	na	na	na	na	na	na	na	na	na	1	2	4	2		2	1	2	10	1	..	1	3	3	1					

Table A5.2 (continued)

Activity/Commodity description	Series 1														Series 2										Series 3					
	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1983	1984	1985	1986	1987	1988	1989	1990	1990	1991	1992					
	-71	-72	-73	-74	-75	-76	-77	-78	-79	-80	-81	-82	-83	-84	-84	-85	-86	-87	-88	-89	-90	-91	-91	-92	-93					
Extensive irrigation and high rainfall crops																														
Sugar <sup>d</sup>	23	14	8	7	-14	-13	-9	-4	-3	-2	-8	-2	11	7	7	15	21	13	13	9	6	10	10	7	3					
Cotton <sup>e</sup>	100	6	19	126	16	40	20	9	11	8	6	2	7	5	5	2	1	5	2	2	-	-	-	-	..					
Rice <sup>f</sup>	28	46	15	6	15	23	26	26	13	14	18	8	22	20	20	8	11	19	17	3	3	4	4	2	2					
Average	na	na	na	na	na	na	na	na	na	na	-4	1	11	8	8	10	12	10	9	6	3	4	4	3	2					
Extensive grazing																														
Beef	1	1	1	1	3	3	2	2	1	1	1	1	2	2	2	1	1	1	1	2	1	1	1	1	..					
Wool	10	15	2	1	2	1	1	2	2	1	1	1	1	1	1	1	1	1	1	..	1	10	10	6	6					
Sheepmeat	2	2	1	1	2	3	2	2	1	1	1	1	2	2	2	1	2	2	1	2	2	3	3	..	..					
Average	na	na	na	na	na	na	na	na	na	na	1	1	2	2	2	1	1	1	1	1	1	6	6	2	2					
Intensive livestock																														
Pigs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	..	-	..	..	..	..	..	..	..	..					
Poultry	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	..	-	-	..	..	..	..	..	..	..					
Eggs <sup>g</sup>	29	35	48	46	17	28	15	17	37	33	32	15	51	69	69	12	29	35	10	na	9	7	7	2	1					
Milk production	63	24	24	27	26	40	35	36	34	34	19	20	32	38	38	52	49	54	49	22	24	28	28	28	19					
Manufacturing milk <sup>h</sup>	60	20	14	14	12	13	5	5	5	7	7	9	21	28	28	34	31	50	45	21	17	20	20	16	9					
Fresh milk <sup>i</sup>	68	32	45	53	52	91	84	85	81	76	41	44	53	53	53	53	75	76	60	54	24	36	41	41	53	44				
Average	na	na	na	na	na	na	na	na	na	na	12	11	20	23	23	23	21	22	23	19	11	13	13	13	10					
Total agriculture																														
Average	15	12	7	3	1	4	5	5	4	3	3	4	7	6	6	6	5	6	8	4	3	3	6	6	4	4				
Standard deviation <sup>j</sup>	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	(13)	(13)	(14)	(13)	(12)	(7)	(9)	(9)	(10)	(9)					
na Not available.																														

**Table A5.2 (continued)**

- Nil.
- .. Less than \$0.5 million.
- a Average nominal rates on outputs are weighted by the unassisted value of output of each activity.
- b Assistance estimates since 1988–89 have been based on a revised methodology. It is assumed that the developing country tariff on frozen orange juice establishes a floor for all citrus production.
- c The required price data for estimating the producer transfer were not available for 1987–88 following the end of domestic marketing arrangements, with the termination of the Australian Canned Fruits Corporation on 31 December 1988. Hence, only export incentives were included in the 1987–88 estimate of the nominal rate of assistance.
- d The embargo on sugar imports ceased in June 1989. The estimates since 1989–90 have been based on a revised methodology. The price distortion was calculated by comparing the average domestic unit returns with a constructed export parity price.
- e The domestic marketing arrangements for cotton ceased in June 1989.
- f 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 Queensland is based on the difference between average domestic and comparable export prices for rice grown in New South Wales. Estimates since 1988–89 have been based on more appropriate data provided by the Ricegrowers' Co-operative. The 1991–92 estimates exclude assistance associated with Queensland production as the required data were unavailable.
- g Estimates for 1986–87 and 1987–88 relied on a comparison of wholesale prices and NSW average export prices. Following the deregulation of the NSW egg market, the necessary data were no longer available and estimates were not reported for 1988–89. Since deregulation in NSW, minimal quantities of eggs have been exported. Estimates since 1989–90 have been based on the difference between the weighted average deregulated farm-gate price and the average price received by farmers in the states maintaining regulation. In 1991–92 NSW was the only deregulated state.
- h For the years 1985–86 through to 1988–89, the producer transfers were estimated for each state by multiplying the difference between the state fresh milk price and a notional deregulated price, by fresh milk sales in the state. For New South Wales, Queensland and South Australia, the deregulated price was assumed to be the Victorian manufacturing milk price, plus freight from Victoria. For Western Australia and Tasmania, the deregulated price was assumed to be the local manufacturing milk price, plus winter incentive payments. Estimates since 1989–90 have been based on a revised methodology. The producer transfer was estimated by multiplying the difference between the fresh 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).
- i The estimates since 1986–87 have been based on a revised methodology for estimating the producer transfers for butter and cheese, so as 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 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.

Table A5.3

**Effective rates of assistance<sup>a</sup> to agriculture, by activity: 1970–71 to 1992–93 (per cent)**

Activity/ Commodity description	Series 1														Series 2											Series 3																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1983	1984	1985	1986	1987	1988	1989	1990	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992

Table A5.3 (continued)

Activity/ Commodity description	Series 1														Series 2										Series 3				
	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1983	1984	1985	1986	1987	1988	1989	1990	1990	1991	1992	1990	1991	1992	
	-71	-72	-73	-74	-75	-76	-77	-78	-79	-80	-81	-82	-83	-84	-84	-85	-86	-87	-88	-89	-90	-91	-91	-92	-93	-91	-92	-93	
Extensive irrigation and high rainfall crops																													
Sugar <sup>d</sup>	38	202	13	16	-19	-21	-14	-8	-4	-3	-13	-3	16	7	10	39	63	33	32	21	16	27	27	21	9				
Cotton <sup>e</sup>	>250	6	38	>250	32	93	42	14	21	14	11	3	10	7	8	3	1	7	6	5	6	..	-4	-3	-2				
Rice <sup>f</sup>	46	75	26	15	26	38	43	43	21	23	32	13	37	21	50	14	26	59	50	5	6	10	11	6	11				
Average	na	na	na	na	na	na	na	na	na	2	-7	-	17	9	11	18	24	20	19	11	10	8	10	7	5				
Extensive grazing																													
Beef	3	3	4	8	13	6	6	26	7	2	6	5	11	9	10	7	6	8	8	10	5	3	4	3	3				
Wool	19	26	5	7	7	4	4	5	6	4	6	5	7	4	4	3	2	4	3	2	1	22	26	16	18				
Sheepmeat	6	5	4	5	7	5	5	5	5	3	5	4	7	4	5	2	3	4	3	5	6	8	9	4	5				
Average	na	na	na	na	na	na	na	na	na	3	6	5	8	6	7	4	4	6	5	5	3	12	14	8	8				
Intensive livestock																													
Pigs	-12	-17	-4	>250	124	22	-15	-8	33	34	10	7	1	-9	-11	-18	-11	1	4	-3	3	2	2	3	4				
Poultry	-7	-11	-1	126	74	17	-11	-4	22	22	-	4	-1	-6	-5	-8	-4	..	6	2	9	1	1	4	3				
Eggs <sup>g</sup>	82	103	>250	na	>250	206	24	43	>250	>250	186	56	>250	>250	176	15	51	71	22	na	23	13	20	8	3				
Milk production	156	43	44	58	51	90	75	77	75	123	40	40	79	84	107	179	159	213	171	53	58	70	55	73	54				
Manufacturing milk <sup>h</sup>	145	34	23	29	23	26	10	9	11	60	16	17	49	58	72	91	80	181	149	49	38	47	43	33	20				
Fresh milk <sup>i</sup>	176	62	96	136	127	>250	>250	>250	>250	246	97	104	147	134	191	>250	>250	>250	205	59	105	123	129	213	154				
Average	na	na	na	na	na	na	na	na	na	85	35	29	54	56	59	46	54	71	59	28	32	33	42	45	32				
Total agriculture																													
Average	28	21	14	13	8	9	9	13	10	7	8	9	17	11	12	10	12	19	11	8	7	13	15	12	11				
Standard deviation <sup>j</sup>	(79)	(104)	(32)	(32)	(36)	(43)	(38)	(39)	(39)	(34)	(22)	(17)	(34)	(52)	(33)	(41)	(43)	(39)	(30)	(14)	(16)	(20)	(22)	(29)	(25)				

**Table A5.3 (continued)**

na	Not available.
–	Nil.
..	Less than \$0.5 million.
a	Average effective rates are weighted by the unassisted value added of each activity.
b	Assistance estimates since 1988–89 have been based on a revised methodology. It is assumed that the developing country tariff on frozen orange juice establishes a floor for all citrus production.
c	The required price data for estimating the producer transfer were not available for 1987–88 following the end of domestic marketing arrangements, with the termination of the Australian Canned Fruits Corporation on 31 December 1988. Hence, only export incentives were included in the 1987–88 estimate of the nominal rate of assistance.
d	The embargo on sugar imports ceased in June 1989. The estimates since 1989–90 have been based on a revised methodology. The price distortion was calculated by comparing the average domestic unit returns with a constructed export parity price.
e	The domestic marketing arrangements for cotton ceased in June 1989.
f	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 Queensland is based on the difference between average domestic and comparable export prices for rice grown in New South Wales. Estimates since 1988–89 have been based on more appropriate data provided by the Ricegrowers' Co-operative. The 1991–92 estimates exclude assistance associated with Queensland production as the required data were unavailable.
g	Estimates for 1986–87 and 1987–88 relied on a comparison of wholesale prices and NSW average export prices. Following the deregulation of the NSW egg market, the necessary data were no longer available and estimates were not reported for 1988–89. Since deregulation in NSW, minimal quantities of eggs have been exported. Estimates since 1989–90 have been based on the difference between the weighted average deregulated farm-gate price and the average price received by farmers in the states maintaining regulation. In 1991–92 NSW was the only deregulated state.
h	For the years 1985–86 through to 1988–89, the producer transfers were estimated for each state by multiplying the difference between the state fresh milk price and a notional deregulated price, by fresh milk sales in the state. For New South Wales, Queensland and South Australia, the deregulated price was assumed to be the Victorian manufacturing milk price, plus freight from Victoria. For Western Australia and Tasmania, the deregulated price was assumed to be the local manufacturing milk price, plus winter incentive payments. Estimates since 1989–90 have been based on a revised methodology. The producer transfer was estimated by multiplying the difference between the fresh 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).
i	The estimates since 1986–87 have been based on a revised methodology for estimating the producer transfers for butter and cheese, so as 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	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.

Table A5.4

**Producer transfers for agricultural commodities<sup>a</sup>: 1970–71 to 1992–93 (\$ million)**

Activity/Commodity description	Series 1													Series 2										Series 3		
	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992			
	-71	-72	-73	-74	-75	-76	-77	-78	-79	-80	-81	-82	-83	-84	-85	-86	-87	-88	-89	-90	-91	-92	-93			
<b>Horticulture</b>																										
Dried vine fruits <sup>b</sup>																										
Sultanas	4	3	5	..	2	6	7	-1	2	-3	1	11	16	16	11	13	10	16	12	10	15	10	11			
Currants	1	1	1	..	..	1	1	..	..	..	1	1	1	1	1	1	1	1	1	1	1	1	1			
Raisins	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	1	1	..	1	1	1	1	..			
Wine grapes	na	na	na	na	na	na	na	na	na	12	14	16	16	16	16	18	15	17	27	53	32	28	25			
Citrus <sup>c</sup>	na	na	na	na	na	na	na	na	na	21	27	27	23	24	24	19	18	12	18	9	7	5	3			
Deciduous canning fruit <sup>d</sup>	na	na	na	na	na	na	na	na	na	-	2	3	5	4	3	4	4	na	-	-	-	-	-			
Tobacco <sup>e</sup>	na	28	28	29	37	38	37	29	24	23	27	22	20	24	20	15	8	19	23	23	21	22	30			
Potatoes	na	na	na	na	na	na	na	na	na	na	11	11	10	19	10	13	17	7	-	-	-	-	-			
Onions	na	na	na	na	na	na	na	na	na	na	1	1	..	1	1	..	1	..	-	-	-	-	-			
Vegetables	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	9	-	-	-	-	-			
<b>Extensive cropping</b>																										
Wheat	22	26	19	-130	-95	-23	20	12	-35																	
Human use <sup>f</sup>	na	na	na	na	na	na	na	na	na	-47	-1	23	27	51	31	35	26	5	6	-	-	-	-			
Stockfeed	na	na	na	na	na	na	na	na	na	-23	-2	-5	7	4	6	2	..	..	1	-	-	-	-			
Industrial	na	na	na	na	na	na	na	na	na	-	-2	-2	-2	2	6	2	-1	-1	..	-	-	-	-			
<b>Extensive irrigation and high rainfall crops</b>																										
Sugar <sup>g</sup>	28	23	17	14	-81	-66	-41	-17	-11	-11	-72	-10	49	34	68	73	66	72	62	50	69	40	24			
Cotton <sup>h</sup>	4	1	5	14	4	10	6	4	7	8	7	3	8	11	7	3	16	9	9	-	-	-	-			
Rice <sup>i</sup>	3	3	3	3	4	7	10	11	10	10	19	11	13	13	8	8	12	14	4	4	4	4	4			

Table A5.4 (continued)

Activity/Commodity description	Series 1										Series 2										Series 3				
	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989					
	-71	-72	-73	-74	-75	-76	-77	-78	-79	-80	-81	-82	-83	-84	-85	-86	-87	-88	-89	-90	-91	-92	-93	-94	-95
<b>Intensive livestock</b>																									
Eggs <sup>j</sup>	20	22	32	42	22	33	21	26	44	46	46	28	80	102	25	55	62	23	na	21	17	5	2		
Manufacturing milk																									
Cheese <sup>k</sup>	11	10	18	14	11	24	18	12	15	10	10	26	60	63	49	63	89	79	67	57	62	62	53		
Butter <sup>k</sup>	51	45	46	43	43	45	40	43	38	31	17	13	41	60	61	64	33	28	18	23	23	22	18		
Skim milk powder <sup>l</sup>	..	..	..	..	2	2	2	6	6	2	..	4	9	13	7	5	18	25	19	19	16	15	10		
Whole milk powder	na	na	na	na	na	na	na	na	2	2	..	2	4	5	5	3	8	8	6	7	6	5	4		
Casein	..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	..	1	1	1	1	1	..	..		
Fresh milk <sup>m</sup>	na	na	na	na	na	na	na	na	na	105	108	129	161	172	220	226	205	192	121	176	198	253	230		

na Not available.

- Nil.

.. Less than \$0.5 million.

- a Producer transfers represent the income transfer to farmers, from domestic consumers/users, due to domestic prices being maintained above export/import parity. 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 fruit, it is assumed that all transfers accrue to the farming activity.
- b Includes the price raising effects of tariffs used in conjunction with the domestic marketing arrangements. The price distortion for sultanas is based on the difference between the average domestic and comparable export returns to packers.
- c Assistance estimates since 1988-89 have been based on a revised methodology. It is assumed that the developing country tariff on frozen orange juice establishes a floor for all citrus production.
- d Producer transfers estimated at 20 to 30 per cent of the total transfer based on respective value added shares between the growing and canning activities. The producer transfer has not been calculated for 1987-88. Domestic marketing arrangements ceased with the termination of the Australian Canned Fruits Corporation on 31 December 1988.
- e Transfers derived by applying the price differential between Australian-grown green leaf and the notional import price on non-USA green leaf, to the domestic sales of Australian-grown leaf.



**Table A5.4 (continued)**

- f For 1980–81 to 1983–84, producer transfers and price distortions were based on the domestic price less the Tasmanian Freight Levy.
- g 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.
- h The domestic marketing arrangements ceased in June 1989.
- i Estimated 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, prices were estimated from the average prices supplied by the NSW Ricegrowers' Co-operative Ltd. The price distortion for rice grown in Queensland is based on the difference between the average domestic and comparable export prices for rice grown in New South Wales. The estimates since 1988–89 have been based on more appropriate data provided by the Ricegrowers' Co-operative. The 1991–92 estimates exclude producer transfers associated with Queensland production. Queensland production accounts for approximately 3 per cent of Australian production.
- j Estimates for 1986–87 and 1987–88 relied on a comparison of wholesale prices and NSW average export prices. Following the deregulation of the NSW egg market, the necessary data were no longer available and estimates were not reported for 1988–89. Since deregulation in NSW, minimal quantities of eggs have been exported. Estimates since 1989–90 have been based on the difference between the weighted average deregulated farm-gate price and the average price received by farmers in the states maintaining regulation. In 1991–92 NSW was the only deregulated state.
- k The methodology for estimating producer transfers has been revised to exclude the levies charged on domestic sales of butter and cheese 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. This arrangement ended on 30 June 1989.
- l From 1989–90 includes buttermilk.
- m For the years 1985–86 through to 1988–89, the producer transfers were estimated for each state by multiplying the difference between the state fresh milk price and a notional deregulated price, by fresh milk sales in the state. For New South Wales, Queensland and South Australia, the deregulated price was assumed to be the Victorian manufacturing milk price, plus freight from Victoria. For Western Australia and Tasmania, the deregulated price was assumed to be the local manufacturing milk price, plus winter incentive payments. Estimates since 1989–90 have been based on a revised methodology. The producer transfer was estimated by multiplying the difference between the fresh 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).

*Source:* Commission estimates.

Table A5.5

Price distortions for agricultural commodities<sup>a</sup>: 1977–78 to 1992–93 (per cent)

Activity/Commodity description	Series 1					Series 2					Series 3					
	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
	-78	-79	-80	-81	-82	-83	-84	-85	-86	-87	-88	-89	-90	-91	-92	-93
<b>Horticulture</b>																
Dried vine fruits <sup>b</sup>																
Sultanas	-4	-14	-16	6	55	74	135	41	42	27	52	37	26	31	28	26
Currants	1	-5	-16	20	18	15	16	14	13	12	15	20	19	17	15	14
Raisins	-12	-4	12	24	19	16	19	14	14	15	15	20	19	17	15	14
Wine grapes	17	17	17	21	21	21	16	16	16	16	18	21	16	15	14	13
Citrus <sup>c</sup>	38	41	41	47	52	35	34	24	18	19	10	11	6	4	2	2
Deciduous canning fruit <sup>d</sup>	-	-	-	18	38	84	42	29	43	51	na	-	-	-	-	-
Tobacco <sup>e</sup>	88	62	51	77	59	44	55	47	29	14	34	43	41	35	36	62
Potatoes	na	na	8	8	8	8	8	8	8	8	na	na	na	na	na	na
Onions	na	na	na	1	1	1	1	1	1	1	na	na	na	na	na	na
Vegetables	na	na	na	na	na	na	na	na	na	na	1	-	-	-	-	-
<b>Extensive cropping</b>																
Wheat																
Human use <sup>f</sup>	na	-14	-21	-1	17	12	32	15	17	13	2	2	-	-	-	-
Stockfeed	na	-2	-13	-2	-5	3	7	12	6	2	..	3	-	-	-	-
Industrial	na	-	-	-2	-4	-3	4	9	3	-2	-2	1	-	-	-	-
<b>Extensive irrigation and high rainfall crops</b>																
Sugar <sup>g</sup>	-16	-9	-7	-39	-6	45	30	71	80	53	57	38	23	54	31	15
Cotton <sup>h</sup>	21	29	30	23	11	30	32	22	10	53	20	27	-	-	-	-
Rice <sup>i</sup>	95	77	68	116	44	59	52	32	36	44	49	14	11	14	14	13

Table A5.5 (continued)

Activity/ <i>Commodity description</i>	Series 1						Series 2						Series 3					
	1977 1978 1979 1980 1981 1982						1983 1984 1985 1986 1987 1988 1989						1990 1991 1992					
	-78	-79	-80	-81	-82	-83	-84	-85	-86	-87	-88	-89	-90	-91	-92	-93		
<b>Intensive livestock</b>																		
Eggs <sup>j</sup>	43	41	50	59	58	65	101	15	39	52	25	na	9	6	2	1		
Manufacturing milk																		
Cheese <sup>k</sup>	22	23	13	12	20	50	64	49	26	55	33	24	13	15	15	12		
Butter <sup>k</sup>	71	69	49	19	8	39	75	98	53	89	67	40	17	23	21	16		
Skim milk powder <sup>l</sup>	42	28	7	1	11	27	49	42	4	37	38	19	19	24	22	14		
Whole milk powder	-	18	21	1	15	27	50	41	4	42	25	17	16	21	22	15		
Casein	17	15	2	-1	11	25	35	57	2	41	33	19	19	29	26	15		
Fresh milk <sup>m</sup>	169	118	106	44	44	53	53	72	75	56	48	24	36	38	53	44		

- Nil.

.. 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 as a percentage of the landed duty-free price.

b Includes the price raising effects of tariffs used in conjunction with the domestic marketing arrangements. The price distortion for sultanas is based on the difference between the average domestic and comparable export returns to packers.

c Assistance estimates since 1988-89 have been based on a revised methodology. It is assumed that the developing country tariff on frozen orange juice establishes a floor for all citrus production.

d Producer transfers estimated at 20 to 30 per cent of the total transfer based on respective value added shares between the growing and canning activities. The producer transfer has not been calculated for 1987-88. Domestic marketing arrangements ceased with the termination of the Australian Canned Fruits Corporation on 31 December 1988.

e Transfers derived by applying the price differential between Australian-grown green leaf and the notional import price on non-USA green leaf, to the domestic sales of Australian-grown leaf.

**Table A5.5 (continued)**

- f For 1980–81 to 1983–84, producer transfers and price distortions were based on the domestic price less the Tasmanian Freight Levy.
- g Producer transfers were estimated in accordance with the industry formula used for dividing raw sugar returns between millers and growers. For the years 1986–87 through 1988–89 the price distortion for sugar was calculated by comparing average unit returns from domestic and export sales. The import embargo on sugar was replaced by a specific tariff rate on sugar imports from 1 July 1989. Since 1989–90 the price distortion has been calculated by comparing the average domestic unit returns with a constructed export parity price.
- h The domestic marketing arrangements ceased in June 1989.
- i Estimated 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, prices were estimated from the average prices supplied by the NSW Ricegrowers' Co-operative Ltd. The price distortion for rice grown in Queensland is based on the difference between the average domestic and comparable export prices for rice grown in New South Wales. The estimates since 1988–89 have been based on more appropriate data provided by the Ricegrowers' Co-operative. The 1991–92 estimates exclude producer transfers associated with Queensland production. Queensland production accounts for approximately 3 per cent of Australian production.
- j Estimates for 1986–87 and 1987–88 relied on a comparison of wholesale prices and NSW average export prices. Following the deregulation of the NSW egg market, the necessary data were no longer available and estimates were not reported for 1988–89. Since deregulation in NSW, minimal quantities of eggs have been exported. Estimates since 1989–90 have been based on the difference between the weighted average deregulated farm-gate price and the average price received by farmers in the states maintaining regulation. In 1991–92 NSW was the only deregulated state.
- k The methodology for estimating producer transfers has been revised to exclude the levies charged on domestic sales of butter and cheese 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. This arrangement ended on 30 June 1989.
- l From 1989–90 includes buttermilk.
- m For the years 1985–86 through to 1988–89, the producer transfers were estimated for each state by multiplying the difference between the state fresh milk price and a notional deregulated price, by fresh milk sales in the state. For New South Wales, Queensland and South Australia, the deregulated price was assumed to be the Victorian manufacturing milk price, plus freight from Victoria. For Western Australia and Tasmania, the deregulated price was assumed to be the local manufacturing milk price, plus winter incentive payments. Estimates since 1989–90 have been based on a revised methodology. The producer transfer was estimated by multiplying the difference between the fresh 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).

*Source:* Commission estimates.



**Table A5.6**  
**Gross and net subsidy equivalents for agriculture<sup>a</sup>, by industry group: 1970–71 to 1992–93 (\$ million)**

Activity/Commodity description	Series 1										Series 2										Series 3									
	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989										
	-71	-72	-73	-74	-75	-76	-77	-78	-79	-80	-81	-82	-83	-84	-85	-86	-87	-88	-89	-90										
<b>Horticulture<sup>b</sup></b>																														
GSE	52	56	60	65	78	78	72	58	65	64	80	91	102	115	111	85	82	93	110	81	71	72	74							
NSE	51	55	62	75	85	79	74	63	70	73	79	90	101	97	82	71	82	90	102	76	62	65	73							
<b>Extensive cropping</b>																														
GSE	55	68	32	-129	-93	-21	23	16	-31	-58	25	62	61	64	49	44	232	13	10	32	66	21	37							
NSE	68	79	62	-61	-65	-10	45	39	-4	-31	62	89	98	27	18	41	261	36	5	41	86	47	67							
<b>Extensive irrigation and high rainfall crops</b>																														
GSE	41	30	25	31	-72	-48	-23	..	7	9	-45	4	73	61	84	99	94	96	75	54	74	44	28							
NSE	39	25	26	39	-68	-54	-31	-6	7	9	-48	-2	68	43	72	89	86	93	75	76	61	40	32							
<b>Extensive grazing<sup>c</sup></b>																														
GSE	51	89	33	30	33	30	35	50	55	34	45	53	60	72	52	68	78	68	89	79	407	152	140							
NSE	73	111	73	114	79	54	67	176	142	85	148	127	210	165	116	109	196	222	250	149	489	266	264							
<b>Intensive livestock<sup>d</sup></b>																														
GSE	16	18	30	69	43	41	11	18	58	247	177	194	356	417	381	420	477	439	276	336	383	404	354							
NSE	9	7	29	147	103	61	-7	12	93	319	227	226	403	406	335	394	493	477	282	379	390	427	372							
<b>Agriculture<sup>e</sup></b>																														
GSE	215	260	180	67	-11	79	118	142	153	296	282	404	651	728	678	716	963	709	561	583	1002	693	632							
NSE	240	277	252	313	134	130	149	285	308	455	468	530	881	737	622	704	1117	918	714	722	1088	846	809							

**Table A5.6 (continued)**

- Nil.
- .. Between -\$0.5 million and \$0.5 million.
- a The gross subsidy equivalent (GSE) 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. The net subsidy equivalent (NSE) is the change in returns to an industry'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 the GSE plus assistance to value-adding factors, minus the tax on materials.
- b Includes honey in some years and excludes bananas in some years.
- c Data for 1990–91 include a payment of \$300 million to wool producers.
- d 1988–89 total excludes eggs.
- e The sum of the subsidy equivalents of industries for which estimates of assistance have been derived. As a small amount of assistance is provided through general measures (eg income tax concessions and fertiliser subsidies) to activities not covered in the estimates, the subsidy equivalents provided in this table will generally be less than those obtained from Table A5.1, which covers total assistance to the sector. Figures may not add due to rounding.

*Source:* Commission estimates.

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## APPENDIX 6

# MANUFACTURING ASSISTANCE ESTIMATES

This appendix contains the following information on assistance to manufacturing:

- Average nominal rates of assistance on outputs, manufacturing industries: 1968–69 to 1982–83 (Table A6.1);
- Average nominal rates of assistance on materials, manufacturing industries: 1968–69 to 1982–83 (Table A6.2);
- Average effective rates of assistance, manufacturing industries: 1968–69 to 1982–83 (Table A6.3);
- Average nominal rates of assistance on outputs, manufacturing industries: 1982–83 to 1996–97 and 2000–01 (Table A6.4);
- Average nominal rates of assistance on materials, manufacturing industries: 1982–83 to 1996–97 and 2000–01 (Table A6.5);
- Average effective rates of assistance, manufacturing industries: 1982–83 to 1996–97 and 2000–01 (Table A6.6);
- Standard deviations for nominal rates on outputs, manufacturing subdivisions: selected years (Table A6.7);
- Standard deviations for effective rates of assistance, manufacturing subdivisions: selected years (Table A6.8); and
- Subsidy equivalents, tax on materials and consumer tax equivalents, manufacturing subdivisions: selected years (Table A6.9).



Table A6.1

**Average nominal rates of assistance on outputs<sup>a</sup>, manufacturing industries: 1968–69 to 1982–83**  
(per cent)

Industry <sup>b</sup>		1971–72 series					1974–75 series					1977–78 series					
ASIC	Description	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1977	1978	1979	1980	1981	1982
code		–69	–70	–71	–72	–73	–74	–75	–76	–77	–78	–78	–79	–80	–81	–82	–83
FOOD, BEVERAGES AND TOBACCO																	
2115	Meat (except smallgoods or poultry)	1	1	1	1	1	..	..	..	..	–	2	3	3	2	3	2
2116	Poultry	3	3	3	3	3	2	..	..	..	..	5	5	6	6	6	3
2117	Bacon, ham and smallgoods nec	11	12	11	7	6	5	10	10	7	4	4	4	3	1	..	2
211	Meat products	2	2	2	2	1	1	2	2	1	1	3	3	3	3	3	2
2121	Liquid milk and cream											2	2	1	1	2	2
2122	Butter											7	11	2	2	2	3
2123	Cheese											4	4	3	3	3	2
2124	Ice cream and frozen confections											12	15	14	12	11	5
2125	Milk products nec											6	6	2	1	2	1
212	Milk products <sup>c</sup>	5	5	5	4	4	4	6	6	6	4	4	5	3	3	3	3
2131	Fruit products	19	19	19	21	20	15	15	17	13	12	11	12	11	16	24	28
2132	Vegetable products	19	19	20	23	20	18	12	12	10	8	6	7	6	6	6	4
213	Fruit and vegetable products	19	19	20	22	20	17	13	14	11	9	8	9	8	10	13	14
214	Margarine and oils and fats nec	15	22	17	16	17	13	12	9	10	9	9	10	10	10	8	6
2151	Flour mill products	3	3	3	2	2	2	6	6	4	3	4	5	2	3	2	2
2152	Starch, gluten and starch sugars	14	12	11	9	8	5	7	8	7	6	12	13	11	10	11	8
2153	Cereal foods and baking mixes	13	13	13	9	9	6	8	8	6	2	20	17	14	23	11	13
215	Flour mill and cereal food products	7	7	7	5	5	4	7	7	5	3	12	11	8	12	7	8

Table A6.1 (continued)

Industry <sup>b</sup> ASIC code	Description	1971–72 series						1974–75 series						1977–78 series					
		1968 –69	1969 –70	1970 –71	1971 –72	1972 –73	1973 –74	1974 –75	1975 –76	1976 –77	1977 –78	1978 –79	1979 –80	1980 –81	1981 –82	1982 –83			
2161	Bread	–	1	1	1	1	1	–	..	–	–	2	2	1	1	1			
2162	Cakes and pastries	1	1	1	1	1	1	–	–	–	–	11	11	11	9	9			
2163	Biscuits	18	18	18	18	18	13	22	22	16	10	10	10	8	9	8			
<b>216</b>	<b>Bread, cakes and biscuits</b>	<b>4</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>3</b>	<b>5</b>	<b>5</b>	<b>3</b>	<b>2</b>	<b>6</b>	<b>6</b>	<b>5</b>	<b>5</b>	<b>5</b>			
2171	Raw sugar ) <sup>c</sup>																		
2176	Food products nec )	35	25	16	9	5	5	3	3	3	2	–10	–5	–8	–15	–1	20		
2173	Confectionary and cocoa products	40	40	39	40	40	31	31	31	29	27	28	25	17	15	13			
2174	Processed seafoods	8	8	8	7	8	5	4	3	3	3	2	2	3	2	2			
2175	Prepared animal and bird foods	6	6	5	6	6	5	6	6	1	..	1	1	1	1	1			
<b>217</b>	<b>Other food products</b>	<b>29</b>	<b>22</b>	<b>16</b>	<b>12</b>	<b>10</b>	<b>8</b>	<b>7</b>	<b>7</b>	<b>5</b>	<b>3</b>	<b>–2</b>	<b>..</b>	<b>–2</b>	<b>–7</b>	<b>1</b>	<b>14</b>		
2185	Soft drinks, cordials and syrups	42	42	42	38	37	21	21	21	16	8	11	12	8	8	9			
2186	Beer	32	32	32	32	32	31	37	37	31	29	30	31	31	30	35			
2187	Malt	–	–	–	–	–	–	3	3	2	–	2	3	4	3	2			
2188	Wine and brandy	56	50	40	47	47	41	40	41	36	37	13	9	12	11	12			
2189	Alcoholic beverages nec	16	16	16	16	15	22	9	8	7	12	30	29	29	28	29			
<b>218</b>	<b>Beverages and malt</b>	<b>36</b>	<b>35</b>	<b>34</b>	<b>33</b>	<b>32</b>	<b>27</b>	<b>29</b>	<b>29</b>	<b>24</b>	<b>21</b>	<b>21</b>	<b>22</b>	<b>20</b>	<b>20</b>	<b>22</b>	<b>23</b>		
<b>219</b>	<b>Tobacco products</b>	<b>31</b>	<b>31</b>	<b>31</b>	<b>31</b>	<b>31</b>	<b>31</b>	<b>38</b>	<b>31</b>	<b>27</b>	<b>23</b>	<b>23</b>	<b>16</b>	<b>17</b>	<b>15</b>	<b>13</b>	<b>12</b>		
<b>21</b>	<b>FOOD, BEVERAGES AND TOBACCO</b>	<b>14</b>	<b>13</b>	<b>12</b>	<b>11</b>	<b>10</b>	<b>8</b>	<b>9</b>	<b>9</b>	<b>7</b>	<b>7</b>	<b>6</b>	<b>7</b>	<b>5</b>	<b>4</b>	<b>6</b>	<b>9</b>		

Table A6.1 (continued)

Industry <sup>b</sup>		1971-72 series						1974-75 series						1977-78 series					
ASIC	Description	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1977	1978	1979	1980	1981	1982		
code		-69	-70	-71	-72	-73	-74	-75	-76	-77	-78	-78	-79	-80	-81	-82	-83		
TEXTILES																			
2341	Cotton ginning	2	2	3	3	3	3	-	..	-	..	12	17	17	14	8	16		
2342	Wool scouring and top making	..	..	..	..	..	..	..	..	..	-	5	7	7	6	6	5		
2343	Man-made fibres and yarns	18	18	17	19	22	16	23	32	32	28	34	35	47	47	40	37		
2344	Man-made fibre broadwoven fabrics	40	38	38	47	48	35	37	44	44	43	44	44	47	56	60	56		
2345	Cotton yarns and broadwoven fabrics	33	31	30	30	31	24	25	29	29	37	35	35	33	32	35	37		
2346	Worsted yarns and broadwoven fabrics	25	25	25	25	24	18	21	21	21	24	20	20	39	39	33	33		
2347	Woollen yarns and broadwoven fabrics	30	29	29	30	29	23	20	20	19	22	20	20	35	35	26	26		
2348	Narrow woven and elastic textiles	27	27	27	28	28	21	26	26	26	25	26	26	27	27	25	23		
2349	Textile finishing	36	36	36	38	38	30	34	44	48	50	73	66	62	59	42	37		
234	Textile fibres, yarns and woven fabrics	24	24	24	25	25	20	22	26	26	28	28	28	32	32	30	29		
2351	Household textiles	41	40	43	43	42	31	30	48	48	58	47	47	36	39	33	36		
2352	Textile floor coverings	24	23	23	21	21	17	15	16	15	17	13	13	14	20	20	20		
2353	Felt and felt products	20	21	21	20	20	16	17	17	16	16	15	15	15	17	17	16		
2354	Canvas and associated products nec	39	38	38	38	38	29	26	26	25	25	25	25	25	25	25	25		
2355	Rope, cordage and twine	26	26	25	24	23	17	16	17	17	18	19	18	20	20	19	17		
2356	Textile products nec	18	18	18	18	18	13	8	8	7	6	10	11	11	12	12	11		
235	Other textile products	25	25	25	24	24	18	17	19	19	21	17	18	17	20	20	20		
23	TEXTILES	25	24	24	25	25	19	20	23	24	26	24	24	27	28	26	25		

Table A6.1 (continued)

Industry <sup>b</sup> ASIC code	Description	1971-72 series					1974-75 series					1977-78 series					
		1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1977	1978	1979	1980	1981	1982
		-69	-70	-71	-72	-73	-74	-75	-76	-77	-78	-78	-79	-80	-81	-82	-83
CLOTHING AND FOOTWEAR																	
2441	Hosiery	46	46	45	46	45	32	34	34	36	37	33	33	41	46	55	51
2442	Cardigans and pullovers	48	49	48	49	58	45	31	52	76	74	74	74	64	75	72	81
2443	Knitted goods nec	40	38	40	39	38	30	37	45	52	46	46	52	49	49	45	45
244	Knitting mills	44	43	43	44	46	35	34	45	56	53	53	55	52	57	56	58
2451	Mens trousers and shorts; work clothing	69	66	65	69	72	51	47	49	66	66	66	66	67	62	92	97
2452	Mens suits and coats; waterproof clothing	69	65	64	63	68	47	52	51	61	78	78	78	70	69	107	112
2453	Womens outerwear nec	52	50	48	48	44	33	40	50	78	72	73	73	70	68	95	97
2454	Foundation garments	47	47	47	48	47	36	42	52	66	58	62	62	69	75	105	105
2455	Underwear and infants clothing nec	61	56	58	58	57	42	46	43	56	81	78	78	76	74	86	82
2456	Headwear and clothing nec	45	45	44	44	44	32	28	37	37	35	37	33	34	34	39	33
245	Clothing	58	55	54	55	54	39	43	47	65	70	70	69	68	66	90	91
246	Footwear	51	53	46	38	43	30	49	51	55	57	60	60	56	63	88	102
24	CLOTHING AND FOOTWEAR	53	51	50	49	50	36	42	47	62	64	64	65	63	63	82	85

Table A6.1 (continued)

Industry <sup>b</sup>	Description	1971-72 series					1974-75 series					1977-78 series					
		1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1977	1978	1979	1980	1981	1982
		-69	-70	-71	-72	-73	-74	-75	-76	-77	-78	-78	-79	-80	-81	-82	-83
WOOD, WOOD PRODUCTS AND FURNITURE																	
2531	Log sawmilling	7	7	7	7	7	4	3	3	2	2	3	3	4	4	4	3
2532	Resawn and dressed timber	12	11	11	9	9	7	5	5	3	3	3	4	7	7	7	6
2533	Veneers and manufactured boards of wood	29	29	29	29	29	22	21	21	23	23	18	19	18	18	17	14
2534	Wooden doors											17	16	12	12	12	9
2535	Wooden structural fittings and joinery nec)	25	25	25	24	24	17	17	17	17	17	17	15	12	12	12	9
2536	Wooden containers	27	27	27	26	26	19	14	13	12	14	13	12	11	11	11	11
2537	Hardwood woodchips ) <sup>d</sup>											3	5	5	4	4	3
2538	Wood products nec )	22	21	20	18	18	13	9	9	8	8	12	11	9	9	8	6
253	Wood and wood products	18	18	18	17	17	12	10	10	10	10	10	9	9	9	9	7
2541	Furniture (except sheet metal)	32	32	32	29	27	20	22	23	23	22	21	21	19	18	18	18
2542	Mattresses (except rubber)	37	37	37	37	37	28	28	28	16	16	5	4	4	4	4	5
254	Furniture and mattresses	33	32	32	29	28	20	23	23	22	22	19	18	17	16	16	16
25	WOOD, WOOD PRODUCTS AND FURNITURE	22	22	22	20	20	14	14	14	13	13	12	12	11	11	11	10

Table A6.1 (continued)

Industry <sup>b</sup>	Description	1971-72 series										1974-75 series					1977-78 series														
		1968		1969		1970		1971		1972		1973		1974		1975		1976		1977		1978		1979		1980		1981		1982	
		-69	-70	-70	-71	-71	-72	-72	-73	-73	-74	-74	-75	-75	-76	-76	-77	-77	-78	-78	-78	-79	-79	-80	-80	-81	-81	-82	-82	-83	-83
PAPER, PAPER PRODUCTS, PRINTING AND PUBLISHING																															
2631	Pulp, paper and paperboard	12	13	12	12	15	13	10				8	8	7	7					8	7	8	7	8	7	7	7	7	7	7	
2632	Paper bags (including textile bags)	37	35	34	34	34	34	25				20	20	21	22					22	24	24	24	24	24	24	24	24	22	22	
2633	Solid fibreboard containers	49	47	46	46	46	46	36				21	21	20	20					18	19	18	19	19	19	19	19	19	16	16	
2634	Corrugated fibreboard containers	49	48	48	48	48	48	37				21	21	20	20					17	18	18	18	18	18	18	18	13	13	13	
2635	Paper products nec	34	33	33	33	32	31	21				23	23	20	16					16	16	14	13	13	13	13	13	15	15	15	
263	Paper and paper products	28	28	27	27	29	28	21				15	15	14	14					14	14	14	13	13	13	13	12	12	12	12	
2641	Publishing ) <sup>d</sup>																			2	2	2	2	2	2	2	2	2	2	2	
2642	Printing and publishing )	5	5	7	7	7	6	5				4	4	4	5					2	2	2	2	2	2	2	2	2	2	2	
2643	Paper stationery ) <sup>d</sup>																			21	22	20	19	19	19	19	19	19	19	19	
2644	Printing and bookbinding )	45	42	42	42	42	42	31				27	27	27	26					23	23	23	23	23	23	23	23	23	23	23	
2645	Printing trade services nec	23	22	22	22	22	22	17				19	19	19	19					21	21	20	19	20	19	20	19	20	19	19	
264	Printing and allied industries	29	28	28	28	28	28	21				19	19	19	19					15	16	15	15	15	15	15	15	15	15	15	
26	PAPER, PAPER PRODUCTS, PRINTING AND PUBLISHING	29	28	28	28	28	28	21				17	17	17	16					15	15	15	14	14	14	14	14	14	14	14	

Table A6.1 (continued)

Industry <sup>b</sup>		1971-72 series					1974-75 series					1977-78 series					
ASIC	Description	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1977	1978	1979	1980	1981	1982
code		-69	-70	-71	-72	-73	-74	-75	-76	-77	-78	-78	-79	-80	-81	-82	-83
CHEMICAL, PETROLEUM AND COAL PRODUCTS																	
2751	Chemical fertilisers	10	11	10	10	10	7	-	-	-	-	..	..	1	1	1	..
2752	Industrial gases ) <sup>c</sup>																
2755	Inorganic industrial chemicals nec )	8	8	8	9	8	7	8	8	8	7	9	8	9	9	8	7
2753	Synthetic resins and rubber	28	27	28	28	27	19	19	18	18	17	19	19	19	19	19	20
2754	Organic industrial chemicals nec	26	26	25	27	23	16	14	14	14	12	10	11	10	10	9	9
275	Basic chemicals	17	17	17	17	16	12	10	10	9	9	9	10	10	10	9	9
2761	Ammunition, explosives and fireworks ) <sup>c</sup>																
2768	Chemical products nec )	20	20	21	20	20	16	14	12	13	13	13	12	12	10	9	8
2762	Paints	34	34	34	35	35	26	26	26	16	13	13	13	13	13	13	13
2763	Pharmaceutical and veterinary products	28	26	29	30	30	26	20	20	19	19	19	18	11	2	2	1
2764	Pesticides	32	33	32	30	31	24	20	20	20	20	18	18	18	17	18	17
2765	Soap and other detergents	24	24	24	24	25	19	20	20	19	10	11	11	11	11	11	10
2766	Cosmetics and toilet preparations	39	39	39	38	29	39	28	28	23	16	17	17	17	16	16	16
2767	Inks	48	48	48	48	48	36	33	32	33	33	34	24	21	21	21	21
276	Other chemical products	29	28	29	29	30	23	21	21	19	15	15	15	13	10	10	9
277	Petroleum refining	2	3	3	3	3	4	-	-	-	-	-	-	-	-	-	-
278	Petroleum and coal products nec	13	13	13	13	13	9	9	9	8	7	12	13	13	13	13	13
27	CHEMICAL, PETROLEUM AND COAL PRODUCTS	21	21	21	21	21	16	9	9	8	7	11	11	10	9	9	9

Table A6.1 (continued)

Industry <sup>b</sup>		1971-72 series										1974-75 series										1977-78 series									
ASIC	Description	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1977	1978	1979	1980	1981	1982														
code		-69	-70	-71	-72	-73	-74	-75	-76	-77	-78	-78	-79	-80	-81	-82	-83														
NON-METALLIC MINERAL PRODUCTS																															
285	Glass and glass products	14	14	14	14	13	10	9	7	5	5	5	5	6	6	6	6														
2861	Clay bricks ) <sup>d</sup>												2	2	2	2	1														
2862	Refractories )	23	23	23	20	20	15	15	15	8	2	3	3	3	3	5	6														
2863	Ceramic tiles and pipes	26	26	26	26	25	20	20	21	17	12	14	13	10	9	9	7														
2864	Ceramic goods nec	34	34	32	33	29	20	22	22	21	21	22	23	22	16	18	14														
286	Clay products and refractories	25	25	24	23	23	17	17	17	11	7	6	6	5	4	5	4														
2871	Cement																														
2873	Cement, concrete pipes & culverts )	7	9	9	5	7	2	1	1	1	2	4	2	2	2	2	2														
2872	Ready-mixed concrete	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-														
2874	Concrete products nec	3	3	3	3	3	2	..	..	..	-	-	-	-	-	-	-														
287	Cement and concrete products	3	4	4	2	3	1	..	..	..	..	1	1	1	1	1	1														
2881	Plaster products and expanded minerals ) <sup>e</sup>	27	27	27	25	25	18	17	17	14	11	11	11	12	12	12	10														
2883	Glass wool and mineral wool products <sup>e</sup> )																														
2882	Stone products	27	27	26	27	27	17	23	22	16	11	14	14	13	10	10	10														
2884	Non-metallic mineral products nec	22	22	22	22	22	16	16	15	13	10	10	10	10	10	9	9														
288	Other non-metallic mineral products	23	24	24	23	23	17	16	16	13	10	10	10	11	11	10	10														
28	NON-METALLIC MINERAL PRODUCTS	12	12	12	11	11	8	7	7	5	4	4	4	4	4	4	4														



Table A6.1 (continued)

Industry <sup>b</sup>		1971-72 series										1974-75 series					1977-78 series									
ASIC	Description	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1977	1978	1978	1979	1980	1981	1982								
code		-69	-70	-71	-72	-73	-74	-75	-76	-77	-78	-78	-79	-80	-81	-82	-83									
BASIC METAL PRODUCTS																										
2941	Iron and steel basic products	17	17	17	18	17	13	9	9	9	8	8	7	7	7	7	7									
2942	Iron casting ) <sup>d</sup>											18	19	17	15	14	13									
2943	Steel casting )	25	25	24	25	25	18	15	15	14	14	19	18	18	19	18	16									
2944	Iron and steel forging )											13	12	11	11	10	10									
2945	Steel pipes and tubes	23	22	22	23	23	17	14	13	12	11	13	14	14	13	13	13									
294	Basic iron and steel	18	18	18	19	18	14	10	10	10	9	9	9	8	9	9	8									
2951	Copper smelting, refining	2	2	2	4	4	3	2	2	2	1	1	1	1	1	1	1									
2952	Silver, lead, zinc smelting, refining ) <sup>c</sup>	2	2	2	3	1	2	2	2	1	..															
2955	Nickel smelting, refining )																									
2956	Non-ferrous metals nec, smelting, refining)	2	2	2	2	2	2	4	4	2	4	1	1	1	1	1	1									
2953	Alumina ) <sup>c</sup>																									
2954	Aluminium smelting )	1	1	1	1	1	1	2	2	1	..															
2957	Secondary recovery and alloying of non-ferrous metals nec	9	10	9	9	9	7	6	6	4	2	3	2	2	2	1	1									
295	Basic non-ferrous metals	3	3	3	3	3	2	3	3	1	1	1	1	1	1	1	1									
2961	Aluminium rolling, drawing, extruding	27	27	27	26	26	20	19	18	15	12	12	12	13	12	12	11									
2962	Non-ferrous metals nec, rolling, drawing, extruding	19	19	19	20	20	15	14	14	12	10	11	10	9	9	9	7									
2963	Non-ferrous metal casting	47	47	47	43	50	38	25	24	22	17	21	20	20	19	21	20									
296	Non-ferrous metal basic products	24	24	24	24	24	18	17	16	14	11	12	12	12	11	11	10									
29	BASIC METAL PRODUCTS	14	14	13	14	14	10	8	8	7	6	6	6	6	6	6	6									

Table A6.1 (continued)

Industry <sup>b</sup>		1971-72 series					1974-75 series					1977-78 series					
ASIC	Description	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1977	1978	1979	1980	1981	1982
code		-69	-70	-71	-72	-73	-74	-75	-76	-77	-78	-78	-79	-80	-81	-82	-83
FABRICATED METAL PRODUCTS																	
3141	Fabricated structural steel	41	41	40	37	35	27	25	24	22	21	17	20	19	19	16	14
3142	Architectural aluminium products	33	33	33	33	32	24	23	23	21	18	18	18	18	18	18	17
3143	Architectural metal products nec	43	43	43	41	38	30	30	31	21	22	22	23	23	23	21	19
314	Structural metal products	39	39	39	36	35	27	25	25	22	21	18	20	19	19	17	15
3151	Metal containers	47	46	46	46	46	35	32	34	31	25	24	24	24	24	24	22
3152	Sheet metal furniture	27	27	27	32	32	25	23	24	25	25	25	25	24	24	25	23
3153	Sheet metal products nec	38	37	37	36	36	27	28	26	23	22	25	25	24	23	24	20
315	Sheet metal products	40	39	40	39	39	29	29	29	26	24	24	24	24	24	24	21
3161	Cutlery and hand tools nec	21	21	22	21	19	14	15	15	14	14	17	17	17	18	16	15
3162	Springs and wire products	31	31	30	29	28	22	22	22	20	18	18	18	18	18	17	15
3163	Nuts, bolts, screws and rivets	37	38	38	38	38	29	24	23	23	22	23	21	21	19	19	18
3164	Metal coating and finishing	36	35	35	33	33	25	25	33	21	20	20	20	19	18	18	17
3165	Non-ferrous steam, gas and water fittings	48	48	47	44	44	33	24	19	19	17	17	17	16	16	16	17
3166	Boiler and plate work	38	32	28	26	27	21	25	25	22	20	19	19	19	19	19	16
3167	Metal blinds and awnings	39	39	39	38	38	29	25	25	21	19	20	20	20	20	20	20
3168	Fabricated metal products nec	39	39	39	38	37	28	22	21	20	18	19	19	17	17	17	16
316	Other fabricated metal products	37	35	34	34	32	25	24	23	21	19	19	19	18	18	18	16
31	FABRICATED METAL PRODUCTS	38	38	37	36	35	27	25	25	22	21	20	21	20	20	19	17

Table A6.1 (continued)

<i>Industry<sup>b</sup></i>		<i>1971-72 series</i>					<i>1974-75 series</i>					<i>1977-78 series</i>					
<i>ASIC</i>	<i>Description</i>	<i>1968</i>	<i>1969</i>	<i>1970</i>	<i>1971</i>	<i>1972</i>	<i>1973</i>	<i>1974</i>	<i>1975</i>	<i>1976</i>	<i>1977</i>	<i>1977</i>	<i>1978</i>	<i>1979</i>	<i>1980</i>	<i>1981</i>	<i>1982</i>
<i>code</i>		<i>-69</i>	<i>-70</i>	<i>-71</i>	<i>-72</i>	<i>-73</i>	<i>-74</i>	<i>-75</i>	<i>-76</i>	<i>-77</i>	<i>-78</i>	<i>-78</i>	<i>-79</i>	<i>-80</i>	<i>-81</i>	<i>-82</i>	<i>-83</i>
<b>TRANSPORT EQUIPMENT</b>																	
3231	Motor vehicles	36	36	36	35	35	27	33	40	37	40	42	46	51	55	59	60
3232	Motor vehicle bodies, trailers, caravans	35	36	36	35	35	26	25	20	20	20	21	21	21	20	21	19
3233	Motor vehicle instruments and electrical equipment nec	40	40	40	39	39	30	25	24	21	21	37	41	46	50	53	55
3234	Motor vehicle parts nec	30	30	29	29	29	22	22	21	22	23	35	39	43	47	50	51
323	Motor vehicles and parts	35	35	35	34	34	26	29	34	32	34	38	42	46	50	53	54
3241	Ships	38	42	41	36	46	33	20	26	26	14	10	8	10	12	14	12
3242	Boats	34	34	34	33	24	18	12	12	13	13	19	19	19	19	19	19
3243	Railway rolling stock and locomotives	32	32	32	32	32	24	26	25	21	21	26	26	26	26	20	18
3244	Aircraft	15	15	15	15	15	11	3	3	..	-	-	-	2	1	1	1
3245	Transport equipment nec	45	45	45	44	44	31	28	29	28	27	27	27	26	26	25	18
324	Other transport equipment	30	31	31	29	32	23	15	17	16	11	12	12	13	13	12	11
32	TRANSPORT EQUIPMENT	34	34	34	33	34	26	27	30	29	30	33	36	39	42	44	45
<b>OTHER MACHINERY AND EQUIPMENT</b>																	
3341	Photographic and optical goods ) <sup>d</sup>											6	7	7	7	7	6
3342	Photographic film processing )	17	17	17	16	16	12	9	9	8	8	13	13	13	13	13	13
3343	Measuring, professional and scientific equipment nec	18	18	18	16	17	13	11	11	11	7	6	6	5	5	5	4
334	Photographic, professional and scientific equipment	17	17	17	16	16	12	10	10	9	8	9	9	9	9	9	8

Table A6.1 (continued)

Industry <sup>b</sup> ASIC	Description	1971-72 series					1974-75 series					1977-78 series						
		1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1977	1978	1979	1980	1981	1982	
		-69	-70	-71	-72	-73	-74	-75	-76	-77	-78	-78	-79	-80	-81	-82	-83	
3351	Radio and TV receivers; audio equipment) <sup>d</sup>																	
3352	Electronic equipment nec )	48	50	44	42	39	27	24	21	19	17		24	24	23	20	19	18
3353	Refrigerators and household appliances	39	39	39	38	38	27	26	27	26	26		11	13	18	21	21	14
3354	Water heating systems	41	41	41	41	41	29	18	17	17	18		25	24	24	22	21	19
3355	Electric and telephone cable and wire	25	25	25	22	22	16	14	13	13	11		18	18	18	18	18	18
3356	Batteries	39	39	39	38	39	29	26	25	25	19		13	12	13	13	12	11
3357	Electrical machinery and equipment nec	28	28	28	28	28	21	21	23	20	10		26	26	25	25	27	27
													10	10	10	10	11	10
335	Appliances and electrical equipment	36	36	35	34	33	24	22	22	21	17		17	17	18	17	17	15
3361	Agricultural machinery	23	23	24	23	22	19	14	13	13	13		15	15	16	15	15	12
3362	Construction machinery	28	28	27	27	23	17	18	17	17	17		21	19	17	17	16	15
3363	Materials handling equipment	33	33	30	28	28	19	22	24	22	22		23	24	23	22	22	20
3364	Wood and metal working machinery	24	25	25	24	20	14	14	15	14	15		17	17	23	22	22	19
3365	Pumps and compressors	40	40	40	40	40	31	15	11	13	12		13	13	14	14	14	13
3366	Commercial space heating and cooling equipment	48	46	46	46	46	32	28	23	22	20		20	20	21	21	21	19
3367	Dies, saw blades and machine tool accessories	27	27	27	27	25	20	17	17	18	20		21	20	20	19	20	18
3368	Food processing machinery	30	30	29	30	29	22	19	18	17	15		17	17	19	19	18	16
3369	Industrial machinery and equipment nec	35	35	35	34	33	24	22	21	16	15		15	16	16	16	16	12
336	Industrial machinery and equipment	33	32	32	31	30	23	19	18	17	16		17	17	17	17	17	15
33	OTHER MACHINERY AND EQUIPMENT	34	34	33	32	31	23	21	20	19	17		16	17	17	17	17	14

Table A6.1 (continued)

Industry <sup>b</sup>	Description	1971-72 series							1974-75 series							1977-78 series						
		1968	1969	1970	1971	1972	1973		1974	1975	1976	1977		1977	1978	1979	1980	1981	1982			
		-69	-70	-71	-72	-73	-74		-75	-76	-77	-78		-78	-79	-80	-81	-82	-83			
MISCELLANEOUS MANUFACTURING																						
3451	Leather tanning and fur dressing	19	19	19	17	17	12		11	11	10	9		11	12	12	13	14	12			
3452	Leather and leather substitute goods nec	38	38	37	37	36	25		27	27	27	26		27	25	23	19	20	18			
345	Leather and leather products	27	27	27	26	26	18		19	19	18	18		16	16	15	15	16	14			
3461	Rubber tyres, tubes, belts, hose and sheets	27	26	26	26	26	20		21	22	22	21		28	30	29	26	23	21			
3462	Rubber products nec	37	40	39	38	36	28		27	26	25	25		24	23	24	24	21	21			
346	Rubber products	29	30	29	29	29	22		23	23	23	22		27	28	27	25	22	21			
3471	Flexible packaging and abrasive papers	28	28	28	27	27	19		22	20	20	20		19	18	17	19	20	19			
3472	Rigid plastic sheeting	33	34	34	27	26	20		17	17	17	16		16	16	16	15	15	13			
3473	Hard surface floor covering nec	27	36	36	35	35	26		27	27	27	27		29	30	26	24	23	20			
3474	Plastic products nec	29	30	29	28	27	20		20	20	18	20		24	24	24	24	24	24			
347	Plastic and related products	29	30	30	28	27	20		21	20	19	20		22	22	22	22	23	22			
3481	Ophthalmic articles	16	16	16	16	16	13		17	18	19	16		13	15	15	14	14	12			
3482	Jewellery and silverware	35	34	32	29	29	20		16	16	16	15		20	23	23	22	22	19			
3483	Brooms and brushes	37	37	37	37	37	26		24	23	22	20		22	16	15	15	15	14			
3484	Signs and advertising displays	35	35	34	34	33	26		29	28	24	21		21	21	19	19	18	15			
3485	Sporting equipment	39	39	40	39	40	28		22	21	19	18		23	25	20	15	16	14			
3486	Writing and marking equipment	31	31	24	24	23	17		15	13	13	13		16	17	17	16	16	17			
3487	Manufacturing nec	35	35	36	35	36	26		21	20	20	24		38	34	23	23	23	21			
348	Other manufacturing	34	34	33	32	32	23		21	20	19	18		22	21	19	18	18	16			
34	MISC. MANUFACTURING	30	30	30	29	28	21		21	21	20	20		23	23	22	22	21	20			
21-34	TOTAL MANUFACTURING	24	23	23	22	22	17		15	16	15	15		15	15	15	15	16	16			

**Table A6.1 (continued)**

- Nil.
- .. Between 0 per cent and 0.5 per cent.
- a Assistance provided by tariffs and certain non-tariff measures. An industry's nominal rate of assistance on outputs is an average of the nominal rates on the products made by that industry, weighted by the unassisted value of output for each product.
- b Industry subdivision, group, and class from the Australian Standard Industrial Classification (ASIC) 1978 Edition.
- c Assistance estimates not calculated separately because of confidentiality of data.
- d Assistance estimates not calculated separately because 1969 ASIC class was split into two or more 1978 ASIC classes.
- e 1978 ASIC class 2883 was a new class created by combining activities relating to the manufacture of glass wool and glass fibres (previously included in 1969 ASIC class 2813) with those relating to the manufacture of mineral wool and mineral wool products (previously included in 1969 ASIC class 2843). Estimates of assistance for the 1971–72 and 1974–75 series for 1978 ASIC class 2883 are, therefore, included partly in 1978 ASIC group 285 and partly in 1978 ASIC class 2884.

*Source:* Commission estimates.

Table A6.2

**Average nominal rates of assistance on materials<sup>a</sup>, manufacturing industries: 1968–69 to 1982–83**  
(per cent)

Industry <sup>b</sup>		1971–72 series					1974–75 series					1977–78 series					
ASIC	Description	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1977	1978	1979	1980	1981	1982
code		–69	–70	–71	–72	–73	–74	–75	–76	–77	–78	–78	–79	–80	–81	–82	–83
FOOD, BEVERAGES AND TOBACCO																	
2115	Meat (except smallgoods or poultry)	1	1	1	1	1	1	1	1	1	..	1	1	1	1	1	1
2116	Poultry	3	2	2	2	2	1	3	3	2	1	1	1	1	1	1	1
2117	Bacon, ham and smallgoods nec	2	2	2	3	2	2	3	3	2	1	1	1	1	1	1	1
211	Meat products	1	1	1	1	1	..	1	1	1	1	1	1	1	1	1	1
2121	Liquid milk and cream											1	1	1	1	3	3
2122	Butter											1	1	1	..	2	2
2123	Cheese											3	3	2	2	3	3
2124	Ice cream and frozen confections											7	8	5	2	6	9
2125	Milk products nec											3	3	2	1	3	4
212	Milk products <sup>c</sup>	3	3	3	2	2	2	1	1	1	1	2	2	2	1	3	3
2131	Fruit products	23	20	14	8	6	-1	-2	1	2	5	10	11	10	11	15	16
2132	Vegetable products	21	21	18	15	12	9	11	12	12	12	9	9	8	7	8	9
213	Fruit and vegetable products	22	20	16	12	9	4	4	6	7	8	9	10	9	9	12	12
214	Margarine and oils and fats nec	24	18	16	16	17	12	6	6	6	5	5	4	4	4	4	4
2151	Flour mill products	1	1	1	1	1	1	..	..	..	..	7	-12	-20	–	17	11
2152	Starch, gluten and starch sugars	1	1	1	1	1	1	9	10	8	5	6	-11	-18	..	16	-2
2153	Cereal foods and baking mixes	23	21	17	13	11	5	5	7	6	3	45	35	29	53	25	32
215	Flour mill and cereal food products	7	6	5	4	4	2	3	4	3	2	19	3	-4	17	20	16

Table A6.2 (continued)

Industry <sup>b</sup> ASIC code	Description	1971–72 series							1974–75 series							1977–78 series						
		1968	1969	1970	1971	1972	1973		1974	1975	1976	1977		1977	1978	1979	1980	1981	1982			
		–69	–70	–71	–72	–73	–74		–75	–76	–77	–78		–78	–79	–80	–81	–82	–83			
2161	Bread	5	4	4	3	3	2		9	9	7	5		7	–8	–13	1	14	10			
2162	Cakes and pastries	37	35	31	28	27	18		5	5	5	7		9	5	3	7	12	13			
2163	Biscuits	33	30	22	16	14	5		3	5	7	9		10	6	2	5	11	12			
<b>216</b>	<b>Bread, cakes and biscuits</b>	<b>17</b>	<b>16</b>	<b>13</b>	<b>11</b>	<b>10</b>	<b>5</b>		<b>7</b>	<b>7</b>	<b>7</b>	<b>7</b>		<b>8</b>	<b>–1</b>	<b>–5</b>	<b>3</b>	<b>13</b>	<b>12</b>			
2171	Raw sugar ) <sup>c</sup>																					
2176	Food products nec )	35	22	14	5	2	1		1	1	1	1		–12	–6	–10	–19	–2	23			
2173	Confectionary and cocoa products	36	31	22	18	14	5		–4	–2	1	6		4	5	2	..	4	8			
2174	Processed seafoods	14	13	13	15	14	10		5	5	4	4		1	1	1	1	1	1			
2175	Prepared animal and bird foods	5	5	4	5	4	3		4	3	3	2		4	–1	–1	1	2	3			
<b>217</b>	<b>Other food products</b>	<b>28</b>	<b>19</b>	<b>13</b>	<b>7</b>	<b>4</b>	<b>2</b>		<b>1</b>	<b>2</b>	<b>2</b>	<b>2</b>		<b>–6</b>	<b>–3</b>	<b>–6</b>	<b>–11</b>	<b>..</b>	<b>15</b>			
2185	Soft drinks, cordials and syrups	49	41	26	12	5	–9		–6	–2	0	9		7	9	6	3	11	19			
2186	Beer	27	25	22	19	19	11		7	8	8	10		9	9	8	7	8	10			
2187	Malt	..	..	..	..	..	–		–	–	–	–		–	–	..	–	–	–			
2188	Wine and brandy	19	18	19	19	20	13		5	5	4	5		7	4	1	5	9	8			
2189	Alcoholic beverages nec	23	19	14	13	7	3		–5	–7	–3	1		18	17	14	17	16	16			
<b>218</b>	<b>Beverages and malt</b>	<b>30</b>	<b>26</b>	<b>20</b>	<b>15</b>	<b>13</b>	<b>4</b>		<b>1</b>	<b>3</b>	<b>4</b>	<b>7</b>		<b>9</b>	<b>10</b>	<b>8</b>	<b>7</b>	<b>10</b>	<b>13</b>			
219	Tobacco products	46	45	44	45	45	42		51	44	41	34		47	36	28	29	30	24			
<b>21</b>	<b>FOOD, BEVERAGES AND TOBACCO</b>	<b>13</b>	<b>10</b>	<b>8</b>	<b>6</b>	<b>5</b>	<b>3</b>		<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>		<b>3</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>5</b>	<b>8</b>			



Table A6.2 (continued)

Industry <sup>b</sup>		1971-72 series								1974-75 series								1977-78 series							
ASIC	Description	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1977	1978	1978	1979	1980	1981	1982							
code		-69	-70	-71	-72	-73	-74	-75	-76	-77	-78	-78	-79	-80	-81	-82	-83								
TEXTILES																									
2341	Cotton ginning	1	1	1	2	1	..	1	1	..	1	17	24	25	19	9	25								
2342	Wool scouring and top making	1	1	1	1	1	1	..	..	..	..	-	-	-	1	2	1								
2343	Man-made fibres and yarns	10	9	7	10	11	8	10	11	11	10	9	10	11	11	11	7								
2344	Man-made fibre broadwoven fabrics	18	14	11	11	11	8	9	9	9	9	7	6	7	6	5	5								
2345	Cotton yarns and broadwoven fabrics	9	10	10	10	10	7	8	9	8	9	18	20	20	18	12	16								
2346	Worsted yarns and broadwoven fabrics	7	7	6	6	6	5	4	4	4	4	1	1	1	1	1	1								
2347	Woollen yarns and broadwoven fabrics	6	6	5	5	6	4	4	4	3	3	3	3	6	6	4	3								
2348	Narrow woven and elastic textiles	17	17	16	16	16	12	10	10	10	10	5	5	5	5	4	3								
2349	Textile finishing	33	32	32	32	32	24	26	24	24	28	24	22	22	20	20	15								
234	Textile fibres, yarns and woven fabrics	14	13	13	13	13	10	10	9	9	10	8	9	9	9	7	8								
2351	Household textiles	25	24	24	25	25	19	17	17	17	18	32	30	30	27	26	21								
2352	Textile floor coverings	15	15	14	14	14	10	12	12	12	10	12	12	21	22	14	9								
2353	Felt and felt products	10	9	9	4	4	2	2	2	2	1	6	6	6	6	6	4								
2354	Canvas and associated products nec	17	15	15	14	15	13	18	18	18	18	38	37	25	25	30	27								
2355	Rope, cordage and twine	18	18	18	9	9	7	6	6	7	5	11	11	11	11	10	6								
2356	Textile products nec	14	15	16	16	16	11	10	11	11	9	9	10	10	9	8	8								
235	Other textile products	16	16	15	14	14	10	12	12	12	11	16	16	20	19	15	11								
23	TEXTILES	14	14	13	13	14	10	10	10	10	10	11	11	13	12	10	9								

Table A6.2 (continued)

Industry <sup>b</sup>		1971-72 series						1974-75 series						1977-78 series					
ASIC	Description	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1977	1978	1979	1980	1981	1982		
code		-69	-70	-71	-72	-73	-74		-75	-76	-77	-78	-78	-79	-80	-81	-82	-83	
CLOTHING AND FOOTWEAR																			
2441	Hosiery	25	18	21	21	21	16		10	9	9	8	9	8	12	12	9	6	
2442	Cardigans and pullovers	21	21	19	20	19	14		16	17	17	15	23	21	31	31	21	15	
2443	Knitted goods nec	16	17	18	19	19	14		13	13	13	11	13	13	16	16	11	7	
244	Knitting mills	19	18	19	20	20	15		13	14	14	12	16	15	20	20	14	9	
2451	Mens trousers and shorts; work clothing	23	22	21	25	25	18		19	18	19	22	37	37	36	33	29	23	
2452	Mens suits and coats; waterproof clothing	23	22	21	25	25	18		20	20	21	23	38	38	37	33	30	23	
2453	Womens outerwear nec	19	19	18	19	19	15		22	25	25	25	36	36	35	32	28	23	
2454	Foundation garments	21	22	22	23	23	18		22	27	27	19	25	27	28	28	22	25	
2455	Underwear and infants clothing nec	25	24	24	26	26	20		21	26	27	22	32	31	31	30	25	23	
2456	Headwear and clothing nec	25	25	25	28	33	22		15	18	16	13	14	14	14	13	12	10	
245	Clothing	22	22	21	23	24	18		21	23	23	22	34	33	33	31	26	23	
246	Footwear	20	20	21	21	21	14		12	15	13	16	11	10	10	11	12	12	
24	CLOTHING AND FOOTWEAR	21	21	21	22	22	16		18	20	20	19	26	26	26	25	21	18	

Table A6.2 (continued)

<i>Industry<sup>b</sup></i> <i>ASIC</i>	<i>Description</i>	<i>1971-72 series</i>							<i>1974-75 series</i>							<i>1977-78 series</i>						
		1968	1969	1970	1971	1972	1973		1974	1975	1976	1977		1977	1978	1979	1980	1981	1982			
<i>code</i>		-69	-70	-71	-72	-73	-74		-75	-76	-77	-78		-78	-79	-80	-81	-82	-83			
<b>WOOD, WOOD PRODUCTS AND FURNITURE</b>																						
2531	Log sawmilling	3	2	3	3	3	1		2	2	1	1		1	1	2	2	2	2			
2532	Resawn and dressed timber	9	8	9	7	6	4		4	3	2	2		2	2	2	2	2	2			
2533	Veneers and manufactured boards of wood	15	14	15	15	13	11		11	11	11	11		11	11	11	11	11	8			
2534	Wooden doors <sup>d</sup>													10	11	10	10	10	8			
2535	Wooden structural fittings and joinery nec )	20	18	19	19	19	13		12	11	11	11		8	8	8	8	8	7			
2536	Wooden containers	5	3	3	2	2	5		4	3	2	2		2	2	2	2	2	2			
2537	Hardwood woodchips <sup>d</sup>													-	-	..	-	-	-			
2538	Wood products nec )	16	17	17	17	18	13		4	3	3	3		6	7	7	7	7	6			
<b>253</b>	<b>Wood and wood products</b>	<b>13</b>	<b>12</b>	<b>13</b>	<b>13</b>	<b>12</b>	<b>9</b>		<b>7</b>	<b>7</b>	<b>6</b>	<b>6</b>		<b>5</b>	<b>5</b>	<b>6</b>	<b>5</b>	<b>5</b>	<b>4</b>			
2541	Furniture (except sheet metal)	25	24	24	26	26	19		15	14	14	14		11	12	11	11	12	11			
2542	Mattresses (except rubber)	19	18	18	18	18	14		13	13	12	12		13	13	13	12	14	13			
<b>254</b>	<b>Furniture and mattresses</b>	<b>24</b>	<b>24</b>	<b>24</b>	<b>25</b>	<b>25</b>	<b>18</b>		<b>15</b>	<b>14</b>	<b>14</b>	<b>14</b>		<b>12</b>	<b>12</b>	<b>12</b>	<b>11</b>	<b>12</b>	<b>11</b>			
<b>25</b>	<b>WOOD, WOOD PRODUCTS AND FURNITURE</b>	<b>17</b>	<b>16</b>	<b>16</b>	<b>17</b>	<b>16</b>	<b>12</b>		<b>9</b>	<b>9</b>	<b>9</b>	<b>8</b>		<b>7</b>	<b>7</b>	<b>7</b>	<b>7</b>	<b>8</b>	<b>7</b>			

Table A6.2 (continued)

<i>Industry<sup>b</sup></i>		<i>1971-72 series</i>						<i>1974-75 series</i>				<i>1977-78 series</i>					
<i>ASIC</i>	<i>Description</i>	<i>1968</i>	<i>1969</i>	<i>1970</i>	<i>1971</i>	<i>1972</i>	<i>1973</i>	<i>1974</i>	<i>1975</i>	<i>1976</i>	<i>1977</i>	<i>1977</i>	<i>1978</i>	<i>1979</i>	<i>1980</i>	<i>1981</i>	<i>1982</i>
<i>code</i>		<i>-69</i>	<i>-70</i>	<i>-71</i>	<i>-72</i>	<i>-73</i>	<i>-74</i>	<i>-75</i>	<i>-76</i>	<i>-77</i>	<i>-78</i>	<i>-78</i>	<i>-79</i>	<i>-80</i>	<i>-81</i>	<i>-82</i>	<i>-83</i>
<b>PAPER, PAPER PRODUCTS, PRINTING AND PUBLISHING</b>																	
2631	Pulp, paper and paperboard	6	6	6	7	6	5	6	6	5	4	6	6	7	7	7	5
2632	Paper bags (including textile bags)	9	9	8	8	8	5	8	8	8	9	11	10	11	10	10	8
2633	Solid fibreboard containers	12	12	11	11	11	7	9	10	10	10	10	9	9	8	8	6
2634	Corrugated fibreboard containers	14	14	12	12	12	8	8	9	8	9	9	9	8	8	8	6
2635	Paper products nec	14	13	13	13	13	9	9	10	9	10	10	10	9	9	8	8
<b>263</b>	<b>Paper and paper products</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>7</b>	<b>7</b>	<b>8</b>	<b>7</b>	<b>7</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>6</b>
2641	Publishing ) <sup>d</sup>											6	6	5	5	5	5
2642	Printing and publishing )	2	4	5	3	3	1	2	2	1	1	1	1	1	1	1	..
2643	Paper stationery ) <sup>d</sup>											9	8	8	8	7	7
2644	Printing and bookbinding )	8	8	8	8	8	5	8	9	9	9	8	8	8	7	7	6
2645	Printing trade services nec	15	14	14	12	12	10	9	9	9	9	12	12	12	12	12	12
<b>264</b>	<b>Printing and allied industries</b>	<b>6</b>	<b>7</b>	<b>7</b>	<b>6</b>	<b>7</b>	<b>4</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>4</b>
<b>26</b>	<b>PAPER, PAPER PRODUCTS, PRINTING AND PUBLISHING</b>	<b>8</b>	<b>9</b>	<b>9</b>	<b>8</b>	<b>8</b>	<b>6</b>	<b>7</b>	<b>7</b>	<b>6</b>	<b>6</b>	<b>7</b>	<b>7</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>5</b>

Table A6.2 (continued)

Industry <sup>b</sup>		1971-72 series					1974-75 series					1977-78 series						
ASIC	Description	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1977	1978	1979	1980	1981	1982	
code		-69	-70	-71	-72	-73	-74		-75	-76	-77	-78	-78	-79	-80	-81	-82	-83
CHEMICAL, PETROLEUM AND COAL PRODUCTS																		
2751	Chemical fertilisers	4	4	4	4	4	3	1	1	1	1	1	1	2	2	2	1	
2752	Industrial gases																	
2755	Inorganic industrial chemicals nec ) <sup>c</sup>	6	6	7	7	7	5	5	5	5	4	7	6	6	6	6	6	
2753	Synthetic resins and rubber	16	16	15	15	15	13	8	7	7	6	8	8	8	8	8	9	
2754	Organic industrial chemicals nec <sup>g</sup>	16	16	14	14	11	7	9	7	5	5	1	1	1	1	1	1	
275	Basic chemicals	10	10	10	10	9	7	6	5	4	4	4	4	4	4	4	4	
2761	Ammunition, explosives and fireworks ) <sup>c</sup>																	
2768	Chemical products nec )	20	20	20	19	19	14	9	10	10	9	15	15	15	15	15	14	
2762	Paints	25	25	25	24	23	17	16	16	14	14	11	11	11	11	11	10	
2763	Pharmaceutical and veterinary products	19	18	18	18	19	16	9	7	7	5	15	15	14	14	14	14	
2764	Pesticides	16	17	18	17	18	13	8	8	6	7	12	12	9	5	5	5	
2765	Soap and other detergents	22	19	21	20	20	15	11	10	9	9	4	4	4	4	4	4	
2766	Cosmetics and toilet preparations	24	23	23	22	23	17	14	14	13	14	3	3	2	2	2	2	
2767	Inks	15	14	15	15	15	11	14	14	12	11	13	13	11	11	11	10	
276	Other chemical products	21	20	21	20	20	15	11	11	10	10	10	10	9	8	8	8	
277	Petroleum refining	4	4	4	6	6	4	-	-	-	-	-	-	-	-	-	-	
278	Petroleum and coal products nec	4	4	4	5	5	3	6	7	6	6	7	7	8	8	8	6	
27	CHEMICAL, PETROLEUM AND COAL PRODUCTS	14	13	13	13	13	9	4	4	3	3	6	6	6	6	5	5	5

Table A6.2 (continued)

[illegible]

Table A6.2 (continued)

Industry <sup>b</sup>		1971-72 series					1974-75 series					1977-78 series					
ASIC	Description	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1977	1978	1979	1980	1981	1982
code		-69	-70	-71	-72	-73	-74	-75	-76	-77	-78	-78	-79	-80	-81	-82	-83
BASIC METAL PRODUCTS																	
2941	Iron and steel basic products	3	4	6	7	7	5	5	5	5	5	5	5	5	4	4	2
2942	Iron casting ) <sup>d</sup>												10	10	9	6	6
2943	Steel casting )	17	15	15	15	15	11	3	3	3	..		10	10	9	9	8
2944	Iron and steel forging )												7	7	7	5	5
2945	Steel pipes and tubes	14	14	14	12	11	8	9	8	8	8	13	13	12	12	10	10
294	Basic iron and steel	5	5	7	7	7	5	5	4	4	4	6	6	6	5	5	3
2951	Copper smelting, refining	-	-	-	-	-	-	-2	-2	-2	-2	-	-	-	-	-	-
2952	Silver, lead, zinc smelting, refining ) <sup>c</sup>	-	-	-	-	-	-	3	2	1	-						
2955	Nickel smelting, refining )											-	-	-	-	-	-
2956	Non-ferrous metals nec, smelting, refining)	2	2	3	2	2	2	-1	..	-1	..						
2953	Alumina ) <sup>c</sup>																
2954	Aluminium smelting )	1	1	1	1	1	..	-4	-3	-3	-3	-	-	-	-	-	-
2957	Secondary recovery and alloying of non-ferrous metals nec	4	4	4	4	4	3	6	6	4	3	-	-	-	-	-	-
295	Basic non-ferrous metals	1	1	1	1	1	1	-1	-1	-1	-1	-	-	-	-	-	-
2961	Aluminium rolling, drawing, extruding	1	1	1	1	1	1	1	1	1	1	13	13	13	13	13	13
2962	Non-ferrous metals nec, rolling, drawing, extruding	7	7	7	10	9	7	8	8	8	6	14	13	11	11	11	11
2963	Non-ferrous metal casting	6	6	6	6	6	4	7	7	4	5	12	12	12	12	12	11
296	Non-ferrous metal basic products	5	5	5	6	6	5	5	5	5	4	13	13	12	12	12	12
29	BASIC METAL PRODUCTS	3	4	5	5	5	4	2	2	2	2	4	4	4	4	4	3

Table A6.2 (continued)

Industry <sup>b</sup>		1971-72 series					1974-75 series					1977-78 series					
ASIC	Description	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1977	1978	1979	1980	1981	1982
code		-69	-70	-71	-72	-73	-74	-75	-76	-77	-78	-78	-79	-80	-81	-82	-83
FABRICATED METAL PRODUCTS																	
3141	Fabricated structural steel	20	19	20	18	18	13	14	14	14	13	13	13	13	12	9	9
3142	Architectural aluminium products	26	26	26	25	25	19	18	17	15	11	11	12	12	11	11	11
3143	Architectural metal products nec	20	19	19	20	20	14	19	18	16	12	11	11	11	10	7	6
314	Structural metal products	21	21	21	20	20	14	16	15	14	12	12	13	13	11	9	9
3151	Metal containers	16	15	13	13	13	9	10	9	9	8	9	9	9	9	8	8
3152	Sheet metal furniture	24	23	21	21	20	13	9	9	8	7	11	11	11	9	6	6
3153	Sheet metal products nec	17	17	15	14	14	9	11	11	10	9	11	11	11	10	7	7
315	Sheet metal products	17	17	14	14	14	9	10	10	9	9	10	10	10	9	7	8
3161	Cutlery and hand tools nec	19	19	19	19	19	13	15	15	14	13	11	11	11	10	9	9
3162	Springs and wire products	20	19	17	17	17	13	10	10	10	10	12	12	12	11	10	8
3163	Nuts, bolts, screws and rivets	18	16	14	16	15	11	14	14	13	12	11	11	11	11	9	9
3164	Metal coating and finishing	20	19	19	17	17	12	18	15	15	12	12	12	12	10	9	9
3165	Non-ferrous steam, gas and water fittings	20	20	20	18	18	14	17	17	15	14	22	21	20	20	20	19
3166	Boiler and plate work	16	15	16	17	17	12	12	11	10	9	11	11	11	10	7	7
3167	Metal blinds and awnings	28	28	26	26	26	20	18	18	15	12	11	12	13	12	12	12
3168	Fabricated metal products nec	22	21	22	20	20	14	16	15	14	13	17	17	17	15	14	13
316	Other fabricated metal products	21	19	19	18	18	13	14	14	13	12	14	14	14	13	11	11
31	FABRICATED METAL PRODUCTS	20	19	18	17	17	12	13	13	12	11	12	12	12	11	9	9



Table A6.2 (continued)

Industry <sup>b</sup>		1971-72 series										1974-75 series					1977-78 series									
ASIC	Description	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1977	1978	1979	1980	1981	1982									
code		-69	-70	-71	-72	-73	-74	-75	-76	-77	-78	-78	-79	-80	-81	-82	-83									
TRANSPORT EQUIPMENT																										
3231	Motor vehicles	29	30	29	28	28	21	20	18	18	17	30	33	37	40	42	43									
3232	Motor vehicle bodies, trailers, caravans	20	20	20	21	20	15	16	16	16	14	16	17	17	16	15	13									
3233	Motor vehicle instruments and electrical equipment nec	28	28	29	28	27	20	16	16	16	15	17	17	18	17	16	16									
3234	Motor vehicle parts nec	20	20	21	20	20	15	15	15	14	12	19	19	17	16	15	15									
323	Motor vehicles and parts	28	28	27	27	27	20	19	17	17	16	27	30	32	34	35	36									
3241	Ships	16	15	16	14	15	11	9	8	9	8	9	9	9	9	8	7									
3242	Boats	23	23	23	22	22	17	17	17	17	17	8	8	8	8	8	7									
3243	Railway rolling stock and locomotives	19	18	16	16	17	13	18	18	17	15	22	22	22	22	16	15									
3244	Aircraft	5	6	5	5	5	3	1	4	4	3	15	15	15	14	13	13									
3245	Transport equipment nec	22	22	21	21	22	19	14	14	13	11	19	19	19	18	16	14									
324	Other transport equipment	15	15	14	14	14	11	11	11	11	10	15	15	15	15	13	12									
32	TRANSPORT EQUIPMENT	25	26	25	24	24	18	18	16	16	15	25	28	30	32	32	33									
OTHER MACHINERY AND EQUIPMENT																										
3341	Photographic and optical goods ) <sup>d</sup>											8	8	8	8	8	8									
3342	Photographic film processing )	18	18	18	18	17	13	10	10	8	9	9	9	9	9	10	9									
3343	Measuring, professional and scientific equipment nec	26	26	25	26	26	19	17	16	15	12	10	10	10	10	10	10									
334	Photographic, professional and scientific equipment	20	20	20	21	20	15	12	11	10	10	9	9	9	9	9	9									

Table A6.2 (continued)

Industry <sup>b</sup>	Description	1971-72 series										1974-75 series						1977-78 series																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
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		-69	-70	-71	-72	-73	-74	-75	-76	-77	-78	-78	-79	-80	-81	-82	-83																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
3351	Radio and TV receivers; audio equipment <sup>d</sup>																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									

Table A6.2 (continued)

Industry <sup>b</sup> ASIC	Description	1971-72 series					1974-75 series					1977-78 series					
		1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1977	1978	1979	1980	1981	1982
		-69	-70	-71	-72	-73	-74	-75	-76	-77	-78	-78	-79	-80	-81	-82	-83
MISCELLANEOUS MANUFACTURING																	
3451	Leather tanning and fur dressing	5	5	5	7	7	5	2	2	1	1	..	..	1	1	1	1
3452	Leather and leather substitute goods nec	21	19	19	21	20	15	11	10	7	9	8	7	6	6	7	6
345	Leather and leather products	11	11	11	12	12	9	6	6	4	5	2	2	2	2	2	2
3461	Rubber tyres, tubes, belts, hose and sheets	19	20	20	22	21	12	13	13	12	10	13	14	13	14	14	14
3462	Rubber products nec	19	20	19	20	20	12	9	9	9	7	13	14	12	14	14	14
346	Rubber products	19	20	20	21	21	12	12	12	11	9	13	14	13	14	14	14
3471	Flexible packaging and abrasive papers	33	32	33	31	31	22	19	19	19	19	18	17	16	17	17	17
3472	Rigid plastic sheeting	35	36	35	32	31	22	17	17	17	17	9	9	9	9	9	8
3473	Hard surface floor covering nec	29	29	29	27	27	18	18	18	18	17	20	20	20	20	20	20
3474	Plastic products nec	37	36	36	37	37	25	20	20	20	19	24	23	23	23	23	23
347	Plastic and related products	35	34	35	34	34	24	20	20	19	19	21	21	21	21	21	21
3481	Ophthalmic articles	19	19	19	17	17	12	12	9	9	8	1	1	2	2	2	2
3482	Jewellery and silverware	12	12	12	13	13	10	14	14	9	6	1	1	1	1	1	1
3483	Brooms and brushes	15	15	14	14	14	11	12	11	11	10	8	8	8	8	8	7
3484	Signs and advertising displays	17	16	16	16	15	11	10	10	10	10	13	12	12	11	10	9
3485	Sporting equipment	24	24	23	23	22	16	15	15	13	13	11	11	10	10	11	10
3486	Writing and marking equipment	19	19	18	20	18	13	11	11	11	10	11	11	10	10	9	7
3487	Manufacturing nec	19	19	19	18	17	12	3	3	3	3	14	14	12	12	11	9
348	Other manufacturing	17	17	17	17	16	12	10	10	9	8	9	9	8	8	8	7
34	MISC. MANUFACTURING	25	25	25	26	25	17	15	15	15	14	16	16	15	16	16	15
21-34	TOTAL MANUFACTURING	15	14	14	13	13	9	8	8	7	7	9	9	9	9	9	10

**Table A6.2 (continued)**

–	Nil.
..	Between 0 per cent and 0.5 per cent.
a	Assistance provided by tariffs and certain non-tariff measures. 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.
b	Industry subdivision, group, and class from the Australian Standard Industrial Classification (ASIC) 1978 Edition.
c	Assistance estimates not calculated separately because of confidentiality of data.
d	Assistance estimates not calculated separately because 1969 ASIC class was split into two or more 1978 ASIC classes.
e	1978 ASIC class 2883 was a new class created by combining activities relating to the manufacture of glass wool and glass fibres (previously included in 1969 ASIC class 2813) with those relating to the manufacture of mineral wool and mineral wool products (previously included in 1969 ASIC class 2843). Estimates of assistance for the 1971–72 and 1974–75 series for 1978 ASIC class 2883 are, therefore, included partly in 1978 ASIC group 285 and partly in 1978 ASIC class 2884.

*Source:* Commission estimates.

TABLE A6.3

**Average effective rates of assistance<sup>a</sup>, manufacturing industries: 1968–69 to 1982–83 (per cent)**

Industry <sup>b</sup>		1971–72 series					1974–75 series					1977–78 series					
ASIC	Description	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1977	1978	1979	1980	1981	1982
code		–69	–70	–71	–72	–73	–74	–75	–76	–77	–78	–78	–79	–80	–81	–82	–83
FOOD, BEVERAGES AND TOBACCO																	
2115	Meat (except smallgoods or poultry)	–1	–1	–1	–1	–1	–1	–1	–1	–1	–1	4	6	6	5	6	4
2116	Poultry	3	5	5	5	5	4	–3	–3	–2	–2	15	15	18	18	18	7
2117	Bacon, ham and smallgoods nec	41	43	42	19	18	16	30	29	23	15	10	11	6	3	–2	3
211	Meat products	4	5	5	2	2	2	3	3	3	1	6	8	7	6	6	4
2121	Liquid milk and cream											2	4	1	..	2	2
2122	Butter											38	66	9	12	6	10
2123	Cheese											6	6	6	5	3	2
2124	Ice cream and frozen confections											16	20	21	21	16	1
2125	Milk products nec											15	16	3	2	–1	–6
212	Milk products <sup>c</sup>	12	12	13	11	11	12	20	22	21	11	10	14	6	6	4	2
2131	Fruit products	12	17	26	39	40	38	55	56	38	28	11	12	12	24	37	48
2132	Vegetable products	17	17	22	32	29	29	12	12	7	3	4	6	5	4	3	..
213	Fruit and vegetable products	15	17	24	36	34	33	27	27	18	11	6	8	7	11	15	17
214	Margarine and oils and fats nec	1	29	19	18	17	16	29	16	24	19	20	21	24	24	17	12
2151	Flour mill products	6	6	6	5	5	4	24	24	18	11	–2	44	53	9	–32	–18
2152	Starch, gluten and starch sugars	47	41	35	30	26	14	2	5	6	9	23	62	70	29	1	30
2153	Cereal foods and baking mixes	3	4	8	5	7	8	11	10	6	1	..	3	2	–1	–1	–2
215	Flour mill and cereal food products	8	8	10	7	8	7	15	14	10	5	1	22	25	5	–11	–5

Table A6.3 (continued)

Industry <sup>b</sup> ASIC code	Description	1971-72 series						1974-75 series						1977-78 series					
		1968 -69	1969 -70	1970 -71	1971 -72	1972 -73	1973 -74	1974 -75	1975 -76	1976 -77	1977 -78	1978 -79	1979 -80	1980 -81	1981 -82	1982 -83			
2161	Bread	-4	-2	-1	-1	-1	..	-6	-6	-5	-3	-1	9	11	2	-7	-5		
2162	Cakes and pastries	-20	-19	-17	-15	-14	-9	-4	-4	-4	-5	13	16	18	12	7	6		
2163	Biscuits	6	8	14	19	21	19	43	40	27	11	10	13	13	12	7	5		
<b>216</b>	<b>Bread, cakes and biscuits</b>	<b>-5</b>	<b>-3</b>	<b>-1</b>	<b>..</b>	<b>10</b>	<b>2</b>	<b>3</b>	<b>3</b>	<b>1</b>	<b>-1</b>	<b>5</b>	<b>11</b>	<b>13</b>	<b>6</b>	<b>-1</b>	<b>-1</b>		
2171	Raw sugar ) <sup>c</sup>																		
2176	Food products nec )	34	29	21	17	13	13	6	6	5	2	-5	-2	-3	-7	..	14		
2173	Confectionary and cocoa products	46	55	68	77	84	74	99	96	86	68	66	56	40	38	32	21		
2174	Processed seafoods	..	-1	..	-4	-2	-3	2	2	1	..	5	6	8	5	5	6		
2175	Prepared animal and bird foods	8	8	8	8	9	8	12	12	-2	-4	-6	4	7	1	..	-4		
<b>217</b>	<b>Other food products</b>	<b>29</b>	<b>27</b>	<b>24</b>	<b>23</b>	<b>22</b>	<b>20</b>	<b>17</b>	<b>16</b>	<b>12</b>	<b>6</b>	<b>5</b>	<b>8</b>	<b>6</b>	<b>2</b>	<b>5</b>	<b>11</b>		
2185	Soft drinks, cordials and syrups	34	43	60	67	71	53	83	74	50	8	17	16	11	16	6	-6		
2186	Beer	36	36	38	40	40	44	93	91	74	64	66	69	71	70	81	86		
2187	Malt	..	..	..	..	..	-	10	11	6	-	7	10	13	11	9	7		
2188	Wine and brandy	11	14	18	18	22	38	24	25	17	25	16	12	16	13	13	11		
2189	Alcoholic beverages nec	122	108	80	99	95	93	148	154	134	137	50	49	52	48	50	56		
<b>218</b>	<b>Beverages and malt</b>	<b>41</b>	<b>43</b>	<b>46</b>	<b>51</b>	<b>52</b>	<b>48</b>	<b>90</b>	<b>87</b>	<b>68</b>	<b>51</b>	<b>40</b>	<b>40</b>	<b>40</b>	<b>41</b>	<b>41</b>	<b>39</b>		
<b>219</b>	<b>Tobacco products</b>	<b>22</b>	<b>22</b>	<b>23</b>	<b>23</b>	<b>23</b>	<b>24</b>	<b>30</b>	<b>22</b>	<b>16</b>	<b>15</b>	<b>6</b>	<b>2</b>	<b>10</b>	<b>6</b>	<b>1</b>	<b>4</b>		
<b>21</b>	<b>FOOD, BEVERAGES AND TOBACCO</b>	<b>16</b>	<b>17</b>	<b>18</b>	<b>19</b>	<b>19</b>	<b>18</b>	<b>21</b>	<b>20</b>	<b>16</b>	<b>13</b>	<b>10</b>	<b>14</b>	<b>13</b>	<b>10</b>	<b>9</b>	<b>9</b>		

Table A6.3 (continued)

Industry <sup>b</sup>		1971–72 series										1974–75 series										1977–78 series									
ASIC	Description	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1974	1975	1976	1977	1977	1978	1979	1980	1981	1982	1977	1978	1979	1980	1981	1982				
code		–69	–70	–71	–72	–73	–74					–75	–76	–77	–78	–78	–79	–80	–81	–82	–83	–78	–79	–80	–81	–82	–83				
TEXTILES																															
2341	Cotton ginning	9	10	10	10	7	..					–3	–3	–3	–3		–1	–1	–2	..	5	–5									
2342	Wool scouring and top making	–1	–1	–1	–1	–1	–1				..	–1	–1	–1			24	34	34	27	24	17									
2343	Man-made fibres and yarns	28	28	28	30	36	26				61	47	71	69	61		106	108	154	154	124	125									
2344	Man-made fibre broadwoven fabrics	72	73	76	99	101	75				149	124	152	153	149		130	132	142	172	186	175									
2345	Cotton yarns and broadwoven fabrics	70	65	62	62	63	50				83	52	63	64	83		59	55	50	50	68	66									
2346	Worsted yarns and broadwoven fabrics	50	51	51	51	50	38				53	45	47	46	53		54	54	103	104	91	88									
2347	Woollen yarns and broadwoven fabrics	66	65	67	68	65	50				50	43	45	43	50		43	43	76	76	56	58									
2348	Narrow woven and elastic textiles	37	37	38	39	39	30				41	43	43	43	41		56	57	60	60	57	51									
2349	Textile finishing	54	53	58	73	69	59				150	68	131	153	150		183	164	152	145	92	86									
234	Textile fibres, yarns and woven fabrics	44	44	44	47	48	38				71	49	65	67	71		71	70	81	83	78	74									
2351	Household textiles	70	69	78	76	71	52				148	57	118	118	148		77	82	48	63	49	67									
2352	Textile floor coverings	41	37	39	32	35	29				32	23	23	22	32		14	14	3	16	31	38									
2353	Felt and felt products	33	36	36	41	41	33				29	31	30	28	29		20	22	22	25	24	25									
2354	Canvas and associated products nec	83	84	85	86	86	62				34	36	35	35	34		14	14	25	25	20	23									
2355	Rope, cordage and twine	33	33	31	37	36	26				37	30	33	32	37		25	24	27	27	24	25									
2356	Textile products nec	21	22	21	21	21	14				3	6	5	4	3		11	12	12	14	15	14									
235	Other textile products	39	38	39	38	38	29				35	24	30	29	35		19	20	14	21	25	30									
23	TEXTILES	43	42	42	45	45	35				57	39	50	51	57		47	47	51	55	54	54									

Table A6.3 (continued)

Industry <sup>b</sup>		1971-72 series					1974-75 series					1977-78 series					
ASIC	Description	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1977	1978	1979	1980	1981	1982
code		-69	-70	-71	-72	-73	-74	-75	-76	-77	-78	-78	-79	-80	-81	-82	-83
CLOTHING AND FOOTWEAR																	
2441	Hosiery	67	74	70	71	68	48	64	63	68	73	56	57	69	78	98	93
2442	Cardigans and pullovers	85	86	86	89	111	87	51	97	151	146	162	165	122	152	162	197
2443	Knitted goods nec	98	90	92	89	85	68	119	153	181	167	189	223	191	192	192	209
244	Knitting mills	84	83	83	83	87	67	74	103	135	130	135	146	124	139	150	166
2451	Mens trousers and shorts; work clothing	145	141	140	144	152	107	124	133	197	186	121	120	127	116	212	238
2452	Mens suits and coats; waterproof clothing	134	126	125	117	129	89	91	90	110	147	121	121	105	107	189	206
2453	Womens outerwear nec	102	96	92	91	80	60	82	109	198	183	159	160	152	150	>250	>250
2454	Foundation garments	66	65	66	66	65	49	67	84	116	107	124	121	140	154	247	240
2455	Underwear and infants clothing nec	118	106	112	109	105	76	94	74	113	191	179	182	175	172	221	210
2456	Headwear and clothing nec	70	68	67	63	57	43	44	60	63	64	68	60	63	64	78	64
245	Clothing	108	102	101	100	97	70	87	96	148	162	140	140	137	135	216	225
246	Footwear	82	86	72	56	67	45	106	107	121	121	151	153	143	161	229	>250
24	CLOTHING AND FOOTWEAR	97	94	91	86	88	64	87	99	141	149	141	143	135	140	204	220



Table A6.3 (continued)

<i>Industry<sup>b</sup></i>	<i>ASIC code</i>	<i>Description</i>	<i>1971-72 series</i>							<i>1974-75 series</i>							<i>1977-78 series</i>						
			1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1977	1978	1979	1980	1981	1982
			-69	-70	-71	-72	-73	-74	-75	-76	-77	-78	-78	-79	-80	-81	-82	-78	-79	-80	-81	-82	-83
<b>WOOD, WOOD PRODUCTS AND FURNITURE</b>																							
2531		Log sawmilling	8	8	7	8	8	4	4	4	2	3	3	3	4	4	3	3	3	4	4	4	3
2532		Resawn and dressed timber	16	15	15	12	14	12	6	5	4	4	5	6	13	13	11	5	6	13	13	13	11
2533		Veneers and manufactured boards of wood	41	41	41	40	41	30	30	30	33	33	27	27	26	26	20	27	27	26	26	25	20
2534		Wooden doors											28	24	13	13	11	28	24	13	13	14	11
2535		Wooden structural fittings and joinery nec)	33	35	34	31	30	23	24	25	25	25	30	26	17	17	14	30	26	17	17	17	14
2536		Wooden containers	58	60	60	58	59	38	28	26	26	30	31	28	24	24	23	31	28	24	24	24	23
2537		Hardwood woodchips ) <sup>d</sup>											9	12	11	11	8	9	12	11	11	11	8
2538		Wood products nec )	25	25	23	19	18	14	15	15	15	14	17	14	11	10	6	17	14	11	10	9	6
<b>253</b>		<b>Wood and wood products</b>	<b>21</b>	<b>22</b>	<b>21</b>	<b>20</b>	<b>20</b>	<b>14</b>	<b>13</b>	<b>14</b>	<b>13</b>	<b>13</b>	<b>14</b>	<b>13</b>	<b>12</b>	<b>12</b>	<b>10</b>	<b>14</b>	<b>13</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>10</b>
2541		Furniture (except sheet metal)	41	40	40	32	29	20	30	32	32	32	32	31	27	25	26	32	31	27	25	24	26
2542		Mattresses (except rubber)	72	73	73	72	71	54	51	53	23	23	-4	-5	-5	-5	-3	-4	-5	-5	-5	-6	-3
<b>254</b>		<b>Furniture and mattresses</b>	<b>43</b>	<b>42</b>	<b>42</b>	<b>35</b>	<b>32</b>	<b>23</b>	<b>32</b>	<b>34</b>	<b>31</b>	<b>31</b>	<b>26</b>	<b>25</b>	<b>22</b>	<b>20</b>	<b>21</b>	<b>26</b>	<b>25</b>	<b>22</b>	<b>20</b>	<b>19</b>	<b>21</b>
<b>25</b>		<b>WOOD, WOOD PRODUCTS AND FURNITURE</b>	<b>26</b>	<b>27</b>	<b>26</b>	<b>23</b>	<b>23</b>	<b>16</b>	<b>18</b>	<b>19</b>	<b>18</b>	<b>18</b>	<b>18</b>	<b>17</b>	<b>15</b>	<b>15</b>	<b>13</b>	<b>18</b>	<b>17</b>	<b>15</b>	<b>15</b>	<b>14</b>	<b>13</b>

Table A6.3 (continued)

Industry <sup>b</sup>	Description	1971-72 series					1974-75 series					1977-78 series					
		1971-72 series					1974-75 series					1977-78 series					
		1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1977	1978	1979	1980	1981	1982
ASIC code		-69	-70	-71	-72	-73	-74	-75	-76	-77	-78	-78	-79	-80	-81	-82	-83
PAPER, PAPER PRODUCTS, PRINTING AND PUBLISHING																	
2631	Pulp, paper and paperboard	17	20	18	22	20	14	10	10	10	11	9	9	9	8	8	10
2632	Paper bags (including textile bags)	119	112	110	111	109	83	43	43	44	47	42	47	48	49	49	46
2633	Solid fibreboard containers	120	115	114	114	114	90	36	35	33	32	31	34	33	34	35	29
2634	Corrugated fibreboard containers	154	155	156	158	159	128	42	40	39	38	32	34	35	36	36	26
2635	Paper products nec	61	59	58	56	54	37	41	41	36	25	21	22	20	17	18	23
263	Paper and paper products	54	54	53	55	53	40	26	25	24	23	20	21	21	21	21	20
2641	Publishing ) <sup>d</sup>											-5	-4	-4	-4	-4	-3
2642	Printing and publishing )	8	5	8	10	9	9	9	9	12	13	21	21	21	22	22	22
2643	Paper stationery ) <sup>d</sup>											33	34	31	29	30	29
2644	Printing and bookbinding )	83	78	77	77	78	57	45	45	44	42	36	37	37	37	37	38
2645	Printing trade services nec	28	27	26	27	27	20	26	26	26	26	24	24	23	21	22	21
264	Printing and allied industries	51	47	48	49	49	36	36	36	36	35	28	30	29	28	29	29
26	PAPER, PAPER PRODUCTS, PRINTING AND PUBLISHING	52	50	50	52	51	38	31	30	30	29	24	26	25	25	25	24

Table A6.3 (continued)

<i>Industry<sup>b</sup></i>		<i>1971-72 series</i>					<i>1974-75 series</i>					<i>1977-78 series</i>					
<i>ASIC</i>	<i>Description</i>	<i>1968</i>	<i>1969</i>	<i>1970</i>	<i>1971</i>	<i>1972</i>	<i>1973</i>	<i>1974</i>	<i>1975</i>	<i>1976</i>	<i>1977</i>	<i>1977</i>	<i>1978</i>	<i>1979</i>	<i>1980</i>	<i>1981</i>	<i>1982</i>
<i>code</i>		<i>-69</i>	<i>-70</i>	<i>-71</i>	<i>-72</i>	<i>-73</i>	<i>-74</i>	<i>-75</i>	<i>-76</i>	<i>-77</i>	<i>-78</i>	<i>-78</i>	<i>-79</i>	<i>-80</i>	<i>-81</i>	<i>-82</i>	<i>-83</i>
<b>CHEMICAL, PETROLEUM AND COAL PRODUCTS</b>																	
2751	Chemical fertilisers	28	29	27	27	27	20	-3	-2	-2	-1	-2	-2	..	..	..	-2
2752	Industrial gases ) <sup>c</sup>																
2755	Inorganic industrial chemicals nec )	10	10	10	10	10	8	11	11	11	11	10	10	11	10	10	9
2753	Synthetic resins and rubber	45	44	46	46	43	29	35	36	36	34	37	36	38	38	37	39
2754	Organic industrial chemicals nec	45	46	44	51	47	33	23	27	30	25	28	31	28	26	24	24
<b>275</b>	<b>Basic chemicals</b>	<b>27</b>	<b>27</b>	<b>27</b>	<b>28</b>	<b>27</b>	<b>19</b>	<b>16</b>	<b>17</b>	<b>18</b>	<b>17</b>	<b>17</b>	<b>18</b>	<b>18</b>	<b>18</b>	<b>17</b>	<b>17</b>
2761	Ammunition, explosives and fireworks ) <sup>c</sup>																
2768	Chemical products nec )	20	21	22	21	22	17	19	15	16	17	14	14	14	10	8	6
2762	Paints	49	48	49	50	52	40	44	44	19	10	11	11	11	11	11	13
2763	Pharmaceutical and veterinary products	34	33	36	39	38	34	29	30	29	29	25	23	13	..	-1	-2
2764	Pesticides	56	59	54	51	53	43	43	43	45	45	39	39	38	37	38	35
2765	Soap and other detergents	27	29	27	28	30	24	27	28	27	11	18	18	18	18	18	16
2766	Cosmetics and toilet preparations	51	51	51	51	51	38	37	38	31	18	19	19	20	20	20	20
2767	Inks	99	99	98	99	99	75	65	62	69	69	70	43	32	33	33	34
<b>276</b>	<b>Other chemical products</b>	<b>36</b>	<b>36</b>	<b>37</b>	<b>38</b>	<b>38</b>	<b>31</b>	<b>32</b>	<b>31</b>	<b>27</b>	<b>21</b>	<b>20</b>	<b>19</b>	<b>17</b>	<b>12</b>	<b>12</b>	<b>11</b>
<b>277</b>	<b>Petroleum refining</b>	<b>-4</b>	<b>-3</b>	<b>-2</b>	<b>-9</b>	<b>-7</b>	<b>..</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>24</b>	<b>24</b>	<b>24</b>	<b>22</b>	<b>22</b>	<b>17</b>	<b>13</b>	<b>12</b>	<b>11</b>	<b>9</b>	<b>22</b>	<b>22</b>	<b>22</b>	<b>21</b>	<b>21</b>	<b>25</b>
<b>27</b>	<b>CHEMICAL, PETROLEUM AND COAL PRODUCTS</b>	<b>31</b>	<b>31</b>	<b>31</b>	<b>32</b>	<b>32</b>	<b>25</b>	<b>23</b>	<b>23</b>	<b>21</b>	<b>18</b>	<b>19</b>	<b>19</b>	<b>17</b>	<b>15</b>	<b>14</b>	<b>14</b>

Table A6.3 (continued)

Industry <sup>b</sup>		1971-72 series						1974-75 series						1977-78 series					
ASIC	Description	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1977	1978	1979	1980	1981	1982		
code		-69	-70	-71	-72	-73	-74	-75	-76	-77	-78	-78	-79	-80	-81	-82	-83		
NON-METALLIC MINERAL PRODUCTS																			
285	Glass and glass products	14	14	14	14	14	10	11	8	5	6	4	4	5	5	4	4		
2861	Clay bricks ) <sup>d</sup>											2	2	1	1	1	1		
2862	Refractories )	30	30	30	28	28	21	26	25	15	6	4	5	4	4	7	8		
2863	Ceramic tiles and pipes	33	34	33	33	33	25	29	29	24	18	18	18	13	12	12	10		
2864	Ceramic goods nec	45	46	42	45	39	26	28	27	27	26	27	29	28	20	22	18		
286	Clay products and refractories	33	33	32	31	30	22	27	26	18	11	8	8	6	5	6	5		
2871	Cement ) <sup>c</sup>																		
2873	Concrete pipes and box culverts )	6	6	6	5	4	1	..	-1	-1	-1	3	-	..	..	1	1		
2872	Ready-mixed concrete	-13	-13	-13	-11	-11	-4	-4	-4	-3	-5	-	-	-	-	-	-		
2874	Concrete products nec	-1	-1	-1	-1	..	..	-3	-2	-3	-3	-4	-3	-3	-3	-3	-2		
287	Cement and concrete products	-2	-2	-2	-1	-1	-1	-3	-3	-2	-2	0	-1	-1	-1	-1	-		
2881	Plaster products and expanded minerals ) <sup>c</sup>	45	45	44	41	41	29	27	28	22	16	13	12	14	14	14	13		
2883	Glass wool and mineral wool products <sup>e</sup> )																		
2882	Stone products	39	39	37	39	39	24	42	40	29	21	22	22	21	16	16	16		
2884	Non-metallic mineral products nec	34	33	34	34	34	26	25	24	21	15	16	17	18	18	16	17		
288	Other non-metallic mineral products	37	37	37	36	36	27	27	25	21	15	15	16	17	16	15	15		
28	NON-METALLIC MINERAL PRODUCTS	15	15	15	14	14	11	11	10	7	5	5	5	5	4	4	4		

Table A6.3 (continued)

Industry <sup>b</sup>	Description	1971-72 series					1974-75 series					1977-78 series					
		1968-69					1974-75					1977-78					
		1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	
ASIC code		-69	-70	-71	-72	-73	-74	-75	-76	-77	-78	-78	-79	-80	-81	-82	-83
BASIC METAL PRODUCTS																	
2941	Iron and steel basic products	37	36	31	33	32	24	13	14	13	11	12	11	10	12	13	15
2942	Iron casting ) <sup>d</sup>											23	24	21	20	19	18
2943	Steel casting )	30	32	31	32	32	24	25	25	23	24	26	24	24	25	24	21
2944	Iron and steel forging )											21	19	15	18	17	16
2945	Steel pipes and tubes	33	33	33	38	39	29	21	20	17	16	13	16	15	14	16	16
294	Basic iron and steel	36	35	31	33	32	24	15	16	15	13	14	13	12	14	15	16
2951	Copper smelting, refining	8	8	8	17	17	12	30	27	23	16	6	6	8	7	7	6
2952	Silver, lead, zinc smelting, refining ) <sup>c</sup>	7	7	7	7	3	4	..	1	1	1						
2955	Nickel smelting, refining )																
2956	Non-ferrous metals nec, smelting, refining)	1	1	..	2	2	2	11	11	8	3	3	3	4	4	4	3
2953	Alumina ) <sup>c</sup>																
2954	Aluminium smelting )	2	2	2	2	2	2	14	12	11	8	..	..	..	..	..	..
2957	Secondary recovery and alloying of non-ferrous metals nec	45	48	43	35	35	28	5	8	2	-4	10	9	8	7	4	2
295	Basic non-ferrous metals	7	7	6	8	6	6	11	10	8	5	2	2	3	3	2	2
2961	Aluminium rolling, drawing, extruding	88	88	88	85	85	64	57	53	46	35	9	11	13	11	10	9
2962	Non-ferrous metals nec, rolling, drawing, extruding	78	77	76	74	74	56	61	61	40	33	3	2	1	1	1	-6
2963	Non-ferrous metal casting	115	115	115	105	124	95	46	45	43	32	30	28	27	26	29	28
296	Non-ferrous metal basic products	87	86	86	83	85	64	57	54	44	34	10	11	11	9	9	7
29	BASIC METAL PRODUCTS	31	30	28	29	29	22	16	16	14	12	10	10	9	10	11	11

Table A6.3 (continued)

<i>Industry<sup>b</sup></i> <i>ASIC</i>	<i>Description</i>	<i>1971–72 series</i>							<i>1974–75 series</i>							<i>1977–78 series</i>						
		1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1977	1978	1979	1980	1981	1982
<i>code</i>	<i>Description</i>	–69	–70	–71	–72	–73	–74	–75	–76	–77	–78	–78	–79	–80	–81	–82	–78	–79	–80	–81	–82	–83
<b>FABRICATED METAL PRODUCTS</b>																						
3141	Fabricated structural steel	68	68	65	61	57	45	40	39	34	35	24	30	27	31	26	22	22	22	22	22	22
3142	Architectural aluminium products	41	41	41	41	40	30	31	32	30	28	28	27	26	27	28	26	26	26	26	26	26
3143	Architectural metal products nec	69	70	70	65	58	48	43	47	27	33	35	37	37	38	37	35	37	37	38	37	35
<b>314</b>	<b>Structural metal products</b>	<b>61</b>	<b>61</b>	<b>59</b>	<b>56</b>	<b>53</b>	<b>41</b>	<b>37</b>	<b>37</b>	<b>32</b>	<b>33</b>	<b>26</b>	<b>30</b>	<b>28</b>	<b>31</b>	<b>28</b>	<b>24</b>	<b>30</b>	<b>28</b>	<b>31</b>	<b>28</b>	<b>24</b>
3151	Metal containers	125	124	131	129	130	99	96	103	92	73	61	61	61	63	65	56	61	61	63	65	56
3152	Sheet metal furniture	31	31	33	43	45	39	35	37	40	40	40	39	38	40	44	40	40	39	38	40	44
3153	Sheet metal products nec	65	63	66	65	63	49	47	43	38	37	39	39	38	38	42	35	39	39	38	38	42
<b>315</b>	<b>Sheet metal products</b>	<b>76</b>	<b>74</b>	<b>78</b>	<b>78</b>	<b>77</b>	<b>60</b>	<b>58</b>	<b>58</b>	<b>52</b>	<b>46</b>	<b>47</b>	<b>46</b>	<b>46</b>	<b>50</b>	<b>43</b>	<b>47</b>	<b>46</b>	<b>46</b>	<b>50</b>	<b>46</b>	<b>43</b>
3161	Cutlery and hand tools nec	23	22	23	22	19	15	15	15	15	15	21	22	21	23	20	20	21	22	21	23	20
3162	Springs and wire products	45	48	47	46	44	34	34	35	31	27	25	25	24	25	26	23	25	25	24	25	26
3163	Nuts, bolts, screws and rivets	53	55	57	56	56	42	31	31	30	29	32	28	28	26	27	25	32	28	28	26	27
3164	Metal coating and finishing	42	42	41	40	40	30	29	28	24	24	24	24	23	22	22	21	24	23	22	22	21
3165	Non-ferrous steam, gas and water fittings	86	85	85	80	80	59	30	21	21	20	14	14	14	14	15	15	14	14	14	14	15
3166	Boiler and plate work	62	50	40	36	39	31	45	45	38	46	30	31	30	32	35	28	30	31	30	32	35
3167	Metal blinds and awnings	57	57	59	57	56	43	32	32	28	28	32	30	29	30	29	29	32	30	29	30	29
3168	Fabricated metal products nec	56	57	56	56	54	42	29	27	25	23	21	20	18	19	18	18	21	20	18	19	18
<b>316</b>	<b>Other fabricated metal products</b>	<b>53</b>	<b>53</b>	<b>51</b>	<b>50</b>	<b>48</b>	<b>37</b>	<b>31</b>	<b>29</b>	<b>27</b>	<b>25</b>	<b>23</b>	<b>23</b>	<b>22</b>	<b>22</b>	<b>21</b>	<b>23</b>	<b>23</b>	<b>22</b>	<b>22</b>	<b>23</b>	<b>21</b>
<b>31</b>	<b>FABRICATED METAL PRODUCTS</b>	<b>61</b>	<b>60</b>	<b>60</b>	<b>58</b>	<b>56</b>	<b>44</b>	<b>39</b>	<b>38</b>	<b>34</b>	<b>32</b>	<b>30</b>	<b>31</b>	<b>30</b>	<b>31</b>	<b>27</b>	<b>30</b>	<b>31</b>	<b>30</b>	<b>31</b>	<b>31</b>	<b>27</b>

Table A6.3 (continued)

Industry <sup>b</sup>		1971-72 series					1974-75 series					1977-78 series					
ASIC	Description	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1977	1978	1979	1980	1981	1982
code		-69	-70	-71	-72	-73	-74	-75	-76	-77	-78	-78	-79	-80	-81	-82	-83
TRANSPORT EQUIPMENT																	
3231	Motor vehicles	52	50	53	51	52	41	77	116	104	124	100	111	120	126	143	147
3232	Motor vehicle bodies, trailers, caravans	70	74	72	68	68	52	41	26	28	31	28	28	27	27	31	29
3233	Motor vehicle instruments and electrical equipment nec	51	51	51	48	49	39	35	34	26	28	67	77	86	97	107	110
3234	Motor vehicle parts nec	40	40	38	39	39	29	28	29	30	34	54	63	74	83	91	94
323	Motor vehicles and parts	50	49	50	49	49	38	54	73	67	79	73	81	89	96	108	110
3241	Ships	70	82	80	69	93	66	30	43	41	19	11	8	11	13	17	14
3242	Boats	45	45	45	44	26	19	7	7	9	10	33	33	32	31	31	32
3243	Railway rolling stock and locomotives	67	70	73	74	70	53	53	48	35	39	34	35	34	34	27	25
3244	Aircraft	24	24	24	24	24	19	4	2	-3	-2	-7	-6	-4	-5	-5	-5
3245	Transport equipment nec	71	71	71	69	67	44	42	43	42	42	36	35	35	36	35	24
324	Other transport equipment	51	55	55	52	57	41	21	24	21	13	10	9	11	11	11	10
32	TRANSPORT EQUIPMENT	50	50	51	50	51	39	45	59	54	61	48	53	59	63	71	72
OTHER MACHINERY AND EQUIPMENT																	
3341	Photographic and optical goods ) <sup>d</sup>											4	5	5	6	6	5
3342	Photographic film processing )	15	15	16	14	14	10	9	8	7	7	14	14	14	14	14	14
3343	Measuring, professional and scientific equipment nec	13	13	13	10	11	9	8	8	8	4	3	3	1	2	1	1
334	Photographic, professional and scientific equipment	14	14	14	12	13	9	8	8	8	5	9	9	8	9	8	8

Table A6.3 (continued)

<i>Industry<sup>b</sup></i> <i>ASIC</i>	<i>Description</i>	<i>1971-72 series</i>						<i>1974-75 series</i>						<i>1977-78 series</i>					
		1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
<i>code</i>	<i>Description</i>	-69	-70	-71	-72	-73	-74	-75	-76	-77	-78	-79	-80	-81	-82	-83	-84	-85	-86
3351	Radio and TV receivers; audio equipment) <sup>d</sup>																		
3352	Electronic equipment nec	66	69	57	53	47	31	27	27	23	21	47	48	41	39	38			
3353	Refrigerators and household appliances	53	54	57	58	58	41	34	37	37	41	39	38	38	33	33	27		
3354	Water heating systems	63	63	64	67	66	45	28	26	29	31	32	31	34	34	37	37		
3355	Electric and telephone cable and wire	43	42	42	42	42	32	14	12	11	8	7	5	7	7	6	6		
3356	Batteries	60	64	60	54	56	41	40	39	43	29	41	41	40	39	43	44		
3357	Electrical machinery and equipment nec	27	27	28	27	28	23	27	31	26	8	10	10	10	10	13	12		
<b>335</b>	<b>Appliances and electrical equipment</b>	<b>47</b>	<b>49</b>	<b>46</b>	<b>45</b>	<b>44</b>	<b>32</b>	<b>28</b>	<b>30</b>	<b>27</b>	<b>22</b>	<b>22</b>	<b>23</b>	<b>24</b>	<b>23</b>	<b>24</b>	<b>20</b>		
3361	Agricultural machinery	24	25	26	25	23	20	11	10	11	13	17	17	18	18	18	13		
3362	Construction machinery	40	39	40	43	29	21	29	26	27	31	39	36	31	30	30	28		
3363	Materials handling equipment	39	39	32	32	29	18	25	30	27	30	36	36	35	34	35	33		
3364	Wood and metal working machinery	22	23	24	24	18	12	12	14	13	16	16	17	26	26	27	22		
3365	Pumps and compressors	53	54	55	56	56	44	11	5	9	10	12	12	13	13	14	13		
3366	Commercial space heating and cooling equipment							46	36	32	31	25	27	28	28	29	25		
3367	Dies, saw blades and machine tool accessories	30	30	31	30	27	22	17	16	19	23	20	20	20	19	20	18		
3368	Food processing machinery	30	29	31	34	32	24	20	18	16	15	15	16	18	19	19	17		
3369	Industrial machinery and equipment nec	44	44	48	43	41	30	27	25	14	17	14	15	15	16	17	12		
<b>336</b>	<b>Industrial machinery and equipment</b>	<b>39</b>	<b>39</b>	<b>41</b>	<b>39</b>	<b>36</b>	<b>27</b>	<b>21</b>	<b>20</b>	<b>16</b>	<b>18</b>	<b>19</b>	<b>19</b>	<b>20</b>	<b>20</b>	<b>21</b>	<b>17</b>		
<b>33</b>	<b>OTHER MACHINERY AND EQUIPMENT</b>	<b>43</b>	<b>43</b>	<b>43</b>	<b>44</b>	<b>39</b>	<b>29</b>	<b>24</b>	<b>25</b>	<b>22</b>	<b>21</b>	<b>20</b>	<b>20</b>	<b>21</b>	<b>20</b>	<b>21</b>	<b>18</b>		



Table A6.3 (continued)

Industry <sup>b</sup> ASIC	Description	1971-72 series										1974-75 series										1977-78 series											
		1968		1969		1970		1971		1972		1973		1974		1975		1976		1977		1978		1979		1980		1981		1982			
		-69	-70	-70	-71	-71	-72	-72	-73	-73	-74	-74	-75	-75	-76	-76	-77	-77	-78	-78	-79	-79	-80	-80	-81	-81	-82	-82	-83	-83			
MISCELLANEOUS MANUFACTURING																																	
3451	Leather tanning and fur dressing	42	42	42	42	35	35	23	21	22	20	19	32	34	32	34	37	33	38	39	37	34	37	33	32	34	32	34	37	33			
3452	Leather and leather substitute goods nec	57	59	57	57	56	54	37	46	47	50	48	50	48	44	34	37	32	50	48	44	34	37	32	50	48	44	34	37	32			
345	Leather and leather products	50	50	49	49	45	44	30	33	34	35	33	38	39	37	34	37	33	38	39	37	34	37	33	38	39	37	34	37	33			
3461	Rubber tyres, tubes, belts, hose and sheets	34	33	33	33	31	31	28	30	32	32	34	51	54	53	44	37	31	51	54	53	44	37	31	51	54	53	44	37	31			
3462	Rubber products nec	55	60	59	59	55	51	44	42	39	39	39	33	29	32	32	26	26	33	29	32	32	26	26	33	29	32	32	26	26			
346	Rubber products	40	40	39	39	37	36	32	34	34	34	36	45	45	45	40	33	29	45	45	45	40	33	29	45	45	45	40	33	29			
3471	Flexible packaging and abrasive papers	23	24	23	23	24	22	16	25	20	22	22	19	20	17	21	24	21	19	20	17	21	24	21	19	20	17	21	24	21			
3472	Rigid plastic sheeting	32	33	33	33	24	23	18	18	16	17	15	24	24	23	23	19	24	24	24	23	23	23	19	24	24	23	23	23	19			
3473	Hard surface floor covering nec	25	42	42	42	42	42	34	35	35	35	36	36	37	30	27	26	20	36	37	30	27	26	20	36	37	30	27	26	20			
3474	Plastic products nec	23	25	24	24	20	19	15	20	20	17	20	24	25	24	24	25	25	24	25	24	24	25	25	24	25	24	24	25	25			
347	Plastic and related products	24	25	27	27	23	21	17	21	20	19	21	23	24	22	22	24	24	23	24	22	23	24	24	23	24	22	23	24	24			
3481	Ophthalmic articles	16	15	16	16	16	16	13	21	23	26	22	18	20	21	19	19	16	18	20	21	19	19	16	18	20	21	19	19	16			
3482	Jewellery and silverware	76	74	69	69	60	58	39	19	19	24	24	43	49	49	47	40	43	49	49	47	47	47	40	43	49	49	47	47	40			
3483	Brooms and brushes	58	58	60	60	58	58	40	32	32	30	27	31	21	20	21	20	20	31	21	20	21	20	20	31	21	20	21	20	20			
3484	Signs and advertising displays	51	50	49	49	49	48	38	47	46	37	32	27	27	23	24	25	20	27	27	23	24	25	20	27	27	23	24	25	20			
3485	Sporting equipment	54	55	56	56	54	59	39	29	26	24	22	32	34	26	19	18	18	32	34	26	19	19	18	32	34	26	19	19	18			
3486	Writing and marking equipment	41	42	29	29	28	28	21	18	15	15	15	19	21	22	21	20	24	19	21	22	21	20	24	19	21	22	21	20	24			
3487	Manufacturing nec	58	59	62	62	60	65	47	50	47	45	55	75	64	40	40	41	38	75	64	40	40	41	38	75	64	40	40	41	38			
348	Other manufacturing	52	52	50	50	48	49	35	31	30	29	29	32	32	28	26	24	24	32	32	28	26	26	24	32	32	28	26	26	24			
34	MISC. MANUFACTURING	34	35	32	32	32	31	24	27	25	26	27	30	30	29	28	27	25	30	30	29	28	27	25	30	30	29	28	27	25			
21-34	TOTAL MANUFACTURING	36	36	36	36	35	35	27	27	28	27	26	23	24	23	23	25	25	23	24	23	23	25	25	23	24	23	23	25	25			

**Table A6.3 (continued)**

–	Nil.
..	Between -0.5 per cent and 0.5 per cent.
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.
b	Industry subdivision, group, and class from the Australian Standard Industrial Classification (ASIC) 1978 Edition.
c	Assistance estimates not calculated separately because of confidentiality of data.
d	Assistance estimates not calculated separately because 1969 ASIC class was split into two or more 1978 ASIC classes.
e	1978 ASIC class 2883 was a new class created by combining activities relating to the manufacture of glass wool and glass fibres (previously included in 1969 ASIC class 2813) with those relating to the manufacture of mineral wool and mineral wool products (previously included in 1969 ASIC class 2843). Estimates of assistance for the 1971–72 and 1974–75 series for 1978 ASIC class 2883 are, therefore, included partly in 1978 ASIC group 285 and partly in 1978 ASIC class 2884.

*Source:* Commission estimates.

**Average nominal rates of assistance on outputs<sup>a</sup>, manufacturing industries: 1982-83 to 1996-97 and 2000-01 (per cent)**

Industry <sup>b</sup>	1983–84 series <sup>c</sup>										1989–90 series <sup>d</sup>									
ASIC code	Description	1982	1983	1984	1985	1986	1987	1988	1989	1990	1989	1990	1991	1992	1993	1994	1995	1996	2000	
		–83	–84	–85	–86	–87	–88	–89	–90	–91	–90	–91	–92	–93	–94	–95	–96	–97	–01	
<b>FOOD, BEVERAGES AND TOBACCO</b>																				
2115	Meat (except smallgoods or poultry)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
2116	Poultry	..	..	..	..	1	1	1	1	1	1	1	1	1	1	1	..	..	..	
2117	Bacon, ham and smallgoods nec	5	4	4	5	5	5	4	4	4	3	3	3	3	3	3	2	2	2	
<b>211</b>	<b>Meat products</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>..</b>	<b>..</b>	<b>..</b>	
2121	Liquid milk and cream <sup>e</sup>	15	18	22	23	19	16	9	11	11	10	11	11	11	10	10	8	7	5	
2122	Butter <sup>e</sup>	18	24	25	29	35	30	18	17	17	18	23	23	23	21	20	18	16	10	
2123	Cheese <sup>e</sup>	12	13	10	12	25	18	13	9	9	13	14	14	14	13	12	11	10	6	
2124	Ice cream and frozen confectionse	1	1	1	1	11	8	5	4	4	4	5	5	5	5	5	4	4	3	
2125	Milk products nec <sup>e</sup>	4	12	11	9	26	20	12	11	11	10	12	12	12	11	11	10	9	6	
<b>212</b>	<b>Milk products<sup>e</sup></b>	<b>12</b>	<b>16</b>	<b>17</b>	<b>18</b>	<b>23</b>	<b>18</b>	<b>11</b>	<b>11</b>	<b>11</b>	<b>11</b>	<b>13</b>	<b>13</b>	<b>13</b>	<b>12</b>	<b>11</b>	<b>10</b>	<b>9</b>	<b>6</b>	
2131	Fruit products <sup>e</sup>	28	22	15	19	20	12	11	10	10	13	12	11	10	9	8	7	5	5	
2132	Vegetable products <sup>e</sup>	5	6	5	6	5	6	7	7	7	7	7	7	8	7	6	5	4	4	
<b>213</b>	<b>Fruit and vegetable products<sup>e</sup></b>	<b>15</b>	<b>12</b>	<b>10</b>	<b>11</b>	<b>11</b>	<b>9</b>	<b>9</b>	<b>8</b>	<b>8</b>	<b>10</b>	<b>9</b>	<b>9</b>	<b>9</b>	<b>8</b>	<b>7</b>	<b>6</b>	<b>4</b>	<b>4</b>	
<b>214</b>	<b>Margarine and oils and fats nec</b>	<b>6</b>	<b>7</b>	<b>6</b>	<b>6</b>	<b>7</b>	<b>7</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>5</b>	<b>5</b>	<b>4</b>	<b>3</b>	<b>3</b>	
2151	Flour mill products <sup>e</sup>	3	5	3	3	2	1	..	..	..	..	..	..	..	..	..	..	..	..	
2152	Starch, gluten and starch sugars <sup>e</sup>	3	4	4	4	4	5	4	3	3	3	3	3	2	2	2	2	2	2	
2153	Cereal foods and baking mixes <sup>e</sup>	13	12	10	10	11	12	13	8	7	9	10	9	9	9	8	8	7	7	
<b>215</b>	<b>Flour mill and cereal food products<sup>e</sup></b>	<b>7</b>	<b>8</b>	<b>6</b>	<b>6</b>	<b>7</b>	<b>6</b>	<b>6</b>	<b>4</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>4</b>	<b>4</b>	

Table A6.4 (continued)

Industry <sup>b</sup>		1983-84 series <sup>c</sup>										1989-90 series <sup>d</sup>									
ASIC	Description	1982	1983	1984	1985	1986	1987	1988	1989	1990	1989	1990	1991	1992	1993	1994	1995	1996	2000		
code		-83	-84	-85	-86	-87	-88	-89	-90	-91	-90	-91	-92	-93	-94	-95	-96	-97	-01		
2161	Bread <sup>e</sup>	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-		
2162	Cakes and pastries <sup>e</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
2163	Biscuits <sup>e</sup>	2	2	2	2	2	5	9	9	7	-	9	7	5	5	5	4	4	4		
216	Bread, cakes and biscuits <sup>e</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
2171	Raw sugar <sup>efg</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
2176	Food products nec )	10	7	3	14	11	11	8	11	10	-	5	10	7	8	6	4	4	5		
2173	Confectionary and cocoa products <sup>e</sup>	15	15	15	16	16	17	17	16	15	-	16	15	14	13	11	9	7	5		
2174	Processed seafoods	1	1	1	1	1	1	1	1	1	-	1	1	1	1	1	1	1	1		
2175	Prepared animal and bird foods <sup>e</sup>	2	5	8	4	1	1	2	-	-	-	-	-	-	-	-	-	-	-		
217	Other food products <sup>e</sup>	8	7	11	11	8	8	7	8	8	-	5	8	6	6	5	4	3	3		
2185	Soft drinks, cordials and syrups <sup>e</sup>	10	10	10	11	11	11	11	10	10	-	10	9	8	8	7	6	6	4		
2186	Beer <sup>e</sup>	38	31	35	32	32	36	6	2	2	-	-	-	-	-	-	-	-	-		
2187	Malt <sup>ef</sup>	-	1	1	1	1	1	1	1	1	-	1	1	1	1	1	1	1	1		
2189	Alcoholic beverages nec )	12	4	7	9	8	9	9	9	8	-	-	-	-	-	-	-	-	-		
2188	Wine and brandy <sup>e</sup>	37	36	23	19	18	18	16	16	13	-	12	13	8	18	11	10	8	3		
218	Beverages and malt <sup>e</sup>	25	22	21	20	19	21	9	7	7	-	7	7	6	6	5	4	3	3		
219	Tobacco products <sup>e</sup>	6	10	9	7	9	7	8	7	7	-	9	9	9	9	8	7	6	5		
21	FOOD, BEVERAGES AND TOBACCO <sup>e</sup>	7	8	8	8	8	8	5	5	5	-	5	7	6	6	5	4	3	3		

Table A6.4 (continued)

<i>Industry<sup>b</sup></i>	<i>1983-84 series<sup>c</sup></i>										<i>1989-90 series<sup>d</sup></i>									
<i>ASIC code</i>	<i>Description</i>	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	2000-01	
<b>TEXTILES</b>																				
2341	Cotton ginning	9	9	6	3	15	5	8	-	-	..	..	..	..	..	..	..	..	..	
2342	Wool scouring and top making	..	..	-	-	-	-	-	-	-	..	..	..	..	..	..	..	..	..	
2343	Man-made fibres and yarns	35	37	39	38	34	27	39	27	25	24	5	5	3	2	5	4	4	4	
2344	Man-made fibre broadwoven fabrics	50	49	61	54	49	52	60	60	54	57	51	39	33	28	25	22	20	13	
2345	Cotton yarns and broadwoven fabrics	38	40	41	40	37	36	40	39	38	36	33	29	23	18	16	16	14	10	
2346	Worsted yarns and broadwoven fabrics	22	22	21	22	20	12	16	15	14	14	13	12	11	9	7	6	6	4	
2347	Woollen yarns and broadwoven fabrics	19	19	18	18	18	10	12	12	11	13	12	12	12	10	8	7	6	5	
2348	Narrow woven and elastic textiles	25	25	25	25	25	25	24	23	23	23	23	22	21	19	17	16	14	9	
2349	Textile finishing	40	39	48	42	37	43	51	50	45	43	44	38	31	28	26	23	21	14	
<b>234</b>	<b>Textile fibres, yarns and woven fabrics</b>	<b>22</b>	<b>22</b>	<b>24</b>	<b>22</b>	<b>21</b>	<b>19</b>	<b>22</b>	<b>21</b>	<b>19</b>	<b>16</b>	<b>15</b>	<b>13</b>	<b>11</b>	<b>9</b>	<b>8</b>	<b>7</b>	<b>7</b>	<b>5</b>	
2351	Household textiles	31	32	35	32	36	34	42	43	43	42	42	37	30	28	25	23	21	14	
2352	Textile floor coverings	35	33	33	34	35	35	35	33	31	34	33	32	29	27	25	23	21	14	
2353	Felt and felt products	16	18	18	18	17	16	16	15	15	13	13	13	13	10	9	7	5	5	
2354	Canvas and associated products nec	16	16	16	16	18	22	21	21	21	22	22	21	20	18	16	15	13	9	
2355	Rope, cordage and twine	19	19	19	19	19	19	19	19	20	21	21	21	19	18	16	14	13	9	
2356	Textile products nec	16	19	19	19	20	16	13	12	11	13	11	10	10	8	7	6	4	4	
<b>235</b>	<b>Other textile products</b>	<b>25</b>	<b>26</b>	<b>26</b>	<b>26</b>	<b>27</b>	<b>27</b>	<b>27</b>	<b>26</b>	<b>25</b>	<b>26</b>	<b>25</b>	<b>24</b>	<b>21</b>	<b>19</b>	<b>18</b>	<b>16</b>	<b>14</b>	<b>10</b>	
<b>23</b>	<b>TEXTILES</b>	<b>23</b>	<b>23</b>	<b>25</b>	<b>23</b>	<b>23</b>	<b>22</b>	<b>24</b>	<b>23</b>	<b>21</b>	<b>19</b>	<b>18</b>	<b>16</b>	<b>14</b>	<b>12</b>	<b>11</b>	<b>10</b>	<b>9</b>	<b>6</b>	

Table A6.4 (continued)

Industry <sup>b</sup>		1983–84 series <sup>c</sup>										1989–90 series <sup>d</sup>									
ASIC	Description	1982	1983	1984	1985	1986	1987	1988	1989	1990	1989	1990	1991	1992	1993	1994	1995	1996	2000		
code		–83	–84	–85	–86	–87	–88	–89	–90	–91	–90	–91	–90	–91	–92	–93	–94	–95	–96	–97	–01
CLOTHING AND FOOTWEAR																					
2441	Hosiery	54	50	66	77	76	79	76	64	58			51	50	47	40	36	33	31	28	19
2442	Cardigans and pullovers	81	79	103	80	73	66	68	69	67			67	65	53	49	42	38	36	33	22
2443	Knitted goods nec	49	50	56	44	50	57	48	49	48			55	54	46	38	35	32	30	28	19
244	Knitting mills	59	58	71	61	62	65	60	58	55			56	55	48	41	37	34	31	29	20
2451	Mens trousers and shorts; work clothing	81	95	100	47	53	57	73	74	78			74	76	60	47	44	40	37	35	24
2452	Mens suits and coats; waterproof clothing	75	96	59	50	50	54	67	62	53			68	57	48	41	39	35	33	30	21
2453	Womens outerwear nec	75	85	95	52	56	71	66	67	68			72	72	58	49	43	39	36	34	23
2454	Foundation garments	83	91	106	132	103	45	68	69	70			78	80	69	51	43	39	36	33	23
2455	Underwear and infants clothing nec	78	81	105	68	98	95	84	86	83			82	79	62	47	40	37	34	32	21
2456	Headwear and clothing nec	38	41	47	38	35	33	31	31	31			41	41	35	31	28	26	24	22	15
245	Clothing	72	81	90	56	64	67	67	68	68			67	66	54	44	39	36	33	30	21
246	Footwear	71	102	106	50	64	55	63	68	69			58	61	49	35	31	28	25	23	13
24	CLOTHING AND FOOTWEAR	69	78	78	88	64	64	65	65	65			63	63	52	42	37	34	31	29	19

Table A6.4 (continued)

<i>Industry<sup>b</sup></i>	<i>1983–84 series<sup>c</sup></i>										<i>1989–90 series<sup>d</sup></i>									
<i>ASIC code</i>	<i>Description</i>	1982	1983	1984	1985	1986	1987	1988	1989	1990	1989	1990	1991	1992	1993	1994	1995	1996	1997	2000
		–83	–84	–85	–86	–87	–88	–89	–90	–91	–90	–91	–92	–93	–94	–95	–96	–97		
<b>WOOD, WOOD PRODUCTS AND FURNITURE</b>																				
2531	Log sawmilling	3	4	4	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
2532	Resawn and dressed timber	11	10	9	9	9	9	9	8	7	9	8	7	7	6	6	5	4	4	4
2533	Veneers and manufactured boards of wood	20	20	18	17	16	16	15	13	13	14	14	13	12	10	8	7	4	4	4
2534	Wooden doors	15	13	13	13	13	13	12	11		12	11	10	9	8	7	6	5	5	5
2535	Wooden structural fittings and joinery nec	13	12	12	12	12	12	11	11	10	9	8	8	7	6	6	5	4	4	4
2536	Wooden containers	6	6	7	6	6	6	6	5	5	4	4	3	3	3	3	2	2	2	2
2537	Hardwood woodchips	..	..	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
2538	Wood products nec	14	14	12	14	14	14	13	12	11	12	11	10	9	9	8	7	5	5	5
<b>253</b>	<b>Wood and wood products</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>9</b>	<b>9</b>	<b>9</b>	<b>9</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>7</b>	<b>7</b>	<b>6</b>	<b>6</b>	<b>5</b>	<b>4</b>	<b>3</b>	<b>3</b>	<b>3</b>
2541	Furniture (except sheet metal)	24	24	24	24	25	25	23	20	18	21	18	16	13	11	9	7	4	4	4
2542	Mattresses (except rubber)	7	7	7	7	7	7	6	6	6	6	6	6	5	5	4	4	3	2	2
<b>254</b>	<b>Furniture and mattresses</b>	<b>21</b>	<b>21</b>	<b>21</b>	<b>22</b>	<b>22</b>	<b>22</b>	<b>20</b>	<b>18</b>	<b>16</b>	<b>19</b>	<b>17</b>	<b>14</b>	<b>12</b>	<b>10</b>	<b>8</b>	<b>7</b>	<b>4</b>	<b>4</b>	<b>4</b>
<b>25</b>	<b>WOOD, WOOD PRODUCTS AND FURNITURE</b>	<b>14</b>	<b>14</b>	<b>13</b>	<b>13</b>	<b>14</b>	<b>14</b>	<b>12</b>	<b>11</b>	<b>10</b>	<b>12</b>	<b>11</b>	<b>10</b>	<b>8</b>	<b>7</b>	<b>6</b>	<b>5</b>	<b>4</b>	<b>4</b>	<b>4</b>

Table A6.4 (continued)

<i>Industry<sup>b</sup></i>	<i>1983-84 series<sup>c</sup></i>										<i>1989-90 series<sup>d</sup></i>									
<i>ASIC</i>	<i>Description</i>	1982	1983	1984	1985	1986	1987	1988	1989	1990	1989	1990	1991	1992	1993	1994	1995	1996	2000	
<i>code</i>	<i>Description</i>	-83	-84	-85	-86	-87	-88	-89	-90	-91	-90	-91	-92	-93	-94	-95	-96	-97	-01	
<b>PAPER, PAPER PRODUCTS, PRINTING AND PUBLISHING</b>																				
2631	Pulp, paper and paperboard	9	10	10	10	9	9	8	7	6	6	6	6	6	5	4	3	2	2	
2632	Paper bags (including textile bags)	19	19	19	20	20	21	20	16	13	16	13	13	13	11	9	7	4	4	
2633	Solid fibreboard containers	20	20	19	20	21	20	19	15	13	16	13	13	13	11	9	7	4	4	
2634	Corrugated fibreboard containers	20	20	19	21	21	21	19	15	12	15	12	12	12	10	8	7	4	4	
2635	Paper products nec	17	20	20	21	21	20	17	14	12	14	12	12	12	9	8	6	4	4	
<b>263</b>	<b>Paper and paper products</b>	<b>15</b>	<b>16</b>	<b>16</b>	<b>16</b>	<b>16</b>	<b>16</b>	<b>14</b>	<b>11</b>	<b>10</b>	<b>10</b>	<b>9</b>	<b>9</b>	<b>9</b>	<b>7</b>	<b>6</b>	<b>5</b>	<b>3</b>	<b>3</b>	
2641	Publishing	..	..	..	..	..	..	..	..	..	1	1	1	1	1	1	..	..	..	
2642	Printing and publishing	1	1	1	1	1	1	..	..	..	..	..	..	..	..	..	..	..	..	
2643	Paper stationery	20	21	21	22	22	22	19	15	13	16	13	13	13	10	9	7	4	4	
2644	Printing and bookbinding	22	22	21	22	21	17	11	9	7	10	9	8	8	6	5	4	3	3	
2645	Printing trade services nec	2	2	2	2	2	2	..	..	..	2	1	1	1	1	1	1	..	..	
<b>264</b>	<b>Printing and allied industries</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>9</b>	<b>6</b>	<b>5</b>	<b>4</b>	<b>6</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>4</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>2</b>	
<b>26</b>	<b>PAPER, PAPER PRODUCTS, PRINTING AND PUBLISHING</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>11</b>	<b>9</b>	<b>7</b>	<b>6</b>	<b>7</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>5</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>2</b>	



Table A6.4 (continued)

Industry <sup>b</sup> ASIC	Description	1983-84 series <sup>c</sup>										1989-90 series <sup>d</sup>									
		1982	1983	1984	1985	1986	1987	1988	1989	1990		1989	1990	1991	1992	1993	1994	1995	1996	2000	
		-83	-84	-85	-86	-87	-88	-89	-90	-91		-90	-91	-92	-93	-94	-95	-96	-97	-01	
CHEMICAL, PETROLEUM AND COAL PRODUCTS																					
2751	Chemical fertilisers	1	1	1	1	4	5	1	1	1		-	-	-	-	-	-	-	-	-	
2752	Industrial gases <sup>g</sup>											..	..	..	..	..	..	..	..	..	
2753	Synthetic resins and rubber	20	21	22	22	20	17	15	12	11		13	12	12	12	10	8	7	4	4	
2754	Organic industrial chemicals nec <sup>g</sup>	4	4	4	4	4	4	4	3	3		5	4	4	4	3	3	3	2	2	
2755	Inorganic industrial chemicals nec	13	13	13	14	12	11	10	8	7		4	4	3	3	3	2	2	2	2	
275	Basic chemicals	10	11	11	11	11	10	8	7	6		6	6	5	5	4	4	3	2	2	
2761	Ammunition, explosives and fireworks	6	6	6	6	6	8	10	10	10		9	9	9	9	8	7	6	4	4	
2762	Paints	13	13	13	13	14	14	13	13	13		13	13	13	13	10	9	7	5	5	
2763	Pharmaceutical and veterinary products	3	3	3	3	3	3	2	2	2		1	1	1	1	1	1	1	1	1	
2764	Pesticides	18	21	22	21	21	18	17	15	14		15	14	14	14	11	9	7	5	5	
2765	Soap and other detergents	6	6	6	6	6	10	13	13	13		13	13	13	13	10	9	7	5	5	
2766	Cosmetics and toilet preparations	17	17	17	18	18	18	17	15	14		15	14	14	14	11	9	7	5	5	
2767	Inks	22	22	22	22	22	20	17	15	13		15	14	14	14	11	9	8	5	5	
2768	Chemical products nec	11	12	12	12	12	13	14	13	12		12	11	11	11	9	8	6	4	4	
276	Other chemical products	9	9	9	10	10	10	11	10	9		9	9	9	9	7	6	5	3	3	
277	Petroleum refining	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	
278	Petroleum and coal products nec	10	12	12	12	12	12	10	9	8		8	7	6	5	5	4	4	3	3	
27	CHEMICAL, PETROLEUM AND COAL PRODUCTS	4	4	4	4	4	4	4	3	3		2	2	2	2	2	1	1	1	1	

Table A6.4 (continued)

<i>Industry<sup>b</sup></i> <i>ASIC</i>	<i>Description</i>	<i>1983–84 series<sup>c</sup></i>										<i>1989–90 series<sup>d</sup></i>									
		1982	1983	1984	1985	1986	1987	1988	1989	1990	1989	1990	1991	1992	1993	1994	1995	1996	2000		
<i>code</i>	<i>Description</i>	–83	–84	–85	–86	–87	–88	–89	–90	–91	–90	–91	–92	–93	–94	–95	–96	–97	–01		
<b>NON-METALLIC MINERAL PRODUCTS</b>																					
<b>285</b>	<b>Glass and glass products</b>	6	6	6	6	6	6	5	4	4	4	4	4	4	4	3	3	3	3	3	3
2861	Clay bricks	–	–	..	..	..	..	..	..	..	..	..	–	–	–	–	–	–	–	–	–
2862	Refractories	6	7	7	7	7	7	6	6	6	6	6	2	2	1	1	1	1	1	1	1
2863	Ceramic tiles and pipes	11	11	9	9	9	9	9	8	8	8	8	7	7	6	6	5	5	3	3	3
2864	Ceramic goods nec	16	18	18	18	18	19	18	17	15			17	16	14	13	11	9	8	5	5
<b>286</b>	<b>Clay products and refractories</b>	4	4	4	4	4	4	4	4	3			3	3	3	2	2	2	1	1	1
2871	Cement	1	2	2	3	1	1	..	..	..			–	–	–	–	–	–	–	–	–
2872	Ready-mixed concrete <sup>g</sup>												–	–	–	–	–	–	–	–	–
2873	Cement, concrete pipes & culverts <sup>g</sup>	–	–	..	..	..	..	..	..	..			3	3	3	2	2	2	1	1	1
2874	Concrete products nec	2	2	4	2	2	2	2	2	2			2	2	2	2	2	1	1	1	1
<b>287</b>	<b>Cement and concrete products</b>	1	1	1	2	1	1	1	1	1			1	1	1	1	1	1	..	..	..
2881	Plaster products and expanded minerals <sup>g</sup>												11	10	9	8	7	6	4	4	4
2882	Stone products <sup>g</sup>	10	11	11	11	11	12	10	10	9			11	10	10	9	8	7	6	5	5
2883	Glass wool and mineral wool products	12	12	10	12	12	11	10	9	9			15	13	11	11	9	8	6	4	4
2884	Non-metallic mineral products nec	6	6	6	6	6	7	5	5	5			3	3	2	2	2	2	2	2	2
<b>288</b>	<b>Other non-metallic mineral products</b>	9	9	9	9	9	9	8	8	7			10	9	8	7	6	5	4	4	4
<b>28</b>	<b>NON-METALLIC MINERAL PRODUCTS</b>	3	3	3	3	4	3	3	3	3	2	2	3	3	3	2	2	2	1	1	1

Table A6.4 (continued)

Industry <sup>b</sup> ASIC	Description	1983-84 series <sup>c</sup>										1989-90 series <sup>d</sup>									
		1982 1983 1984 1985 1986 1987 1988 1989 1990										1989 1990 1991 1992 1993 1994 1995 1996 2000									
		-83	-84	-85	-86	-87	-88	-89	-90	-91	-92	-93	-94	-95	-96	-97	-01				
<b>BASIC METAL PRODUCTS</b>																					
2941	Iron and steel basic products	9	9	9	8	8	7	7	6	6	7	7	7	5	5	5	4	4	4		
2942	Iron casting	17	16	16	15	15	15	13	13	12	11	10	10	9	8	7	6	4	4		
2943	Steel casting	29	23	19	18	19	19	17	16	15	15	15	14	13	10	9	7	4	4		
2944	Iron and steel forging	18	15	13	13	13	15	17	16	15	11	11	10	9	8	7	6	4	4		
2945	Steel pipes and tubes	15	15	15	14	14	14	13	11	11	11	10	10	9	8	7	6	4	4		
294	<b>Basic iron and steel</b>	10	10	10	9	9	8	8	7	7	8	8	7	6	5	5	4	4	4		
2951	Copper smelting, refining <sup>g</sup>										1	1	1	1	1	1	1	..	..		
2952	Silver, lead, zinc smelting, refining	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		
2953	Alumina	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		
2954	Aluminium smelting	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		
2955	Nickel smelting, refining <sup>g</sup>	1	1	1	1	1	1	1	1	1	..	..	..	..	..	..	..	..	..		
2956	Non-ferrous metals nec, smelting, refining )	2	2	1	2	2	2	..	..	..	..	..	..	..	..	..	..	..	..		
2957	Secondary recovery and alloying of ) non-ferrous metals nec ) <sup>f</sup>	2	2	2	2	2	2	2	..	..	..	..	..	..	..	..	..	..	..		
295	<b>Basic non-ferrous metals</b>	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..		
2961	Aluminium rolling, drawing, extruding	12	12	12	12	12	12	11	10	10	12	11	10	9	8	7	6	4	4		
2962	Non-ferrous metals nec, rolling, drawing, extruding	7	7	7	7	7	7	7	7	7	8	7	7	7	7	6	5	4	4		
2963	Non-ferrous metal casting	9	9	9	9	9	9	7	7	6	14	13	13	12	9	8	6	4	4		
296	<b>Non-ferrous metal basic products</b>	10	10	10	10	10	10	10	9	9	10	10	9	9	8	7	6	4	4		
29	<b>BASIC METAL PRODUCTS</b>	6	6	6	6	6	5	5	5	5	4	4	4	3	3	3	2	2	2		

Table A6.4 (continued)

Industry <sup>b</sup>		1983–84 series <sup>c</sup>										1989–90 series <sup>d</sup>									
ASIC	Description	1982	1983	1984	1985	1986	1987	1988	1989	1990		1989	1990	1991	1992	1993	1994	1995	1996	2000	
code		–83	–84	–85	–86	–87	–88	–89	–90	–91		–90	–91	–92	–93	–94	–95	–96	–97	–01	
FABRICATED METAL PRODUCTS																					
3141	Fabricated structural steel	18	13	11	11	11	11	9	9	8		7	7	6	6	5	5	4	3	3	
3142	Architectural aluminium products	17	16	17	17	17	17	17	16	15		14	14	13	12	10	8	7	4	4	
3143	Architectural metal products nec	19	16	15	15	15	15	14	13	12		13	12	11	10	9	8	6	4	4	
314	Structural metal products	17	14	13	13	13	13	12	11	10		10	9	9	8	7	6	5	4	4	
3151	Metal containers	15	15	18	15	15	15	13	12	11		14	13	13	12	10	8	7	4	4	
3152	Sheet metal furniture	22	22	21	22	22	22	20	18	15		18	16	14	12	10	8	7	4	4	
3153	Sheet metal products nec	21	18	16	15	15	16	16	15	14		14	14	13	12	9	8	6	4	4	
315	Sheet metal products	19	17	16	16	16	16	15	14	13		15	14	13	12	10	8	7	4	4	
3161	Cutlery and hand tools nec	18	18	18	18	18	18	16	16	14		16	15	14	13	11	9	7	5	5	
3162	Springs and wire products	25	21	16	15	16	15	13	12	11		12	12	11	10	8	7	6	4	4	
3163	Nuts, bolts, screws and rivets	18	22	21	22	22	22	20	18	17		18	17	15	13	11	9	7	5	5	
3164	Metal coating and finishing	19	17	16	16	16	16	15	14	13		15	14	14	13	10	9	7	4	4	
3165	Non-ferrous steam, gas and water fittings	19	19	19	20	20	20	18	17	16		16	15	14	13	10	9	7	4	4	
3166	Boiler and plate work	21	19	18	18	18	18	17	16	15		16	15	14	13	11	9	8	5	5	
3167	Metal blinds and awnings	19	18	17	17	18	19	18	18	17		17	16	15	14	11	10	8	5	5	
3168	Fabricated metal products nec	26	21	19	18	18	18	17	16	15		14	13	12	11	9	8	7	4	4	
316	Other fabricated metal products	22	20	18	18	18	18	16	15	14		15	14	13	12	10	8	7	4	4	
31	FABRICATED METAL PRODUCTS	20	17	16	15	16	15	14	13	12		13	12	11	10	9	7	6	4	4	

Table A6.4 (continued)

Industry <sup>b</sup>	Description	1983-84 series <sup>c</sup>										1989-90 series <sup>d</sup>									
		ASIC																			
		1982	1983	1984	1985	1986	1987	1988	1989	1990		1989	1990	1991	1992	1993	1994	1995	1996	2000	
code		-83	-84	-85	-86	-87	-88	-89	-90	-91		-90	-91	-92	-93	-94	-95	-96	-97	-01	
TRANSPORT EQUIPMENT																					
3231	Motor vehicles <sup>h</sup>	59	60	59	49	35	33	29	30	28		29	27	25	23	21	19	17	15	10	
3232	Motor vehicle bodies, trailers, caravans	22	22	23	24	24	22	19	19	17		18	17	15	13	10	9	7	5	4	
3233	Motor vehicle instruments and electrical equipment nec <sup>h</sup>	45	45	38	25	15	15	22	26	24		28	26	25	23	21	20	19	18	13	
3234	Motor vehicle parts nec <sup>h</sup>	38	41	35	23	14	14	20	24	22		27	25	23	22	20	19	18	17	13	
323	Motor vehicles and part <sup>sh</sup>	50	51	49	40	28	27	26	27	25		28	26	24	22	20	19	17	15	10	
3241	Ships	19	19	19	18	18	18	16	15	14		14	13	11	10	8	7	6	4	4	
3242	Boats	16	18	18	18	18	17	15	14			18	17	15	14	12	10	9	6	6	
3243	Railway rolling stock and locomotives	18	19	18	18	18	17	16	15			16	15	14	13	11	9	7	5	5	
3244	Aircraft	2	2	2	2	2	2	2	1	1		1	1	1	1	1	1	1	..	..	
3245	Transport equipment nec	18	21	20	20	21	21	20	18	16		15	11	10	9	8	7	6	4	4	
324	Other transport equipment	14	14	14	14	14	14	13	12	11		10	9	8	7	6	5	4	3	3	
32	TRANSPORT EQUIPMENT <sup>h</sup>	38	39	38	31	23	22	22	22	21		24	22	20	19	17	15	14	12	9	
OTHER MACHINERY AND EQUIPMENT																					
3341	Photographic and optical goods	5	6	6	6	7	6	6	8	10		13	14	13	10	7	7	6	4	4	
3342	Photographic film processing	2	2	2	2	2	2	-	-	-		1	1	1	1	1	1	1	..	..	
3343	Measuring, professional and scientific equipment nec	8	7	7	7	7	7	7	6	5		10	9	8	9	8	7	6	5	5	
334	Photographic, professional and scientific equipment	5	5	5	5	5	5	4	4	4		8	8	7	7	5	5	4	3	3	

Table A6.4 (continued)

Industry <sup>b</sup>	Description	1983–84 series <sup>c</sup>										1989–90 series <sup>d</sup>									
		ASIC																			
		1982	1983	1984	1985	1986	1987	1988	1989	1990	1989	1990	1991	1992	1993	1994	1995	1996	2000		
code		–83	–84	–85	–86	–87	–88	–89	–90	–91	–90	–91	–92	–93	–94	–95	–96	–97	–01		
3351	Radio and TV receivers; audio equipment	22	18	19	25	18	15	13	12	11											
3352	Electronic equipment nec	23	23	23	23	19	19	18	16	15											
3353	Refrigerators and household appliances	23	23	23	22	23	23	21	19	17											
3354	Water heating systems	18	19	23	20	20	20	19	17	16											
3355	Electric and telephone cable and wire	16	15	15	15	15	15	14	13	12											
3356	Batteries	29	30	30	30	30	30	27	23	20											
3357	Electrical machinery and equipment nec	19	19	19	19	18	17	15	14	13											
335	Appliances and electrical equipment	21	21	21	21	20	19	17	16	14											
3361	Agricultural machinery	12	12	12	15	11	10	8	5	4											
3362	Construction machinery	20	14	13	15	18	17	14	12	11											
3363	Materials handling equipment	19	20	19	19	20	20	19	17	15											
3364	Wood and metal working machinery	29	20	19	19	17	15	12	11	10											
3365	Pumps and compressors	16	17	17	17	18	18	16	15	13											
3366	Commercial space heating and cooling equipment	23	23	23	23	24	23	21	19	17											
3367	Dies, saw blades and machine tool accessories	15	16	14	14	14	15	14	13	13											
3368	Food processing machinery	13	17	17	17	17	16	14	13	12											
3369	Industrial machinery and equipment nec	12	13	12	12	12	11	10	10	9											
336	Industrial machinery and equipment	15	15	14	14	14	14	12	11	10											
33	OTHER MACHINERY AND EQUIPMENT	17	17	17	17	16	16	14	13	12											

Table A6.4 (continued)

Industry <sup>b</sup>		1983-84 series <sup>c</sup>										1989-90 series <sup>d</sup>									
ASIC	Description	1982	1983	1984	1985	1986	1987	1988	1989	1990		1989	1990	1991	1992	1993	1994	1995	1996	2000	
code		-83	-84	-85	-86	-87	-88	-89	-90	-91		-90	-91	-92	-93	-94	-95	-96	-97	-01	
MISCELLANEOUS MANUFACTURING																					
3451	Leather tanning and fur dressing	5	5	5	5	5	6	6	6	6		8	8	8	7	6	5	4	3	3	
3452	Leather and leather substitute goods nec	22	22	22	23	23	20	20	19	18		16	16	15	14	13	11	10	8	6	
345	Leather and leather products	8	9	9	9	9	9	9	9	9		9	9	9	8	7	6	5	3	3	
3461	Rubber tyres, tubes, belts, hose and sheets	20	20	20	21	21	20	18	17	15		16	15	13	12	10	10	9	7	7	
3462	Rubber products nec	23	24	24	25	25	23	21	19	18		17	16	15	12	10	9	7	5	5	
346	Rubber products	21	21	21	22	22	21	19	18	16		16	15	14	12	10	9	8	6	6	
3471	Flexible packaging and abrasive papers	19	21	20	21	20	19	17	15	14		14	13	13	13	10	8	7	4	4	
3472	Rigid plastic sheeting )fg																				
3473	Hard surface floor covering nec )	17	18	17	17	17	16	14	12	11		10	9	9	9	7	6	5	3	3	
3474	Plastic products nec	21	20	21	21	21	19	16	15	14		15	14	14	13	11	9	7	5	5	
347	Plastic and related products	20	21	20	21	20	19	16	15	14		14	13	13	13	10	9	7	5	5	
3481	Ophthalmic articles	15	15	15	15	15	14	12	10			15	13	13	13	11	9	7	5	5	
3482	Jewellery and silverware	13	23	23	21	22	20	18	17			11	10	9	9	8	7	6	5	5	
3483	Brooms and brushes	22	22	22	22	22	20	18	16			18	17	15	13	11	9	7	5	5	
3484	Signs and advertising displays	18	13	12	12	12	15	16	15	14		18	16	15	13	11	9	7	5	5	
3485	Sporting equipment	20	22	21	21	21	21	20	18	16		19	18	16	15	13	11	9	7	7	
3486	Writing and marking equipment	13	15	15	14	15	15	14	13	12		12	11	10	10	8	7	5	3	3	
3487	Manufacturing nec	17	18	17	17	18	18	16	14	13		9	8	7	7	6	5	4	3	3	
348	Other manufacturing	17	18	17	17	18	18	17	16	14		15	14	12	11	10	8	7	5	5	
34	MISC. MANUFACTURING	19	19	19	19	19	18	16	15	14		14	13	13	12	10	9	7	5	5	
21-34	TOTAL MANUFACTURING	13	13	13	12	12	11	10	9	9		9	8	8	7	6	5	5	4	3	

**Table A6.4 (continued)**

—	Nil.
..	Between 0 per cent and 0.5 per cent.
a	Assistance provided by tariffs and certain non-tariff measures. An industry's nominal rate of assistance on outputs is an average of the nominal rates on the products made by that industry, weighted by the unassisted value of output for each product.
b	Industry subdivision, group, and class from the Australian Standard Industrial Classification (ASIC) 1983 Edition.
c	For 1987–88 only, following the introduction of the Harmonised Tariff System on 1 January 1988, it was necessary to construct new concordances between the Harmonised tariff items and the outputs produced 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 Harmonised concordances.
d	Estimates for 1992–93 to 2000–01 reflect 1991–92 prices.
e	Estimates for 1993–94 and projections through to 2000–01 reflect Commission projections of assistance to agricultural commodities. These exclude recent changes to assistance arrangements for dairy and tobacco resulting from the Uruguay Round.
f	Assistance estimates not calculated separately because 1989–90 production data are confidential.
g	Assistance estimates not calculated separately because 1983–84 production data are confidential.
h	The estimates up until the first half of 1988–89 are based on an estimate of the average price disadvantage on components used as original equipment under the local content plan. In 1986–87, 1987–88 and the first half of 1988–89, the average price disadvantage was estimated to be 10 per cent. 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. For 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.

*Source:* Commission estimates.



Table A6.5

# **Average nominal rates of assistance on materials<sup>a</sup>, manufacturing industries: 1982–83 to 1996–97 and 2000–01 (per cent)**

<i>Industry<sup>b</sup></i>	<i>1983–84 series<sup>c</sup></i>										<i>1989–90 series<sup>d</sup></i>									
<i>ASIC</i>	<i>1982 1983 1984 1985 1986 1987 1988 1989 1990</i>										<i>1989 1990 1991 1992 1993 1994 1995 1996 2000</i>									
<i>code</i>	<i>Description</i>	<i>–83</i>	<i>–84</i>	<i>–85</i>	<i>–86</i>	<i>–87</i>	<i>–88</i>	<i>–89</i>	<i>–90</i>	<i>–91</i>	<i>–90</i>	<i>–91</i>	<i>–92</i>	<i>–93</i>	<i>–94</i>	<i>–95</i>	<i>–96</i>	<i>–97</i>	<i>–01</i>	
<b>FOOD, BEVERAGES AND TOBACCO</b>																				
2115	Meat (except smallgoods or poultry)	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	
2116	Poultry	2	2	2	1	1	1	1	..	..	..	..	..	..	..	..	..	..	..	
2117	Bacon, ham and smallgoods nec	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	..	
211	<b>Meat products</b>	1	1	1	1	1	1	..	..	..	..	..	..	..	..	..	..	..	..	
2121	Liquid milk and cream <sup>e</sup>	22	26	31	32	28	23	14	16	16	16	19	18	18	16	16	14	12	8	
2122	Butter <sup>e</sup>	21	28	29	34	41	35	21	19	19	20	23	23	23	21	21	19	17	11	
2123	Cheese <sup>e</sup>	18	20	16	19	37	26	20	14	14	17	18	18	18	16	15	14	12	8	
2124	Ice cream and frozen confections <sup>e</sup>	15	20	26	33	51	39	27	22	21	12	15	14	14	12	11	9	9	7	
2125	Milk products nec <sup>e</sup>	13	21	19	16	51	40	21	18	18	10	14	12	12	11	9	8	8	6	
212	<b>Milk products<sup>e</sup></b>	20	24	26	28	36	28	18	17	17	16	19	18	18	16	16	14	13	8	
2131	Fruit products <sup>e</sup>	20	19	14	14	14	10	12	11	10	10	9	8	8	7	6	5	3	3	
2132	Vegetable products <sup>e</sup>	8	8	9	9	8	7	6	6	6	4	4	4	4	3	3	2	2	1	
213	<b>Fruit and vegetable products<sup>e</sup></b>	13	13	11	11	11	8	9	8	8	7	7	6	6	5	4	3	2	2	
214	<b>Margarine and oils and fats nec</b>	4	4	4	4	4	4	4	3	3	2	2	2	2	2	1	1	1	1	
2151	Flour mill products <sup>e</sup>	11	32	4	16	11	3	3	..	..	1	1	1	1	..	..	..	..	..	
2152	Starch, gluten and starch sugars	2	2	2	2	2	2	1	1	..	1	1	1	1	1	1	1	1	1	
2153	Cereal foods and baking mixes <sup>e</sup>	27	26	18	19	21	23	23	11	11	11	11	11	11	10	10	9	8	8	
215	<b>Flour mill and cereal food products<sup>e</sup></b>	15	24	14	15	14	10	10	5	5	6	5	5	5	5	5	4	4	4	

Table A6.5 (continued)

Industry <sup>b</sup>	1983-84 series <sup>c</sup>										1989-90 series <sup>d</sup>									
	ASIC																			
	code	Description	1982	1983	1984	1985	1986	1987	1988	1989	1990	1989	1990	1991	1992	1993	1994	1995	1996	2000
		-83	-84	-85	-86	-87	-88	-89	-90	-91		-90	-91	-92	-93	-94	-95	-96	-97	-01
2161	Bread <sup>e</sup>	5	7	5	5	5	5	3	3	3		2	1	1	1	1	1	1	1	1
2162	Cakes and pastries <sup>e</sup>	12	16	11	10	9	10	8	7	7		5	6	5	5	4	3	3	2	2
2163	Biscuits <sup>e</sup>	10	11	12	12	10	11	8	9	9		8	8	7	7	6	5	4	3	3
216	Bread, cakes and biscuits <sup>e</sup>	8	10	8	8	8	7	6	5	5		4	4	4	4	3	2	2	2	1
2171	Raw sugar <sup>efg</sup>																			
2176	Food products nec )	15	12	23	26	19	18	14	15	15		8	16	11	12	10	7	6	7	7
2173	Confectionary and cocoa products <sup>e</sup>	10	10	13	12	11	11	8	10	9		10	11	10	9	8	7	6	5	4
2174	Processed seafoods	1	1	1	1	1	1	1	1	1		1	1	1	..	..	..	..	..	..
2175	Prepared animal and bird food <sup>e</sup>	3	4	5	3	2	2	2	1	1		2	2	2	2	1	1	1	1	1
217	Other food products <sup>e</sup>	9	8	14	14	10	10	8	8	8		6	10	8	8	6	5	4	4	4
2185	Soft drinks, cordials and syrups <sup>e</sup>	13	11	13	14	12	12	10	11	11		9	10	8	7	6	5	4	4	4
2186	Beer <sup>e</sup>	6	5	6	6	6	6	4	5	4		5	5	5	4	4	3	3	2	2
2187	Malt <sup>ef</sup>	1	..	..	..	..	1	..	..	..		1	1	1	..	..	..	..	..	..
2189	Alcoholic beverages nec )	26	23	21	28	26	18	6	5	5										
2188	Wine and brandy <sup>e</sup>	16	17	14	14	12	13	15	11	9		10	9	8	8	6	5	4	3	3
218	Beverages and malt <sup>e</sup>	9	9	9	10	9	9	8	8	7		7	7	6	6	5	4	3	3	3
219	Tobacco products <sup>e</sup>	24	21	24	14	9	11	20	17	18		17	13	12	11	9	8	6	4	4
21	FOOD, BEVERAGES AND TOBACCO	8	8	9	9	9	8	6	6	6		5	7	6	6	5	4	4	3	3

Table A6.5 (continued)

Industry <sup>b</sup>	1983-84 series <sup>c</sup>										1989-90 series <sup>d</sup>									
ASIC	1982 1983 1984 1985 1986 1987 1988 1989 1990										1989 1990 1991 1992 1993 1994 1995 1996 2000									
code	Description	-83	-84	-85	-86	-87	-88	-89	-90	-91	-90	-91	-92	-93	-94	-95	-96	-97	-01	
TEXTILES																				
2341	Cotton ginning	10	10	7	4	16	6	9	..	..	..	..	..	..	..	..	..	..	..	
2342	Wool scouring and top making	2	-	-	-	-	-	-	-	-	..	..	..	..	..	..	..	..	..	
2343	Man-made fibres and yarns	8	8	8	9	9	6	4	4	4	1	1	1	1	..	..	..	..	..	
2344	Man-made fibre broadwoven fabrics	6	6	6	7	7	6	5	5	4	10	10	9	9	8	7	6	4	4	
2345	Cotton yarns and broadwoven fabrics	4	8	6	4	12	10	12	7	7	6	6	6	6	5	4	3	2	2	
2346	Worsted yarns and broadwoven fabrics	3	3	3	3	3	3	1	1	1	..	..	..	..	..	..	..	..	..	
2347	Woollen yarns and broadwoven fabrics	3	3	3	3	4	3	1	1	..	5	5	5	5	4	3	3	2	2	
2348	Narrow woven and elastic textiles	6	6	6	7	7	5	3	3	2	8	7	7	7	6	5	5	3	3	
2349	Textile finishing	20	22	23	22	18	17	17	16	15	29	27	23	21	20	18	16	14	9	
234	Textile fibres, yarns and woven fabrics	7	7	6	5	8	5	5	3	3	5	4	4	4	3	3	3	2	2	
2351	Household textiles	21	19	24	21	18	22	26	25	21	37	33	26	24	21	20	18	16	10	
2352	Textile floor coverings	6	6	6	7	7	9	11	11	11	8	8	8	8	6	5	4	3	3	
2353	Felt and felt products	2	1	1	3	5	4	2	1	1	2	2	2	2	2	2	2	2	2	
2354	Canvas and associated products nec	22	21	27	24	22	26	29	28	26	26	23	19	17	15	13	12	10	7	
2355	Rope, cordage and twine	6	6	6	6	6	8	10	9	10	6	5	5	5	4	3	2	2	2	
2356	Textile products nec	9	10	11	10	9	10	11	10	8	4	4	4	4	3	3	2	1	1	
235	Other textile products	11	11	12	11	11	13	15	14	13	12	11	10	9	8	7	6	5	4	
23	TEXTILES	8	8	8	7	9	7	8	6	6	7	6	6	5	4	4	4	3	2	

Table A6.5 (continued)

Industry <sup>b</sup> ASIC code	Description	1983-84 series <sup>c</sup>										1989-90 series <sup>d</sup>									
		1982	1983	1984	1985	1986	1987	1988	1989	1990	1989	1990	1991	1992	1993	1994	1995	1996	2000		
		-83	-84	-85	-86	-87	-88	-89	-90	-91	-90	-91	-92	-93	-94	-95	-96	-97	-01		
CLOTHING AND FOOTWEAR																					
2441	Hosiery	4	4	4	4	4	7	9	9	8	9	9	9	9	7	6	6	4	4		
2442	Cardigans and pullovers	8	7	7	7	7	8	9	8	8	13	13	13	12	10	9	9	7	6		
2443	Knitted goods nec	6	6	6	7	7	8	9	9	9	11	11	11	11	9	7	7	5	4		
244	Knitting mills	6	6	6	6	7	8	9	9	9	11	11	11	11	9	8	7	5	5		
2451	Mens trousers and shorts; work clothing	26	24	29	26	23	29	35	33	30	33	30	25	22	20	18	17	15	10		
2452	Mens suits and coats; waterproof clothing	16	15	19	16	13	17	21	21	17	25	23	22	20	19	17	16	15	10		
2453	Womens outdoor nec	23	21	26	22	19	25	30	29	25	37	33	27	25	22	20	19	17	11		
2454	Foundation garments	14	13	16	16	22	11	25	15	14	18	18	18	16	15	14	13	12	8		
2455	Underwear and infants clothing nec	20	19	21	19	18	21	24	23	21	29	27	25	22	20	18	17	15	10		
2456	Headwear and clothing nec	20	19	19	19	18	20	22	20	19	24	21	19	17	16	14	13	11	8		
245	Clothing	22	20	24	21	19	23	28	26	23	29	27	23	21	19	18	16	14	9		
246	Footwear	19	20	26	27	25	20	13	17	17	18	19	17	11	9	8	7	5	5		
24	CLOTHING AND FOOTWEAR	17	17	17	20	17	19	21	21	19	22	21	19	17	15	13	12	10	7		

Table A6.5 (continued)

Industry <sup>b</sup> ASIC code	Description	1983-84 series <sup>c</sup>										1989-90 series <sup>d</sup>									
		1982	1983	1984	1985	1986	1987	1988	1989	1990	1989	1990	1991	1992	1993	1994	1995	1996	2000		
		-83	-84	-85	-86	-87	-88	-89	-90	-91	-90	-91	-92	-93	-94	-95	-96	-97	-01		
<b>WOOD, WOOD PRODUCTS AND FURNITURE</b>																					
2531	Log sawmilling	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1		
2532	Resawn and dressed timber	3	3	3	3	3	3	2	2	2	2	2	1	1	1	1	1	1	1		
2533	Veneers and manufactured boards of wood	10	10	9	9	9	8	8	7	7	7	6	6	6	5	4	3	2	2		
2534	Wooden doors	15	14	14	12	12	11	10	9	9	7	7	6	6	5	5	4	3	3		
2535	Wooden structural fittings and joinery nec	10	10	9	9	8	8	8	7	7	10	9	9	8	7	6	5	3	3		
2536	Wooden containers	4	4	4	4	4	4	3	3	3	6	5	5	5	4	4	3	3	3		
2537	Hardwood woodchips	..	..	..	..	..	..	..	..	..	2	2	2	1	1	1	1	1	1		
2538	Wood products nec	6	7	6	6	6	6	5	5	5	8	7	7	7	6	5	4	3	3		
253	Wood and wood products	6	6	6	6	6	6	5	5	5	6	6	5	5	4	4	3	2	2		
2541	Furniture (except sheet metal)	16	16	16	15	14	14	14	13	12	12	11	10	9	8	7	6	4	4		
2542	Mattresses (except rubber)	16	17	17	16	15	15	14	14	13	13	12	11	10	8	7	6	4	4		
254	Furniture and mattresses	16	16	16	15	14	14	14	13	12	12	11	10	10	8	7	6	4	4		
25	WOOD, WOOD PRODUCTS AND FURNITURE	10	10	9	9	9	9	8	8	7	8	8	7	7	6	5	4	3	3		

Table A6.5 (continued)

<i>Industry<sup>b</sup></i>	<i>1983-84 series<sup>c</sup></i>										<i>1989-90 series<sup>d</sup></i>									
<i>ASIC</i>	<i>Description</i>	1982	1983	1984	1985	1986	1987	1988	1989	1990	1989	1990	1991	1992	1993	1994	1995	1996	2000	
<i>code</i>	<i>Description</i>	-83	-84	-85	-86	-87	-88	-89	-90	-91	-90	-91	-92	-93	-94	-95	-96	-97	-01	
<b>PAPER, PAPER PRODUCTS, PRINTING AND PUBLISHING</b>																				
2631	Pulp, paper and paperboard	5	4	4	4	4	3	2	1	1	2	2	2	2	1	1	1	1	1	
2632	Paper bags (including textile bags)	13	14	14	14	14	14	12	10	10	9	9	9	9	7	6	5	4	4	
2633	Solid fibreboard containers	7	8	8	7	7	8	7	7	6	7	6	6	6	5	4	4	3	3	
2634	Corrugated fibreboard containers	11	13	13	12	13	13	11	10	9	8	8	8	8	6	5	5	3	3	
2635	Paper products nec	8	8	8	8	9	8	7	6	6	6	5	5	5	4	4	3	2	2	
<b>263</b>	<b>Paper and paper products</b>	<b>7</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>6</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>2</b>	
2641	Publishing	1	1	1	1	1	1	1	1	1	5	5	5	5	4	4	3	2	2	
2642	Printing and publishing	2	2	2	2	2	2	2	1	1	..	..	..	..	..	..	..	..	..	
2643	Paper stationery	11	12	12	12	12	12	10	8	8	8	7	7	7	6	5	4	3	3	
2644	Printing and bookbinding	10	11	11	11	11	10	9	8	7	6	6	6	6	5	4	3	2	2	
2645	Printing trade services nec	6	6	6	6	10	9	8	8	7	5	4	4	4	3	3	2	2	2	
<b>264</b>	<b>Printing and allied industries</b>	<b>7</b>	<b>8</b>	<b>7</b>	<b>7</b>	<b>8</b>	<b>7</b>	<b>6</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>4</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>2</b>	
<b>26</b>	<b>PAPER, PAPER PRODUCTS, PRINTING AND PUBLISHING</b>	<b>7</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>7</b>	<b>6</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>2</b>	

Table A6.5 (continued)

[illegible]

Table A6.5 (continued)

Industry <sup>b</sup>	1983-84 series <sup>c</sup>										1989-90 series <sup>d</sup>									
ASIC	Description	1982	1983	1984	1985	1986	1987	1988	1989	1990	1989	1990	1991	1992	1993	1994	1995	1996	2000	
code		-83	-84	-85	-86	-87	-88	-89	-90	-91	-90	-91	-92	-93	-94	-95	-96	-97	-01	
NON-METALLIC MINERAL PRODUCTS																				
285	Glass and glass products	6	7	6	7	7	7	7	6	5	5	4	4	4	3	3	3	2	2	
2861	Clay bricks	1	1	1	1	2	2	1	1	1	1	1	1	..	..	..	..	..	..	
2862	Refractories	3	2	2	3	3	3	2	1	1	1	..	..	..	..	..	..	..	..	
2863	Ceramic tiles and pipes	4	4	3	3	3	4	3	3	3	3	3	3	3	2	2	2	1	1	
2864	Ceramic goods nec	6	6	7	7	7	8	8	7	6	6	5	4	4	4	3	3	2	2	
286	Clay products and refractories	2	2	2	2	2	3	2	2	2	1	1	1	1	1	1	1	1	1	
2871	Cement	..	..	..	1	1	1	1	..	..	..	..	..	..	..	..	..	..	..	
2872	Ready-mixed concrete <sup>g</sup>										1	1	1	1	1	1	1	1	1	
2873	Cement, concrete pipes & culverts <sup>g</sup>	1	2	2	2	1	1	..	..	..	..	..	..	..	..	..	..	..	..	
2874	Concrete products nec	3	4	4	4	4	4	3	3	3	1	1	1	1	1	1	1	1	1	
287	Cement and concrete products	3	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	..	..	
2881	Plaster products and expanded minerals <sup>g</sup>										5	4	4	4	4	3	3	2	2	
2882	Stone products <sup>g</sup>	5	5	5	5	7	6	5	5	5	4	4	3	3	3	3	2	2	2	
2883	Glass wool and mineral wool products	9	9	9	9	8	6	5	5	4	7	7	6	5	5	4	4	3	2	
2884	Non-metallic mineral products nec	5	5	5	5	5	5	4	4	4	3	3	3	2	2	2	2	1	1	
288	Other non-metallic mineral products	5	6	6	6	6	6	5	4	4	5	4	4	4	3	3	3	2	2	
28	NON-METALLIC MINERAL PRODUCTS	2	3	3	3	3	3	2	2	2	2	2	2	2	1	1	1	1	1	



Table A6.5 (continued)

Industry <sup>b</sup>	Description	1983–84 series <sup>c</sup>										1989–90 series <sup>d</sup>									
		ASIC										ASIC									
		1982	1983	1984	1985	1986	–87	–88	–89	–90	–91	1989	1990	1991	1992	1993	1994	1995	1996	2000	
code		–83	–84	–85	–86	–87	–88	–89	–90	–91		–90	–91	–92	–93	–94	–95	–96	–97	–01	
BASIC METAL PRODUCTS																					
2941	Iron and steel basic products	8	7	7	7	6	6	6	6	5		3	3	2	2	2	2	2	2	2	
2942	Iron casting	8	5	4	4	4	4	4	4	4		2	2	2	2	2	1	1	1	1	
2943	Steel casting	5	4	3	3	3	4	4	3	3		3	3	3	3	2	2	2	1	1	
2944	Iron and steel forging	7	7	7	6	7	7	7	6	6		3	3	3	3	2	2	2	2	2	
2945	Steel pipes and tubes	12	12	11	10	10	9	9	9	8		6	6	6	4	4	4	4	4	4	
294	Basic iron and steel	8	8	7	7	7	6	6	6	5		3	3	3	2	2	2	2	2	2	
2951	Copper smelting, refinings											..	..	..	..	..	..	..	..	..	
2952	Silver, lead, zinc smelting, refining	1	..	..	..	..	..	..	..	..		..	..	..	..	..	..	..	..	..	
2953	Alumina	5	5	5	5	9	6	5	4	4		2	2	2	1	1	1	1	1	1	
2954	Aluminium smelting	2	1	1	1	1	2	1	1	1		..	..	..	..	..	..	..	..	..	
2955	Nickel smelting, refinings	2	2	2	2	3	3	1	1	1		–	–	–	–	–	–	–	–	–	
2956	Non-ferrous metals nec, smelting, refining )	2	2	2	2	2	2	..	..	..											
2957	Secondary recovery and alloying of )																				
	non-ferrous metals nec )f	2	2	2	2	2	2	2	..	..		1	1	1	1	1	1	1	1	1	
295	Basic non-ferrous metals	3	2	2	2	4	3	2	2	2		1	1	..	..	..	..	..	..	..	
2961	Aluminium rolling, drawing, extruding	4	2	2	2	2	2	..	..	..		..	..	..	..	..	..	..	..	..	
2962	Non-ferrous metals nec, rolling, drawing, extruding	2	2	2	2	2	2	..	..	..		4	4	4	4	3	3	3	2	2	
2963	Non-ferrous metal casting	3	2	2	2	2	2	..	..	..		4	3	3	3	3	2	2	1	1	
296	Non-ferrous metal basic products	3	2	2	2	2	2	..	..	..		2	2	2	1	1	1	1	1	1	
29	BASIC METAL PRODUCTS	5	5	4	4	4	5	4	3	3		2	2	2	1	1	1	1	1	1	

Table A6.5 (continued)

<i>Industry<sup>b</sup></i> <i>ASIC</i>	<i>Description</i>	<i>1983-84 series<sup>c</sup></i>										<i>1989-90 series<sup>d</sup></i>									
		1982	1983	1984	1985	1986	1987	1988	1989	1990		1989	1990	1991	1992	1993	1994	1995	1996	2000	
<i>code</i>	<i>Description</i>	-83	-84	-85	-86	-87	-88	-89	-90	-91		-90	-91	-92	-93	-94	-95	-96	-97	-01	
<b>FABRICATED METAL PRODUCTS</b>																					
3141	Fabricated structural steel	11	10	10	9	9	10	9	9	8		7	7	7	6	5	5	5	4	4	
3142	Architectural aluminium products	13	13	13	13	13	13	13	12	11		12	11	10	9	8	7	6	5	4	
3143	Architectural metal products nec	11	10	9	9	9	9	9	8	8		11	10	10	9	8	7	6	4	4	
<b>314</b>	<b>Structural metal products</b>	<b>12</b>	<b>11</b>	<b>11</b>	<b>10</b>	<b>10</b>	<b>11</b>	<b>10</b>	<b>10</b>	<b>9</b>		<b>9</b>	<b>8</b>	<b>8</b>	<b>7</b>	<b>6</b>	<b>6</b>	<b>5</b>	<b>4</b>	<b>4</b>	
3151	Metal containers	13	12	11	11	11	11	10	10	9		7	7	7	5	5	5	4	3	3	
3152	Sheet metal furniture	10	10	9	9	9	8	8	7			7	7	7	5	5	5	4	4	4	
3153	Sheet metal products nec	13	12	11	11	11	10	10	10	9		8	7	7	5	5	5	5	4	4	
<b>315</b>	<b>Sheet metal products</b>	<b>13</b>	<b>12</b>	<b>11</b>	<b>11</b>	<b>11</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>9</b>		<b>7</b>	<b>7</b>	<b>7</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>4</b>	<b>4</b>	<b>4</b>	
3161	Cutlery and hand tools nec	14	12	11	11	10	10	9	9	8		8	8	7	7	6	5	4	3	3	
3162	Springs and wire products	9	9	9	8	9	9	9	9	9		7	7	6	6	6	5	4	3	3	
3163	Nuts, bolts, screws and rivets	9	9	9	9	9	9	8	8	8		8	7	7	7	6	5	5	3	3	
3164	Metal coating and finishing	5	5	5	5	5	6	7	6	6		7	7	6	6	5	4	3	2	2	
3165	Non-ferrous steam, gas and water fittings	10	9	9	9	9	9	8	8	8		4	4	4	4	4	4	3	2	2	
3166	Boiler and plate work	12	12	11	10	10	10	10	10	9		3	3	3	2	2	2	2	2	2	
3167	Metal blinds and awnings	12	11	12	11	13	14	14	13	12		14	13	11	10	9	8	7	5	5	
3168	Fabricated metal products nec	12	11	11	10	11	10	10	10	9		7	7	6	6	5	4	4	3	3	
<b>316</b>	<b>Other fabricated metal products</b>	<b>10</b>	<b>10</b>	<b>9</b>	<b>9</b>	<b>9</b>	<b>10</b>	<b>9</b>	<b>9</b>	<b>9</b>		<b>7</b>	<b>7</b>	<b>6</b>	<b>6</b>	<b>5</b>	<b>5</b>	<b>4</b>	<b>3</b>	<b>3</b>	
<b>31</b>	<b>FABRICATED METAL PRODUCTS</b>	<b>12</b>	<b>11</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>9</b>	<b>9</b>		<b>8</b>	<b>8</b>	<b>7</b>	<b>6</b>	<b>6</b>	<b>5</b>	<b>5</b>	<b>4</b>	<b>4</b>	

Table A6.5 (continued)

<i>Industry<sup>b</sup></i> <i>ASIC</i>	<i>Description</i>	<i>1983-84 series<sup>c</sup></i>										<i>1989-90 series<sup>d</sup></i>									
		1982	1983	1984	1985	1986	1987	1988	1989	1990	1989	1990	1991	1992	1993	1994	1995	1996	2000	1989	1990
<i>code</i>	<i>Description</i>	-83	-84	-85	-86	-87	-88	-89	-90	-91	-90	-91	-92	-93	-94	-95	-96	-97	-01	-90	-91
<b>TRANSPORT EQUIPMENT</b>																					
3231	Motor vehicles	35	34	28	17	9	9	14	19	18	17	15	14	13	12	11	10	9	6		
3232	Motor vehicle bodies, trailers, caravans	15	14	15	17	16	14	13	12	11	14	13	12	10	9	8	7	5	5		
3233	Motor vehicle instruments and electrical equipment nec	19	18	17	17	15	15	14	13	12	14	13	12	11	10	9	8	7	7		
3234	Motor vehicle parts nec	16	16	15	15	14	14	12	12	11	10	9	9	8	7	6	5	4	4		
<b>323</b>	<b>Motor vehicles and parts</b>	<b>29</b>	<b>29</b>	<b>24</b>	<b>17</b>	<b>11</b>	<b>10</b>	<b>14</b>	<b>17</b>	<b>16</b>	<b>15</b>	<b>14</b>	<b>13</b>	<b>12</b>	<b>11</b>	<b>10</b>	<b>9</b>	<b>8</b>	<b>6</b>		
3241	Ships	9	9	8	8	7	7	6	6	6	9	8	8	7	6	6	5	4	4		
3242	Boats	9	9	9	8	10	10	8	8	7	5	5	4	4	3	3	3	2	2		
3243	Railway rolling stock and locomotives	20	19	17	17	16	15	13	12	12	15	14	14	13	10	9	7	4	4		
3244	Aircraft	2	2	2	2	2	2	1	1	1	11	10	10	9	7	6	5	3	3		
3245	Transport equipment nec	15	13	13	13	10	10	9	8	8	3	3	3	3	2	2	2	1	1		
<b>324</b>	<b>Other transport equipment</b>	<b>13</b>	<b>13</b>	<b>12</b>	<b>11</b>	<b>11</b>	<b>10</b>	<b>9</b>	<b>8</b>	<b>8</b>	<b>10</b>	<b>10</b>	<b>9</b>	<b>8</b>	<b>7</b>	<b>6</b>	<b>5</b>	<b>3</b>	<b>3</b>		
<b>32</b>	<b>TRANSPORT EQUIPMENT</b>	<b>26</b>	<b>26</b>	<b>22</b>	<b>16</b>	<b>11</b>	<b>10</b>	<b>13</b>	<b>15</b>	<b>14</b>	<b>14</b>	<b>13</b>	<b>13</b>	<b>12</b>	<b>10</b>	<b>9</b>	<b>8</b>	<b>7</b>	<b>6</b>		
<b>OTHER MACHINERY AND EQUIPMENT</b>																					
3341	Photographic and optical goods	5	5	5	6	8	8	7	6	6	8	7	7	7	6	5	4	3	3		
3342	Photographic film processing	3	3	3	3	8	8	7	8	8	8	7	7	6	6	5	4	3	3		
3343	Measuring, professional and scientific equipment nec	8	8	1	3	5	4	4	4	4	4	4	4	4	3	3	2	1	1		
<b>334</b>	<b>Photographic, professional and scientific equipment</b>	<b>5</b>	<b>5</b>	<b>4</b>	<b>4</b>	<b>7</b>	<b>7</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>7</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>5</b>	<b>4</b>	<b>4</b>	<b>2</b>	<b>2</b>		

Table A6.5 (continued)

Industry <sup>b</sup>	Description	1983-84 series <sup>c</sup>										1989-90 series <sup>d</sup>									
		ASIC										ASIC									
		1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	2000				
code		-83	-84	-85	-86	-87	-88	-89	-90	-91	-90	-91	-92	-93	-94	-95	-96	-97	-01		
3351	Radio and TV receivers; audio equipment	11	11	8	8	8	7	6	5	5	7	7	4	4	3	3	2	1	1		
3352	Electronic equipment nec	22	22	10	9	10	10	8	7	7	12	11	9	8	6	5	4	3	3		
3353	Refrigerators and household appliances	17	17	15	15	16	15	13	12	11	13	12	12	10	9	7	6	4	4		
3354	Water heating systems	9	9	8	8	4	4	3	3	3	3	3	3	2	2	2	2	2	2		
3355	Electric and telephone cable and wire	12	12	12	12	12	11	10	10	10	10	10	9	9	8	7	6	4	4		
3356	Batteries	6	6	5	6	6	5	4	3	3	13	11	10	8	7	5	4	3	3		
3357	Electrical machinery and equipment nec	13	12	10	10	10	11	10	10	9	12	11	10	9	8	7	6	4	4		
335	Appliances and electrical equipment	15	15	12	11	11	11	10	9	9	12	11	9	9	7	6	5	3	3		
3361	Agricultural machinery	11	10	9	9	10	10	10	9	9	10	10	9	8	7	6	5	4	4		
3362	Construction machinery	14	12	11	10	11	10	10	9	9	15	13	12	10	8	7	6	4	4		
3363	Materials handling equipment	13	11	10	10	12	11	11	10	9	8	8	7	6	5	5	5	4	4		
3364	Wood and metal working machinery	14	13	11	11	11	11	11	10	10	7	6	6	5	4	4	3	2	2		
3365	Pumps and compressors	17	16	14	13	15	14	13	12	12	14	13	12	11	9	7	6	4	4		
3366	Commercial space heating and cooling equipment	12	12	12	11	11	11	10	10	10	11	10	10	8	7	6	5	4	4		
3367	Dies, saw blades and machine tool accessories	10	9	8	8	8	8	8	8	8	6	6	6	5	5	4	4	3	3		
3368	Food processing machinery	14	13	11	11	11	11	10	10	10	8	7	6	5	5	4	4	3	3		
3369	Industrial machinery and equipment nec	14	13	12	12	11	11	11	10	10	10	9	9	7	7	6	5	4	4		
336	Industrial machinery and equipment	13	12	11	11	11	11	11	10	10	10	9	9	7	6	6	5	4	4		
33	OTHER MACHINERY AND EQUIPMENT	14	13	11	11	11	11	10	9	9	11	10	9	8	7	6	5	3	3		

Table A6.5 (continued)

Industry <sup>b</sup>		1983-84 series <sup>c</sup>										1989-90 series <sup>d</sup>									
ASIC	Description	1982	1983	1984	1985	1986	1987	1988	1989	1990	1989	1990	1991	1992	1993	1994	1995	1996	2000		
code		-83	-84	-85	-86	-87	-88	-89	-90	-91		-90	-91	-92	-93	-94	-95	-96	-97 -01		
MISCELLANEOUS MANUFACTURING																					
3451	Leather tanning and fur dressing	2	..	..	..	..	1	..	..	..		..	..	..	..	..	..	..	..		
3452	Leather and leather substitute goods nec	9	9	9	10	12	11	11	11	11		7	7	7	6	5	4	3	2		
345	Leather and leather products	3	2	2	2	2	3	2	2	2		1	1	1	1	1	..	..	..		
3461	Rubber tyres, tubes, belts, hose and sheets	11	11	12	12	11	10	10	9	8		9	9	9	8	7	6	5	3		
3462	Rubber products nec	9	9	9	9	9	8	8	7	7		11	11	10	10	8	7	6	4		
346	Rubber products	10	11	11	11	11	10	9	8	8		10	9	9	9	7	6	5	3		
3471	Flexible packaging and abrasive papers	17	18	19	19	18	16	14	12	11		10	9	9	9	7	6	5	3		
3472	Rigid plastic sheeting ) <sup>fg</sup>																				
3473	Hard surface floor covering nec )	11	13	13	13	14	14	13	11	11		9	9	9	9	7	6	5	3		
3474	Plastic products nec	19	20	20	20	19	16	14	12	11		11	11	10	10	8	7	6	4		
347	Plastic and related products	18	19	19	19	18	16	14	12	11		11	10	10	10	8	7	6	4		
3481	Ophthalmic articles	4	4	4	4	8	8	8	7	6		8	6	6	6	5	4	3	2		
3482	Jewellery and silverware	2	2	2	2	1	1	1	..	..		1	1	1	..	..	..	..	..		
3483	Brooms and brushes	10	10	10	10	11	11	10	9	9		3	3	3	2	2	1	1	1		
3484	Signs and advertising displays	14	14	14	13	9	8	8	7	6		4	4	4	4	3	2	2	1		
3485	Sporting equipment	11	11	11	11	7	6	6	5	5		9	9	8	7	6	5	5	4		
3486	Writing and marking equipment	7	7	6	6	11	10	9	8	8		9	8	8	7	6	5	4	3		
3487	Manufacturing nec	12	14	16	14	11	13	13	13	12		16	14	12	11	9	8	7	5		
348	Other manufacturing	9	9	9	9	7	7	7	6	6		5	5	5	4	4	3	2	2		
34	MISC. MANUFACTURING	14	14	14	14	14	12	11	10	9		9	8	8	8	7	6	4	3		
21-34	TOTAL MANUFACTURING <sup>h</sup>	8	8	8	8	7	7	6	6	6		5	5	5	4	4	3	3	2		

**Table A6.5 (continued)**

–	Nil.
..	Between 0 per cent and 0.5 per cent.
a	Assistance provided by tariffs and certain non-tariff measures. 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.
b	Industry subdivision, group, and class from the Australian Standard Industrial Classification (ASIC) 1983 Edition.
c	For 1987–88 only, following the introduction of the Harmonised Tariff System on 1 January 1988, it was necessary to construct new concordances between the Harmonised tariff items and the outputs produced 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 Harmonised concordances.
d	Estimates for 1992–93 to 2000–01 reflect 1991–92 prices.
e	Estimates for 1993–94 and projections through to 2000–01 reflect the Commission's projections of assistance to agricultural commodities. These exclude recent changes to assistance arrangements for dairy and tobacco resulting from the Uruguay Round.
f	Assistance estimates not calculated separately because 1989–90 production data are confidential.
g	Assistance estimates not calculated separately because 1983–84 production data are confidential.

*Source:* Commission estimates.

Table A6.6

**Average effective rates of assistance<sup>a</sup>, manufacturing industries: 1982–83 to 1996–97 and 2000–01 (per cent)**

Industry <sup>b</sup> ASIC code	Description	1983–84 series <sup>c</sup>										1989–90 series <sup>d</sup>									
		1982	1983	1984	1985	1986	1987	1988	1989	1990		1989	1990	1991	1992	1993	1994	1995	1996	2000	
		–83	–84	–85	–86	–87	–88	–89	–90	–91		–90	–91	–92	–93	–94	–95	–96	–97	–01	
<b>FOOD, BEVERAGES AND TOBACCO</b>																					
2115	Meat (except smallgoods or poultry)	-1	-1	-1	-1	-1	-2	-1	-1	-1		..	..	..	..	..	..	..	1	1	
2116	Poultry	-3	-2	-3	-2	..	..	..	1	1		1	1	1	1	1	1	1	1	1	
2117	Bacon, ham and smallgoods nec	14	13	13	14	13	14	13	13	13		8	8	8	8	7	6	5	5	5	
<b>211</b>	<b>Meat products</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>2</b>		<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	
2121	Liquid milk and cream <sup>e</sup>	-4	-4	-4	-3	-3	-3	-3	-3	-3		-3	-5	-3	-3	-3	-3	-3	-3	-2	
2122	Butter <sup>e</sup>	1	4	3	3	1	1	1	2	2		14	23	23	23	21	20	17	15	8	
2123	Cheese <sup>e</sup>	-2	-2	-2	-1	-1	-1	-2	-2	-2		4	7	7	7	6	6	5	4	2	
2124	Ice cream and frozen confections <sup>e</sup>	-11	-15	-19	-25	-22	-17	-13	-10	-10		-2	-3	-1	-2	-1	..	..	..	-1	
2125	Milk products nec <sup>e</sup>	-13	-5	-4	-4	-21	-16	-4	-3	-4		10	8	12	12	12	13	12	10	5	
<b>212</b>	<b>Milk products<sup>e</sup></b>	<b>-6</b>	<b>-5</b>	<b>-6</b>	<b>-6</b>	<b>-8</b>	<b>-6</b>	<b>-4</b>	<b>-4</b>	<b>-4</b>		<b>2</b>	<b>2</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>1</b>	
2131	Fruit products <sup>e</sup>	43	28	19	29	30	16	9	8	9		21	19	18	16	14	12	10	7	7	
2132	Vegetable products <sup>e</sup>	2	3	2	2	1	5	8	7	8		11	11	12	12	11	10	9	7	7	
<b>213</b>	<b>Fruit and vegetable products<sup>e</sup></b>	<b>17</b>	<b>12</b>	<b>8</b>	<b>11</b>	<b>11</b>	<b>9</b>	<b>8</b>	<b>8</b>	<b>8</b>		<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>12</b>	<b>11</b>	<b>9</b>	<b>7</b>	<b>7</b>	
<b>214</b>	<b>Margarine and oils and fats nec</b>	<b>9</b>	<b>11</b>	<b>10</b>	<b>10</b>	<b>12</b>	<b>11</b>	<b>11</b>	<b>12</b>	<b>13</b>		<b>15</b>	<b>15</b>	<b>15</b>	<b>16</b>	<b>15</b>	<b>13</b>	<b>12</b>	<b>9</b>	<b>9</b>	
2151	Flour mill products <sup>e</sup>	-8	-30	-11	-14	-9	-1	-3	..	..		..	..	..	..	..	..	..	..	..	
2152	Starch, gluten and starch sugars	8	11	13	12	12	14	15	13	11		8	8	7	6	6	6	5	5	5	
2153	Cereal foods and baking mixes <sup>e</sup>	..	..	2	1	2	2	3	4	4		7	8	8	8	7	7	7	6	6	
<b>215</b>	<b>Flour mill and cereal food products<sup>e</sup></b>	<b>-3</b>	<b>-12</b>	<b>-3</b>	<b>-4</b>	<b>-2</b>	<b>2</b>	<b>1</b>	<b>3</b>	<b>3</b>		<b>5</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>4</b>	<b>4</b>	

Table A6.6 (continued)

Industry <sup>b</sup>	1983-84 series <sup>c</sup>										1989-90 series <sup>d</sup>									
	ASIC																			
	code	Description	1982	1983	1984	1985	1986	1987	1988	1989	1990	1989	1990	1991	1992	1993	1994	1995	1996	2000
		-83	-84	-85	-86	-87	-88	-89	-90	-91		-90	-91	-92	-93	-94	-95	-96	-97	-01
2161	Bread <sup>e</sup>	-4	-6	-5	-5	-4	-4	-3	-2	-2		..	..	-1	-1	..	..	..	..	..
2162	Cakes and pastries <sup>e</sup>	-8	-11	-8	-7	-8	-6	-5	-4	-4		-4	-4	-4	-3	-3	-2	-2	-1	-1
2163	Biscuits <sup>e</sup>	-5	-5	-6	-6	-5	1	9	8	5		9	6	2	3	4	4	5	6	6
216	Bread, cakes and biscuits <sup>e</sup>	-5	-7	-6	-5	-5	-3	-1	..	-1		1	..	-1	-1	..	..	..	1	1
2171	Raw sugar <sup>efg</sup>																			
2176	Food products nec )	4	2	3	2	2	4	2	6	6		1	2	2	2	1	1	1	2	2
2173	Confectionary and cocoa products <sup>e</sup>	21	21	18	20	21	23	26	22	21		22	19	19	17	14	11	8	4	5
2174	Processed seafoods	-1	2	2	2	2	1	1	1	1		2	2	2	3	3	3	3	3	3
2175	Prepared animal and bird foods <sup>e</sup>	1	10	18	8	-2	-3	1	-3	-3		-4	-3	-3	-3	-2	-2	-2	-1	-1
217	Other food products <sup>e</sup>	6	6	7	5	4	6	6	7	7		4	4	4	4	3	2	2	2	2
2185	Soft drinks, cordials and syrups <sup>e</sup>	6	9	6	7	8	10	13	9	8		10	7	8	8	8	8	7	5	5
2186	Beer <sup>e</sup>	93	74	83	75	76	87	9	-3	-3		-3	-3	-3	-3	-2	-2	-2	-1	-1
2187	Malt <sup>ef</sup>	-3	2	2	2	2	-1	2	2	2		1	2	2	2	1	2	2	1	1
2189	Alcoholic beverages nec )	5	-4	1	3	1	5	10	11	9										
2188	Wine and brandy <sup>e</sup>	65	64	37	28	26	25	19	22	19		14	16	9	18	14	13	11	8	8
218	Beverages and malt <sup>e</sup>	49	43	40	36	36	41	12	7	6		4	4	4	4	3	3	3	2	2
219	Tobacco products <sup>e</sup>	-12	..	-6	1	8	4	-4	-4	-4		4	7	7	8	8	7	6	5	5
21	FOOD, BEVERAGES AND TOBACCO <sup>e</sup>	7	6	6	5	6	7	4	3	3		4	4	4	4	3	3	3	2	2



Table A6.6 (continued)

Industry <sup>b</sup>	Description	1983–84 series <sup>c</sup>										1989–90 series <sup>d</sup>									
		1982	1983	1984	1985	1986	1987	1988	1989	1990	1989	1990	1991	1992	1993	1994	1995	1996	2000		
		–83	–84	–85	–86	–87	–88	–89	–90	–91	–90	–91	–92	–93	–94	–95	–96	–97	–01		
TEXTILES																					
2341	Cotton ginning	–17	–18	–16	–17	–16	–16	–13	..	–3	–2	–2	–2	–1	–1	–1	–1	–1	–1		
2342	Wool scouring and top making	–14	–	–	–	–	–	–	–	–	2	2	2	3	7	8	8	8	8		
2343	Man-made fibres and yarns	75	79	79	81	70	57	66	62	57	103	100	97	86	64	45	5	3	3		
2344	Man-made fibre broadwoven fabrics	149	146	184	149	142	155	181	183	166	180	160	120	106	90	81	66	62	37		
2345	Cotton yarns and broadwoven fabrics	101	99	107	106	82	86	93	100	95	85	76	70	61	53	47	35	33	22		
2346	Worsted yarns and broadwoven fabrics	57	57	55	57	50	29	43	41	38	45	42	38	38	34	30	20	19	14		
2347	Woollen yarns and broadwoven fabrics	58	58	56	56	52	27	40	39	38	25	24	25	24	20	16	9	9	5		
2348	Narrow woven and elastic textiles	53	52	52	51	53	53	54	53	53	48	49	48	43	42	39	35	32	21		
2349	Textile finishing	109	96	135	115	103	133	169	168	152	82	91	78	56	52	47	43	40	28		
234	Textile fibres, yarns and woven fabrics	75	77	88	83	72	72	85	86	79	59	56	49	42	37	33	24	23	15		
2351	Household textiles	77	90	82	83	117	90	115	122	139	52	60	61	44	43	40	37	35	26		
2352	Textile floor coverings	211	177	177	182	184	175	163	151	142	94	89	88	80	75	72	66	63	40		
2353	Felt and felt products	27	32	32	30	28	27	27	27	26	18	18	18	18	15	13	9	6	6		
2354	Canvas and associated products nec	10	10	5	8	14	18	14	14	17	18	20	24	22	21	20	18	15	11		
2355	Rope, cordage and twine	27	27	27	28	28	27	26	26	26	38	39	38	34	33	30	27	24	15		
2356	Textile products nec	24	31	30	31	33	24	15	15	15	22	20	18	16	14	12	10	7	7		
235	Other textile products	56	58	55	57	62	56	52	50	50	46	44	44	39	37	34	31	28	19		
23	TEXTILES	68	69	75	72	68	65	72	72	68	53	51	46	41	37	33	27	25	17		

Table A6.6 (continued)

Industry <sup>b</sup>	Description	1983–84 series <sup>c</sup>										1989–90 series <sup>d</sup>									
		ASIC										ASIC									
		1982	1983	1984	1985	1986	1987	1988	1989	1990	1989	1990	1991	1992	1993	1994	1995	1996	2000		
code		-83	-84	-85	-86	-87	-88	-89	-90	-91	-90	-91	-92	-93	-94	-95	-96	-97	-01		
CLOTHING AND FOOTWEAR																					
2441	Hosiery	131	120	161	189	188	192	180	149	135		100	98	93	80	74	68	63	59	40	
2442	Cardigans and pullovers	>250	>250	>250	>250	>250	234	239	244	237		198	191	152	139	118	110	102	98	64	
2443	Knitted goods nec	158	160	182	139	159	181	147	149	147		158	153	127	101	95	90	84	81	51	
244	Knitting mills	181	177	222	189	192	197	178	171	164		144	140	119	101	92	86	80	76	49	
2451	Mens trousers and shorts; work clothing	223	>250	>250	101	128	129	173	180	201		129	137	106	79	76	70	66	62	43	
2452	Mens suits and coats; waterproof clothing	216	>250	154	134	139	143	179	160	140		107	88	71	60	57	52	48	45	31	
2453	Womens outerwear nec	215	>250	>250	132	157	196	164	172	187		96	98	79	65	57	52	49	45	31	
2454	Foundation garments	228	>250	>250	>250	>250	116	156	181	187		127	130	110	80	65	59	55	51	34	
2455	Underwear and infants clothing nec	222	236	>250	188	>250	>250	233	242	238		158	154	117	84	69	63	60	56	38	
2456	Headwear and clothing nec	63	71	84	64	57	51	43	44	47		60	63	53	46	43	39	36	34	23	
245	Clothing	189	222	243	136	168	167	159	164	171		105	106	84	66	59	54	50	47	33	
246	Footwear	232	>250	>250	123	185	164	217	224	231		111	116	91	67	60	54	50	46	24	
24	CLOTHING AND FOOTWEAR	192	227	>250	148	176	174	171	173	176		113	113	92	73	65	60	56	52	34	

Table A6.6 (continued)

Industry <sup>b</sup> ASIC code	Description	1983-84 series <sup>c</sup>										1989-90 series <sup>d</sup>									
		1982	1983	1984	1985	1986	1987	1988	1989	1990	1989	1990	1991	1992	1993	1994	1995	1996	2000		
		-83	-84	-85	-86	-87	-88	-89	-90	-91	-90	-91	-92	-93	-94	-95	-96	-97	-01		
<b>WOOD, WOOD PRODUCTS AND FURNITURE</b>																					
2531	Log sawmilling	3	4	4	4	4	4	4	4	4	3	3	3	3	3	3	3	4	4		
2532	Resawn and dressed timber	20	20	18	17	17	17	16	15	14	16	15	14	13	12	11	10	7	7		
2533	Veneers and manufactured boards of wood	36	35	32	29	27	27	26	23	23	31	29	27	25	20	17	13	9	9		
2534	Wooden doors	15	11	12	14	15	16	16	15	13	17	16	14	13	12	10	9	6	6		
2535	Wooden structural fittings and joinery nec	16	15	15	16	17	17	16	14	13	8	7	7	6	6	5	5	4	4		
2536	Wooden containers	10	9	10	9	10	10	9	8	8	2	2	2	2	2	2	1	1	1		
2537	Hardwood woodchips	..	..	..	..	..	..	..	..	..	-2	-2	-2	-2	-2	-1	-1	-1	-1		
2538	Wood products nec	22	21	21	22	22	22	20	19	17	16	15	14	12	11	10	9	7	7		
253	Wood and wood products	14	13	13	13	13	13	12	11	10	10	9	8	8	7	6	6	4	4		
2541	Furniture (except sheet metal)	33	33	34	36	38	38	33	29	24	30	26	22	17	13	11	9	5	5		
2542	Mattresses (except rubber)	-2	-2	-3	-2	-1	-1	-3	-3	-2	..	1	1	1	1	1	1	2	1		
254	Furniture and mattresses	27	27	28	29	31	31	27	23	20	26	22	19	15	12	9	8	4	4		
25	WOOD, WOOD PRODUCTS AND FURNITURE	18	18	17	18	18	18	17	15	13	15	14	12	10	9	7	6	4	4		

Table A6.6 (continued)

Industry <sup>b</sup>	1983-84 series <sup>c</sup>										1989-90 series <sup>d</sup>									
ASIC	1982	1983	1984	1985	1986	1987	1988	1989	1990	1989	1990	1991	1992	1993	1994	1995	1996	2000		
code	-83	-84	-85	-86	-87	-88	-89	-90	-91	-90	-91	-91	-92	-93	-94	-95	-96	-97	-01	
PAPER, PAPER PRODUCTS, PRINTING AND PUBLISHING																				
2631	Pulp, paper and paperboard	16	22	21	20	19	21	20	17	15		11	11	11	9	8	6	4	4	
2632	Paper bags (including textile bags)	30	28	26	29	30	32	32	24	19		26	20	20	16	13	10	6	6	
2633	Solid fibreboard containers	43	41	40	44	45	43	39	30	24		25	20	20	16	13	10	6	6	
2634	Corrugated fibreboard containers	40	36	34	38	38	38	36	26	19		26	21	20	16	13	11	6	6	
2635	Paper products nec	30	37	37	39	38	36	33	25	21		27	22	22	17	14	11	6	6	
263	Paper and paper products	28	30	30	31	31	31	29	22	18		19	16	16	13	11	8	5	5	
2641	Publishing	..	..	..	..	..	..	..	..	-		-1	-1	-1	-1	..	..	..	..	
2642	Printing and publishing	..	..	..	..	..	..	..	..	..		..	..	..	..	..	..	..	..	
2643	Paper stationery	31	31	32	34	34	33	30	23	18		23	19	18	15	12	10	6	6	
2644	Printing and bookbinding	32	31	30	31	31	23	13	10	8		13	11	10	9	8	6	5	4	
2645	Printing trade services nec	1	1	1	1	..	..	-3	-3	-3		..	..	..	..	..	..	..	..	
264	Printing and allied industries	12	12	12	12	12	10	6	5	4		6	5	5	5	4	3	2	2	
26	PAPER, PAPER PRODUCTS, PRINTING AND PUBLISHING	16	16	16	17	16	15	12	9	7		9	7	7	7	6	5	4	2	

Table A6.6 (continued)

[illegible]

Table A6.6 (continued)

Industry <sup>b</sup>		1983-84 series <sup>c</sup>										1989-90 series <sup>d</sup>									
ASIC	Description	1982	1983	1984	1985	1986	1987	1988	1989	1990		1989	1990	1991	1992	1993	1994	1995	1996	2000	
code		-83	-84	-85	-86	-87	-88	-89	-90	-91		-90	-91	-92	-93	-94	-95	-96	-97	-01	
NON-METALLIC MINERAL PRODUCTS																					
285	Glass and glass products	5	5	5	5	5	5	3	4	3		5	4	4	4	4	3	3	3	3	
2861	Clay bricks	..	-1	-1	-1	-1	-1	-1	-1	-1		..	..	..	..	..	..	..	..	..	
2862	Refractories	13	13	14	14	14	13	14	14	13		3	3	3	2	2	2	2	1	1	
2863	Ceramic tiles and pipes	15	15	13	12	12	13	12	12	11		9	9	9	8	8	7	6	5	5	
2864	Ceramic goods nec	20	23	23	24	24	24	22	21	19		22	21	19	17	14	12	10	7	7	
286	Clay products and refractories	5	6	5	5	5	5	5	5	4		4	4	3	3	3	2	2	1	1	
2871	Cement	2	4	6	6	2	2	..	..	..		..	..	..	..	..	..	..	..	..	
2872	Ready-mixed concrete <sup>g</sup>	-3	-5	-5	-6	-4	-3	-1	-1	-1		-3	-3	-3	-3	-2	-2	-2	-1	-1	
2873	Cement, concrete pipes & culverts <sup>g</sup>											4	4	4	4	4	3	3	2	2	
2874	Concrete products nec	..	..	..	3	..	1	1	1	1		3	3	3	3	2	2	2	1	1	
287	Cement and concrete products	..	..	..	1	-1	..	..	..	..		1	1	1	1	1	1	..	..	..	
2881	Plaster products and expanded minerals <sup>g</sup>											15	14	13	12	11	9	8	6	6	
2882	Stone products <sup>g</sup>	16	18	16	17	16	17	15	15	13		15	14	13	12	11	10	9	7	7	
2883	Glass wool and mineral wool products	14	14	10	14	15	14	14	13	12		20	17	14	14	12	10	8	5	5	
2884	Non-metallic mineral products nec	7	7	7	7	7	8	6	5	6		3	3	2	2	2	2	2	2	2	
288	Other non-metallic mineral products	12	13	12	13	12	13	11	11	10		14	12	11	10	9	8	7	5	5	
28	NON-METALLIC MINERAL PRODUCTS	4	4	4	4	4	4	3	3	3		4	4	3	3	3	3	2	2	2	

Table A6.6 (continued)

Industry <sup>b</sup>		1983-84 series <sup>c</sup>										1989-90 series <sup>d</sup>									
ASIC	Description	1982	1983	1984	1985	1986	1987	1988	1989	1990		1989	1990	1991	1992	1993	1994	1995	1996	2000	
code		-83	-84	-85	-86	-87	-88	-89	-90	-91		-90	-91	-92	-93	-94	-95	-96	-97	-01	
BASIC METAL PRODUCTS																					
2941	Iron and steel basic products	10	12	12	11	11	10	9	8	8		17	17	17	12	11	11	11	10	10	
2942	Iron casting	26	28	27	26	26	25	23	21	19		19	18	16	16	13	12	10	7	7	
2943	Steel casting	48	38	31	30	30	30	28	26	25		28	26	25	23	18	15	12	8	8	
2944	Iron and steel forging	38	30	24	24	23	29	34	32	31		20	19	18	17	14	12	10	6	6	
2945	Steel pipes and tubes	20	21	20	21	21	21	19	16	15		21	18	16	18	15	13	10	5	5	
294	Basic iron and steel	14	15	15	14	14	13	12	11	11		18	18	17	13	12	11	11	9	9	
2951	Copper smelting, refinings <sup>g</sup>											2	2	2	2	2	1	1	1	1	
2952	Silver, lead, zinc smelting, refining	-7	..	..	..	-1	-1	..	..	..		..	..	..	..	..	..	..	..	..	
2953	Alumina	-8	-9	-9	-10	-16	-12	-9	-8	-7		-2	-1	-1	-1	-1	-1	-1	-1	-1	
2954	Aluminium smelting	-1	-2	-2	-2	-2	-3	-2	-2	-1		..	..	..	..	..	..	..	..	..	
2955	Nickel smelting, refinings <sup>g</sup>	-6	-8	-8	-10	-15	-20	..	1	1		..	..	..	..	..	..	..	..	..	
2956	Non-ferrous metals nec, smelting, refining )	2	..	..	..	2	2	3	3	2											
2957	Secondary recovery and alloying of ) non-ferrous metals nec ) <sup>f</sup>	2	2	3	3	3	3	2	2	2		-16	-15	-14	-16	-16	-16	-16	-15	-15	
295	Basic non-ferrous metals	-5	-5	-5	-6	-9	-8	-5	-4	-4		-1	..	..	..	..	..	..	..	..	
2961	Aluminium rolling, drawing, extruding	39	46	47	47	48	47	49	46	42		60	56	51	47	42	36	31	22	22	
2962	Non-ferrous metals nec, rolling, drawing, extruding	25	29	29	29	29	28	36	36	36		17	16	16	16	14	13	11	8	8	
2963	Non-ferrous metal casting	17	17	17	18	18	17	15	14	13		28	26	25	23	18	15	12	7	7	
296	Non-ferrous metal basic products	31	36	37	37	37	37	39	38	35		38	36	33	31	27	24	20	14	14	
29	BASIC METAL PRODUCTS	9	10	10	9	8	8	9	8	8		9	8	8	6	6	5	5	4	4	

Table A6.6 (continued)

Industry <sup>b</sup>		1983–84 series <sup>c</sup>										1989–90 series <sup>d</sup>									
ASIC	Description	1982	1983	1984	1985	1986	1987	1988	1989	1990		1989	1990	1991	1992	1993	1994	1995	1996	2000	
code		–83	–84	–85	–86	–87	–88	–89	–90	–91		–90	–91	–92	–93	–94	–95	–96	–97	–01	
FABRICATED METAL PRODUCTS																					
3141	Fabricated structural steel	27	17	13	13	14	12	10	8	8		8	7	6	6	5	5	4	3	3	
3142	Architectural aluminium products	24	23	25	25	25	24	24	23	21		20	19	18	18	13	10	7	3	4	
3143	Architectural metal products nec	29	24	22	22	22	22	21	19	17		14	14	12	11	10	9	7	5	5	
314	Structural metal products	27	19	17	17	17	16	14	13	12		12	11	10	10	8	7	5	3	3	
3151	Metal containers	19	19	20	22	22	22	19	16	14		25	24	22	22	17	14	11	6	6	
3152	Sheet metal furniture	39	39	39	40	41	41	36	32	26		32	27	23	21	16	13	10	5	5	
3153	Sheet metal products nec	31	24	21	20	21	23	23	21	20		22	21	19	19	15	12	9	4	4	
315	Sheet metal products	27	23	22	22	23	24	23	20	19		24	22	20	20	15	12	9	5	5	
3161	Cutlery and hand tools nec	20	22	22	22	22	22	21	20	18		23	22	20	19	15	12	10	6	6	
3162	Springs and wire products	50	40	28	26	27	24	18	16	15		18	17	15	14	11	9	7	4	4	
3163	Nuts, bolts, screws and rivets	26	34	33	34	34	34	31	28	25		26	23	21	18	14	12	9	6	6	
3164	Metal coating and finishing	28	25	24	23	23	23	22	20	18		22	21	20	19	15	13	10	6	6	
3165	Non-ferrous steam, gas and water fittings																				
		27	28	29	29	30	30	27	25	23		26	24	22	20	15	13	10	6	6	
3166	Boiler and plate work	32	28	27	28	27	27	26	24	23		32	30	28	27	21	17	14	9	9	
3167	Metal blinds and awnings	28	26	24	24	23	26	24	24	23		20	20	20	19	15	12	9	5	6	
3168	Fabricated metal products nec	38	30	26	26	26	25	23	21	20		21	20	18	17	14	11	9	6	6	
316	Other fabricated metal products	35	30	27	26	26	26	23	22	20		22	21	19	18	14	12	9	6	6	
31	FABRICATED METAL PRODUCTS	30	25	22	22	22	22	20	18	17		19	18	16	15	12	10	8	4	4	



Table A6.6 (continued)

Industry <sup>b</sup>	1983-84 series <sup>c</sup>										1989-90 series <sup>d</sup>										
	ASIC																				
	code	Description	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	2000-01	
TRANSPORT EQUIPMENT																					
3231	Motor vehicles <sup>h</sup>	>250	>250	>250	>250	>250	243	162	119	113			59	55	51	47	42	38	34	29	18
3232	Motor vehicle bodies, trailers, caravans	32	32	32	35	35	34	29	29	25			25	22	20	16	13	10	8	4	4
3233	Motor vehicle instruments and electrical equipment nec <sup>h</sup>	98	98	81	43	17	16	38	53	49			48	45	43	39	38	36	34	33	22
3234	Motor vehicle parts nec <sup>h</sup>	69	80	65	35	14	15	32	43	40			45	42	39	36	35	33	32	31	22
323	Motor vehicles and parts <sup>h</sup>	126	135	143	125	92	88	72	65	60			52	48	45	41	38	35	31	28	19
3241	Ships	25	26	25	25	25	24	23	20	19			17	16	13	12	9	8	6	4	3
3242	Boats	28	32	32	32	30	30	29	26	24			35	33	30	27	23	20	17	12	12
3243	Railway rolling stock and locomotives	16	18	18	19	19	20	19	18	17			16	16	14	14	11	9	8	5	5
3244	Aircraft	2	2	2	2	2	2	2	2	2			-4	-4	-3	-3	-3	-2	-2	-1	-1
3245	Transport equipment nec	22	30	29	29	33	34	32	29	24			32	23	21	20	17	15	13	9	9
324	Other transport equipment	14	15	15	16	16	16	15	14	13			10	9	7	7	5	5	4	2	2
32	TRANSPORT EQUIPMENT <sup>h</sup>	61	65	68	61	47	46	39	35	33			37	34	31	29	26	24	21	19	13
OTHER MACHINERY AND EQUIPMENT																					
3341	Photographic and optical goods	6	9	9	8	4	4	4	12	17			19	22	21	15	10	9	8	6	6
3342	Photographic film processing	1	2	2	2	..	..	-2	-2	-2			†	†	†	†	†	†	†	†	†
3343	Measuring, professional and scientific equipment nec	8	7	11	10	9	9	8	7	6			15	13	12	12	11	10	8	7	7
334	Photographic, professional and scientific equipment	4	4	6	5	4	3	2	3	4			17	17	15	14	11	10	8	7	7

Table A6.6 (continued)

Industry <sup>b</sup> ASIC	Description	1983-84 series <sup>c</sup>										1989-90 series <sup>d</sup>									
		1982	1983	1984	1985	1986	1987	1988	1989	1990		1989	1990	1991	1992	1993	1994	1995	1996	2000	
		-83	-84	-85	-86	-87	-88	-89	-90	-91		-90	-91	-92	-93	-94	-95	-96	-97	-01	
3351	Radio and TV receivers; audio equipment	35	27	31	45	30	24	21	20	19		17	17	13	13	11	10	9	7	7	
3352	Electronic equipment nec	24	25	37	38	30	30	28	26	23		23	20	19	17	14	12	10	7	7	
3353	Refrigerators and household appliances	31	32	32	32	33	34	31	27	24		25	23	19	17	13	11	9	6	5	
3354	Water heating systems	30	32	33	34	40	40	37	34	32		45	41	37	34	27	23	18	11	11	
3355	Electric and telephone cable and wire	22	21	19	20	21	23	21	20	18		7	6	4	3	3	2	2	2	2	
3356	Batteries	75	78	77	76	76	77	70	61	53		37	32	27	22	19	17	16	13	13	
3357	Electrical machinery and equipment nec	25	27	28	28	27	24	20	18	16		18	17	15	14	12	10	8	5	5	
335	Appliances and electrical equipment	28	29	32	33	30	30	26	24	21		21	19	17	15	12	10	9	6	6	
3361	Agricultural machinery	14	15	16	22	12	10	7	..	-1		4	3	3	3	3	3	3	2	3	
3362	Construction machinery	32	16	17	25	34	31	24	17	15		9	9	8	8	7	6	5	4	4	
3363	Materials handling equipment	28	31	31	31	30	32	30	26	23		33	29	25	23	18	15	11	6	6	
3364	Wood and metal working machinery	40	25	25	25	22	19	14	11	11		11	11	10	9	8	7	6	5	5	
3365	Pumps and compressors	15	19	20	21	20	21	20	17	15		14	13	11	10	9	8	7	5	5	
3366	Commercial space heating and cooling equipment	36	38	38	37	40	39	34	31	27		34	31	26	24	19	15	12	7	7	
3367	Dies, saw blades and machine tool accessories	18	19	18	18	18	18	17	16	16		19	19	18	16	13	11	9	5	5	
3368	Food processing machinery	13	22	22	22	22	20	18	16	14		17	16	14	14	12	11	9	6	6	
3369	Industrial machinery and equipment nec	11	13	12	12	12	12	10	9	8		18	16	14	13	10	9	7	5	5	
336	Industrial machinery and equipment	16	17	17	18	17	17	14	12	10		17	16	14	13	11	9	7	5	5	
33	OTHER MACHINERY AND EQUIPMENT	21	22	23	24	22	22	19	17	15		19	17	15	14	11	9	8	5	5	

Table A6.6 (continued)

Industry <sup>b</sup>		1983-84 series <sup>c</sup>										1989-90 series <sup>d</sup>									
ASIC	Description	1982	1983	1984	1985	1986	1987	1988	1989	1990		1989	1990	1991	1992	1993	1994	1995	1996	2000	
code		-83	-84	-85	-86	-87	-88	-89	-90	-91		-90	-91	-92	-93	-94	-95	-96	-97	-01	
MISCELLANEOUS MANUFACTURING																					
3451	Leather tanning and fur dressing	17	22	22	22	22	24	27	26	26		46	47	46	42	36	33	28	20	20	
3452	Leather and leather substitute goods nec	41	41	41	42	39	34	34	30	30		24	24	22	21	19	17	15	13	10	
345	Leather and leather products	24	28	28	28	27	27	29	27	27		39	39	38	35	30	27	23	18	17	
3461	Rubber tyres, tubes, belts, hose and sheets	32	33	33	34	35	35	31	28	24		22	19	17	15	13	12	12	10	10	
3462	Rubber products nec	38	40	41	42	42	40	35	32	29		23	21	18	14	11	10	8	6	6	
346	Rubber products	34	36	36	37	38	37	32	30	26		22	20	17	14	13	12	11	9	9	
3471	Flexible packaging and abrasive papers	23	27	24	26	25	26	22	20	18		18	17	17	17	13	11	9	6	6	
3472	Rigid plastic sheeting <sup>fg</sup>																				
3473	Hard surface floor covering nec )	26	25	23	24	21	19	16	14	13		10	9	9	9	7	6	5	3	3	
3474	Plastic products nec	22	21	21	22	23	21	19	17	16		19	17	17	17	13	11	9	6	6	
347	Plastic and related products	22	23	22	23	24	22	20	18	17		18	17	17	17	13	11	9	6	6	
3481	Ophthalmic articles	21	21	21	21	19	18	18	15	13		19	16	16	16	13	11	9	6	6	
3482	Jewellery and silverware	28	59	58	55	58	58	54	50	45		28	27	24	23	20	18	16	13	13	
3483	Brooms and brushes	33	33	33	33	33	33	29	27	24		34	31	28	25	20	17	14	9	9	
3484	Signs and advertising displays	20	12	10	11	15	21	22	21	20		28	26	23	21	17	14	11	7	7	
3485	Sporting equipment	29	32	30	31	37	38	34	31	27		32	30	27	24	21	18	15	11	11	
3486	Writing and marking equipment	20	23	23	22	19	20	19	18	17		13	12	11	11	9	7	6	4	4	
3487	Manufacturing nec	23	23	20	21	27	24	19	15	14		5	4	4	3	3	3	2	1	2	
348	Other manufacturing	25	27	26	26	28	30	28	25	23		24	22	20	18	15	13	11	7	8	
34	MISC. MANUFACTURING	25	26	25	26	27	26	24	22	20		20	19	18	17	14	12	10	7	7	
21-34	TOTAL MANUFACTURING <sup>h</sup>	21	22	22	20	19	19	17	16	15		15	14	13	12	10	9	8	6	5	

**Table A6.6 (continued)**

—	Nil.
..	Between -0.5 per cent and 0.5 per cent.
†	Not applicable.
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.
b	Industry subdivision, group, and class from the Australian Standard Industrial Classification (ASIC) 1983 Edition.
c	For 1987–88 only, following the introduction of the Harmonised Tariff System on 1 January 1988, it was necessary to construct new concordances between the Harmonised tariff items and the outputs produced 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 Harmonised concordances.
d	Estimates for 1992–93 to 2000–01 reflect 1991–92 prices.
e	Estimates for 1993–94 and projections through to 2000–01 reflect Commission projections of assistance to agricultural commodities. These exclude recent changes to assistance arrangements for dairy and tobacco resulting from the Uruguay Round.
f	Assistance estimates not calculated separately because 1989–90 production data are confidential.
g	Assistance estimates not calculated separately because 1983–84 production data are confidential.
h	The estimates up until the first half of 1988–89 are based on an estimate of the average price disadvantage on components used as original equipment under the local content plan. In 1986–87, 1987–88 and for the first half of 1988–89, the average price disadvantage was estimated to be 10 per cent. 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. For 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.

*Source:* Commission estimates.

Table A6.7

**Standard deviations<sup>a</sup> for nominal rates on outputs, manufacturing subdivisions<sup>b</sup>: selected years (percentage points)**

<i>Industry<sup>b</sup></i>										
<i>ASIC</i>		<i>1968</i>	<i>1973</i>	<i>1974</i>	<i>1977</i>	<i>1983</i>	<i>1989</i>	<i>1992</i>	<i>1996</i>	<i>2000</i>
<i>code</i>	<i>Description</i>	<i>-69</i>	<i>-74</i>	<i>-75</i>	<i>-78</i>	<i>-84</i>	<i>-90</i>	<i>-93</i>	<i>-97</i>	<i>-01</i>
21	Food, beverages and tobacco <sup>c</sup>	16	11	12	10	9	5	5	3	2
23	Textiles	12	10	11	17	16	18	15	9	6
24	Clothing and footwear	9	8	6	13	20	13	9	5	4
25	Wood, wood products and furniture	10	7	8	8	8	7	5	1	1
26	Paper, paper products, printing and publishing	17	12	9	8	9	6	5	2	2
27	Chemical, petroleum and coal products	13	9	10	7	7	5	4	2	2
28	Non-metallic mineral products	11	8	8	5	4	4	3	2	2
29	Basic metal products	9	7	5	5	5	4	4	2	2
31	Fabricated metal products	6	4	3	3	3	3	3	1	1
32	Transport equipment	6	5	8	13	20	9	8	6	4
33	Other machinery and equipment	9	5	5	6	6	3	3	1	1
34	Miscellaneous manufacturing	5	4	3	5	5	3	2	1	1
<b>21–34</b>	<b>Total manufacturing</b>	<b>16</b>	<b>11</b>	<b>12</b>	<b>15</b>	<b>16</b>	<b>11</b>	<b>9</b>	<b>5</b>	<b>4</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 Estimates for 1992–93, 1996–97 and 2000–01 reflect the Commission's projections of assistance to agricultural commodities. These exclude recent changes to assistance arrangements for dairy and tobacco resulting from the Uruguay Round.

Source: Commission estimates.

Table A6.8

**Standard deviations<sup>a</sup> for effective rates of assistance,  
manufacturing subdivisions<sup>b</sup>: selected years (percentage points)**

<i>Industry<sup>b</sup></i>										
<i>ASIC code</i>	<i>Description</i>	<i>1968 -69</i>	<i>1973 -74</i>	<i>1974 -75</i>	<i>1977 -78</i>	<i>1983 -84</i>	<i>1989 -90</i>	<i>1992 -93</i>	<i>1996 -97</i>	<i>2000 -01</i>
21	Food, beverages and tobacco <sup>c</sup>	26	29	32	18	21	7	7	3	5
23	Textiles	25	25	28	45	58	47	32	22	13
24	Clothing and footwear	36	26	28	36	85	33	19	15	10
25	Wood, wood products and furniture	15	10	12	14	13	12	7	2	2
26	Paper, paper products, printing and publishing	33	24	16	13	16	9	7	2	2
27	Chemical, petroleum and coal products	24	14	12	12	17	11	10	3	3
28	Non-metallic mineral products	20	13	14	7	7	6	5	2	2
29	Basic metal products	20	18	12	7	15	13	10	6	6
31	Fabricated metal products	23	18	16	12	6	7	6	1	1
32	Transport equipment	14	13	28	39	87	23	19	14	9
33	Other machinery and equipment	17	10	9	13	11	7	5	2	2
34	Miscellaneous manufacturing	14	10	9	12	9	6	5	3	3
<b>21-34</b>	<b>Total manufacturing</b>	<b>30</b>	<b>23</b>	<b>25</b>	<b>29</b>	<b>43</b>	<b>22</b>	<b>16</b>	<b>10</b>	<b>7</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 Estimates for 1992-93, 1996-97 and 2000-01 reflect the Commission's projections of assistance to agricultural commodities. These exclude recent changes to assistance arrangements for dairy and tobacco resulting from the Uruguay Round.

Source: Commission estimates.

Table A6.9 Subsidy equivalents, tax on materials and consumer tax equivalents <sup>a</sup> , manufacturing subdivisions <sup>b</sup> : selected years (\$million)																				
<i>Industry<sup>b</sup></i>		<i>Gross subsidy equivalent<sup>c</sup></i>								<i>Net subsidy equivalent<sup>d</sup></i>								<i>Consumer tax equivalent<sup>e</sup></i>		
<i>ASIC code</i>	<i>Description</i>	<i>1971 -72</i>	<i>1974 -75</i>	<i>1977 -78</i>	<i>1983 -84</i>	<i>1989 -90</i>	<i>1992 -93</i>	<i>1996 -97</i>	<i>2000 -01</i>	<i>1971 -72</i>	<i>1974 -75</i>	<i>1977 -78</i>	<i>1983 -84</i>	<i>1989 -90</i>	<i>1992 -93</i>	<i>1996 -97</i>	<i>2000 -01</i>	<i>1989 -90</i>	<i>1992 -93</i>	<i>2000 -01</i>
21	Food, beverages and tobacco <sup>f</sup>	2 257	2 198	1 640	2 220	1 626	1 657	989	854	1 564	1 730	1 012	566	468	465	298	285	1 224	1 358	542
23	Textiles	803	584	659	733	808	580	379	262	531	382	478	540	608	470	292	196	348	384	161
24	Clothing and footwear	1 641	1 392	1 797	2 029	1 750	1 147	801	531	1 209	1 008	1 307	1 722	1 410	902	649	428	2 032	1 510	964
25	Wood, wood products and furniture	954	723	633	771	832	617	265	262	589	488	475	503	538	372	155	159	440	314	128
26	Paper, paper products, printing and publishing	1 735	1 235	1 100	1 105	899	725	260	258	1 470	975	757	785	644	489	168	166	91	86	31
27	Chemical, petroleum and coal products	1 468	1 214	1 010	851	894	806	311	311	967	867	733	532	570	520	194	194	204	213	95
28	Non-metallic mineral products	539	407	239	183	224	180	95	95	413	349	176	102	159	123	67	67	36	27	18
29	Basic metal products	1 520	1 117	737	844	848	678	437	437	1 180	897	418	371	630	497	306	306	94	71	46
31	Fabricated metal products	2 760	1 957	1 583	1 347	1 432	1 122	436	435	2 034	1 388	1 068	861	928	739	214	215	310	263	112
32	Transport equipment	3 243	2 816	3 229	3 806	3 311	2 580	1 663	1 182	1 711	1 557	1 456	2 166	2 357	1 643	1 074	725	2 197	1 971	1 180
33	Other machinery and equipment	2 943	2 279	1 682	1 780	1 995	1 459	592	590	1 724	1 269	1 051	1 068	1 246	903	352	352	1 401	995	561
34	Miscellaneous manufacturing	1 409	1 272	1 438	1 135	1 001	859	342	336	790	808	827	648	671	561	232	230	272	222	128
<b>21–34 Total manufacturing</b>		21 273	17 194	15 747	16 804	15 620	12 409	6 570	5 553	14 182	11 717	9 757	9 865	10 230	7 683	4 001	3 322	8 649	7 316	3 967

**Table A6.9 (continued)**

- 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 for 1989–90 and earlier years are in current year prices, whilst those for 1992–93, 1996–97 and 2000–01 are expressed in 1991–92 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 The gross subsidy equivalent is the estimated 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.
- d The net subsidy equivalent is the estimated 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.
- e 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.
- f Estimates for 1992–93, 1996–97 and 2000–01 reflect the Commission's projections of assistance to agricultural commodities. These exclude recent changes to assistance arrangements for dairy and tobacco resulting from the Uruguay Round.

*Source:* Commission estimates.



**TABLE A6.10 Assistance to manufacturing by form<sup>a</sup>, various years**  
(per cent)

	1983-84	1989-90	1992-93	1996-97	2000-01
<b>Assistance to outputs</b>					
Tariffs <sup>b</sup>	8205	13671	12725	6629	5562
Quantitative import restrictions	1248	505	46	-	-
Bounties <sup>c</sup>	139	208	124	50	47
Export incentives <sup>c</sup>	219	241	273	285	285
<b>Assistance to materials</b>					
Tariffs <sup>b</sup>	3604	5064	4918	2624	2274
Quantitative import restrictions	493	94	49	-	-
Excise taxes	8	97	100	100	100
<b>Assistance to value adding factors<sup>d</sup></b>	-	..	58	8	8

- Nil

.. Less than \$5 million

a Estimates for 1983-84 and 1989-90 are in 1983-84 and 1989-90 prices respectively, while estimates for 1992-93, 1996-67 and 2000 are in 1991-92 prices. The figures are 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 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.

c Except for the base year 1989-90 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 1989-90 production patterns.

Source: Commission estimates

**Table A6.12 TCF (and PMV) Base plus tender premiums 1982 to 1993**  
(per cent).

<i>Tender Category<sup>a</sup>; New/Old</i>	<i>Description</i>	<i>1982</i>	<i>1983</i>	<i>1984</i>	<i>1985</i>	<i>1986</i>	<i>1987</i>	<i>1988</i>	<i>1989<sup>b</sup></i>	<i>1990</i>	<i>1991</i>	<i>1992<sup>c</sup></i>	<i>1993<sup>d</sup></i>
<b>601/201</b>	Knitted or crocheted coats, jumpers cardigans, sweaters and the like, tube tops	84	80	90	135	91	71	60	73	78	59	61	Tariff
<b>602/202</b>	Shirts and blouses and knitted or crocheted tops	86	105	105	155	90	147						Tariff
<b>602/224</b>	Knitted shirts and blouses							205	117	135	75	74	Tariff
<b>603/225</b>	Woven shirts and blouses							122	125	125	83	66	Tariff
<b>604/203</b>	Woven coats and jackets; sets of men's garments, including suits	87	150	151	70	72	70	80	99	76	55	58	Tariff
<b>605/206</b>	Leather coats and jackets	55	92	81	75	50	50	67	86	95	63	60	Tariff
<b>606/204</b>	Trousers, jeans and overalls	70	103	113	100	60	55	62	75	88	75	64	Tariff
<b>607/205</b>	Shorts and male swimwear	62	102	86	100	50	50	50	77	105	75	68	Tariff
<b>608/207</b>	Women's, girls' and infants' swimwear	75	101	110	133	110	70	50	55	55	55	51	Tariff
<b>609/210</b>	Certain children's wear	71	90	91	150	96	50	51	57	70	70	54	Tariff
<b>610/209</b>	Men's woven pyjamas	74	80	85	105	81	150						Tariff
<b>610/213</b>	Dresses, dressing gowns, adult nightdresses and nightshirts; other outer garments and other sleepwear	74	105	105	121	50	50						Tariff
<b>610/226</b>	Dresses other outerwear, pyjamas							51	67	76	64	62	Tariff
<b>611/214</b>	Other undergarments for men and boys; other undergarments for women, girls and infants	90	90	70	82	69	115	87	86	90	86	70	Tariff
<b>612/208</b>	Brassieres; corsets, girdles and the like	84	120	120	140	180	131	50	86	91	84	61	Tariff
<b>613/211</b>	Garments of plastic material, of rubber, or the like	60	70	65	82	84	52	55	55	55	55	51	Tariff
<b>614/212A</b>	Tights and pantyhose less than 4.4 tex	76	60	50	70	101	110	126	132	55	55	51	Tariff
<b>615/212B</b>	Socks and the like; tights pantyhose 4.4 tex or more	76	60	62	83	75	56	50	55	75	72	59	Tariff
<b>616/215</b>	Footwear with leather uppers	71	100	116	118	40	71	63	90	95	68	50	Tariff
<b>617/216</b>	Other footwear	90	115	141	166	40	70	65	65	85	81	41	Tariff
<b>618/217</b>	Parts for footwear	55	52	60	91	99	91	63	48	61	50	10	Tariff

<b>619/218</b>	Terry towelling, towels, babies' napkins and the like	81	85	85	91	90	80	80	80	84	75	61 Tariff
<b>620/219</b>	Bed linen, including quilt covers and bed ruffles	60	48	51	56	50	60	56	77	80	75	52 Tariff
<b>621/222</b>	Fabric suitable for use as bed sheeting and the like, or in the making up of bed linen	48	49	51	55	57	60	72	60	58	40	37 Tariff
<b>622/223</b>	Woven fabric of man-made fibres	70	75	70	96	80	63	72	80	80	47	45 Tariff
<b>220</b>	Curtains	50	47	40	43	40	40	40	40			Tariff
<b>221</b>	Sleeping bags having a customs value not exceeding \$30 each	25	35	25	35	25	25	25	25			Tariff
<b>288</b>	Motor Vehicles				94.5	81.5	57.5	57.5				Tariff

a. The description of some categories was changed from 1 Jan 1988, and then the numbering system was changed in March 1989.

b. In 1989 the base premium for most categories increased from 50 per cent to 55 per cent. In addition, a surcharge of 5 percent was added to quota not allocated by tender. The base duty for other categories increased from 40 percent to 45 percent. These were 616, Footwear with leather uppers and 617, Other footwear. The base duty rate for 618, Parts for footwear, fell from 40 percent to 35 percent; 620, Bed linen, fell from 55 percent to 40 per cent; 622, Woven fabric of man-made fibres was constant at 40 percent; and 621, Fabric suitable for bed sheeting went from tariffs ranging from 0 to 40 percent to a base rate of 40 percent.

c. In 1992, the base rates were reduced in preparation for the removal of quota the following year, for most items, from 55 per cent to 51 per cent. For 616, Footwear with leather uppers, and 617, Other footwear, it was reduced from 45 percent to 41 percent. For 618, Parts for footwear, it was reduced from 35 percent to 10 percent. For 621, Fabric suitable for use as bedsheets, and 622, Woven Fabric of man made fibres, it was reduced from 40 per cent to 37 per cent.

d. From March 1993, quotas ceased to apply to imports of TCF items, and the tariff rate was set at 47 percent for most items. For item 616, Footwear with leather uppers, and 617, Other footwear, it was set at 37 per cent. For 618, Parts for footwear, it was set at 10 percent. For 621, Fabric suitable for use as bedsheets, and 622, Woven Fabric of man made fibres, it was set at 34 per cent.

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## REFERENCES

- Balassa, B. and associates 1971, *The Structure of Protection in Developing Countries*, John Hopkins Press, Baltimore.
- Corden, W.M. 1966, 'The effective protective rate, the uniform tariff equivalent and the average tariff', *The Economic Record*, vol. 43, pp. 200–17.
- Corden, W.M. 1971, *The Theory of Protection*, Oxford Clarendon Press.
- Corden, W.M. 1977, 'Cost and consequences of protection: A survey of empirical work' in Peter B. Kenen (ed.), *International Trade and Finance, Frontiers for Research*, Cambridge University Press.
- Crean, S. (Minister for Primary Industries and Energy) 1992, *Media Release*, DPIE 92/78C, 21 September.
- 1993, *Media Release*, DPIE 93/7J, 2 February.
- DPM&C (Department of the Prime Minister and Cabinet) 1991, *Building a Competitive Australia*, AGPS, Canberra.
- Dixon, P.B., Parmenter, B.R., Sutton, J. and Vincent, D.P. 1982, *ORANI: A Multisectoral Model of the Australian Economy*, North Holland, Amsterdam.
- IAC (Industries Assistance Commission) 1976a, *Assistance to Manufacturing Industries in Australia: 1968–69 to 1973–74*, AGPS, Canberra.
- 1976b, *Annual Report 1975–76*, AGPS, Canberra.
- 1979, *Annual Report 1978–79*, AGPS, Canberra.
- 1980, *Trends in the Structure of Assistance to Manufacturing*, Approaches to General Reductions in Protection, Information Paper No.1, AGPS Canberra.
- 1981a, *Passenger Motor Vehicles and Components – Post 1984 Assistance Arrangements*, Report No. 267, AGPS, Canberra.
- 1981b, *Annual Report 1980–81*, AGPS, Canberra.
- 1982, *Annual Report 1981–82*, AGPS, Canberra.
- 1983a, *Annual Report 1982–83*, AGPS, Canberra.
- 1983b, *Assistance to Australian Agriculture*, AGPS, Canberra.
- 1984, *Local Content Schemes: A Technical Analysis*, Working Paper, Canberra.

- 1985, *Assistance to Manufacturing Industries 1977–78 to 1982–83*, AGPS, Canberra.
- 1986a, *Certain Petroleum Products — Taxation Measures*, Report No. 397, AGPS, Canberra.
- 1986b, *The Textile, Clothing and Footwear Industries, Volumes 1 & 2*, Report No. 386, AGPS, Canberra.
- 1987, *Assistance to Agricultural and Manufacturing Industries*, AGPS, Canberra.
- 1988, *State Government Assistance to Agriculture*, AGPS, Canberra.
- IC (Industry Commission) 1990, *The Automotive Industry*, Report No. 5, AGPS, Canberra.
- 1991, *Changes to Manufacturing Industry Assistance: March 1991*, Information Paper, AGPS, Canberra.
- 1992, *Annual Report 1991–92*, AGPS, Canberra.
- 1993, *Annual Report 1992–93*, AGPS, Canberra.
- 1994, *The Tobacco Growing and Manufacturing Industries*, Report No. 39, AGPS, Canberra.
- Keating, P. 1994, *Working Nation — Policies and Programs*, AGPS, Canberra.
- McLachlan, R., Ironfield, D. and Valdes, R. 1991, *Assistance to the Wool Industry*, Working Paper No. 3, Canberra.
- Plunkett, H., Wilson, R. and Argy, S. 1992, *The Measurement of Effective Rates of Assistance in Australia*, Staff Working Paper, IC, Canberra.