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COMMISSION

THE TOBACCO GROWING

AND

MANUFACTURING INDUSTRIES

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INDUSTRY COMMISSION

29 June 1994

The Honourable George Gear MP
Assistant Treasurer
Parliament House
CANBERRA ACT   2600

Dear Assistant Treasurer

In accordance with Section 7 of the *Industry Commission Act 1989* we have pleasure in submitting to you the report on *The Tobacco Growing and Manufacturing Industries*.

Yours sincerely

Tor Hundloe
Presiding Commissioner

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Associate Commissioner

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TABLE OF CONTENTS

APPENDICES

ABBREVIATIONS

ABS	Australian Bureau of Statistics
ACS	Australian Customs Service
ACT	Australian Capital Territory
ACTHPF	Australian Capital Territory Health Promotion Foundation
AGPS	Australian Government Publishing Service
APS	Australian Public Service
ARMCANZ	Agricultural and Resource Management Council of Australia and New Zealand
ASIC	Australian Standard Industrial Classification
ATB	Australian Tobacco Board
ATMAC	Australian Tobacco Marketing Advisory Committee
BAT	British American Tobacco
CES	Commonwealth Employment Service
cif	cost, insurance and freight
CPI	Consumer Price Index
DAV	Department of Agriculture Victoria
DC	developing country
DFAT	Department of Foreign Affairs and Trade
DEET	Department of Employment, Education and Training
DPI	Department of Primary Industries
DPIE	Department of Primary Industries and Energy
DSS	Department of Social Security
FMC	fully manufactured cigarette
fob	free on board
GATT	General Agreement on Tariffs and Trade
GNP	Gross National Product

GSE	gross subsidy equivalent
HPF	Health Promotion Foundation
IAC	Industries Assistance Commission
LDC	less developed country
ldf	landed duty free
LLCS	Local Leaf Content Scheme
MCDS	Ministerial Council on Drug Strategy
MDIA	Mareeba-Dimbulah Irrigation Area
MSP	manufacturers selling price
NDS	National Drug Strategy
NSE	net subsidy equivalent
NSW	New South Wales
NT	Northern Territory
OECD	Organisation for Economic Co-operation and Development
OLMA	Office of Labour Market Adjustment
ORPG	Ovens Research Produce Group
PIDC	Primary Industry Development Council
PSA	Prices Surveillance Authority
QDPI	Queensland Department of Primary Industries
QIDC	Queensland Industry Development Corporation
Qld	Queensland
RAS	Rural Adjustment Scheme
RFC	Rural Finance Corporation
RWC	Rural Water Corporation
SA	South Australia
SCARM	Standing Committee on Agriculture and Resource Management
SLF	State licence fees
SPC	Shepparton Preserving Company
SWOT	Strengths, Weaknesses, Opportunities, Threats

Tas	Tasmania
TGV	Tobacco Growers of Victoria
TIA	Tobacco Institute of Australia
TISP	Tobacco Industry Stabilisation Plan
TLMB	Tobacco Leaf Marketing Board
TLMBQ	Tobacco Leaf Marketing Board of Queensland
TLMBV	Tobacco Leaf Marketing Board of Victoria
TMA	Tobacco Merchants Association
TPC	Trade Practices Commission
TRDC	Tobacco Research and Development Council
vfd	value for duty
VHPF	Victorian Health Promotion Foundation
Vic	Victoria
UK	United Kingdom
US	United States
USDA	United States Department of Agriculture
WA	Western Australia
WHA	World Health Assembly
WHO	World Health Organisation
WRC	Water Resources Commission
WRDC	Wangaratta Regional Development Corporation
$A	Australian dollar
$US	United States dollar

GLOSSARY

Air-curing	The controlled drying of the picked tobacco leaf to bring out its texture, colour and aromatic characteristics without the use of produced heat (burley tobacco).
Basic quota	An amount of quota the grower is originally allocated.
Cut tobacco	Tobacco for use in roll-your-own and pipe tobacco products.
Dry weight	Term applied to tobacco leaf following redrying and threshing in a processing plant.
Flue-curing	Process of colouring the freshly harvested green tobacco leaf to a desirable yellow colouring in a barn or kiln by use of heat, usually generated by electricity, oil or coal.
Grade fall-out	Total amount of leaf sold classified according to grade.
‘Filler’ tobacco	A thin textured and almost neutral tasting product (with low nicotine content) which adds bulk to the cigarette, but contributes little to its overall taste qualities.
Green weight	Term applied to tobacco leaf after it is picked and cured.
Marketing quota	see Selling entitlement.
National quota	The sum of all selling entitlements.
Non-quota leaf	Comprises over-quota and out-of-quota leaf.
Out-of-quota leaf	Flue-cured leaf which does not meet the requirements for any of the grades set down in the Grade and Minimum Price Schedule, or flue-cured leaf grown by a farmer who is not a quota holder.
Over-quota leaf	Quota leaf produced in excess of a grower’s selling entitlement.
Quota leaf	Flue-cured leaf which can be graded into agreed grades listed in the Grade and Minimum Price Schedule.
Redrying	Process of stabilising the moisture content in the tobacco leaf.

Run-of-crop	Refers to the total leaf grown on the tobacco plant which is suitable for classification into grades according to the Grade and Minimum Price Schedule.
Selling entitlement	The quantity of tobacco leaf for which each quota holder has a guaranteed market under the stabilisation arrangements. (In 1994, the selling entitlement was 55 per cent of basic quota).
Straight-laid leaf	Cured tobacco leaf which, when packed into the bale, is aligned so that the butts of the leaves are positioned together in a standard pattern throughout the whole bale.
Tangled leaf	Cured tobacco leaf which, when packed into the bale, is not aligned in any particular direction.
Threshing	Mechanical process applied to the cured whole tobacco leaf which separates the lamina from the stem and removes impurities, such as residual soil.

TERMS OF REFERENCE

I, George Gear, Assistant Treasurer, in pursuance of Section 7 of the Industry Commission Act 1989, hereby:

1. refer the tobacco growing and manufacturing industry to the Industry Commission for inquiry and report within nine months of the date of receiving this reference;

2. having regard to the Government's decision to terminate the Tobacco Industry Stabilisation Plan and the Local Leaf Content Scheme on 30 September 1995, request that the Commission report on the appropriate tariff level to apply after that date to imports of tobacco leaf and manufactured tobacco products;

3. specify that in making its recommendations the Commission aim to improve the overall economic performance of the Australian economy;

4. request that the Commission report on:
   (a) emerging trends in local and global markets for the industry;
   (b) the current structure and competitiveness of the industry, including an identification of strengths and weaknesses, drawing international comparisons where appropriate;
   (c) the potential for further development of the industry, including the scope for increasing exports and any barriers to the export of tobacco leaf and tobacco products; taking account of Australia's international approach in relation to tobacco and health;
   (d) any measures which could be undertaken to remove impediments or otherwise contribute to the efficiency, growth or export development of the industry, in ways that are consistent with the principles of efficient resource use in the economy; and
   (e) any impediments to efficient land use, especially impediments to the structural adjustment of the industry, including identifying and adjusting to alternative land use;
   (f) the effectiveness of the existing rural adjustment policies in facilitating adjustment and any measures which could be undertaken to remove impediments to efficient land use, in ways that are consistent with the principles of efficient resource use in the economy; and
   (g) the effects on the industry, and the economy in general, of any measures recommended by the Commission;

5. request that the Commission quantify the extent of any assistance provided to the industry, identify if it is offered in a discriminatory manner within the industry and report on ways in which:
   (a) that assistance could be better used to promote the long term development or adjustment of the industry and economy; and
   (b) the costs of adjusting to lower levels of assistance can be minimised;

6. request that, where appropriate and without disclosing material provided in confidence, the Commission report on examples of past success and failure in the industry, both in Australia and elsewhere, by way of case studies or other means; and

7. specify that the Commission have regard to the established economic, social, health and environmental objectives of governments.

GEORGE GEAR
29 October 1993

OVERVIEW

Background to the inquiry

The catalyst for this inquiry is the impending termination, on 30 September 1995, of arrangements which have regulated the production and marketing of tobacco leaf in Australia for nearly three decades. Under those arrangements the level of production has been controlled through a system of individual grower quotas, supported by legislation which empowers State Tobacco Leaf Marketing Boards to acquire all leaf and market it on behalf of growers. The three tobacco product manufacturers (Philip Morris, WD & HO Wills, and Rothmans) have participated in this scheme through the Australian Tobacco Marketing Advisory Committee (ATMAC). Each year, before planting commences, growers and manufacturers, through ATMAC, agree on the aggregate marketing quota level for that year. They also agree on the grades of leaf to be marketed and the price to be paid for each of those grades.

Under a local leaf content scheme (LLCS), manufacturers who use 50 per cent local leaf in their tobacco products qualify for concessional rates of duty on their imports of leaf. Since 1977, all three manufacturers have agreed, under the Tobacco Industry Stabilisation Plan (TISP), to use 57 per cent Australian leaf in their tobacco products.

The growing and manufacturing industries have been on notice since 1988 that none of the above arrangements will be renewed, and in this context the Commission has been asked to report on an appropriate tariff to apply from September 1995.

Production and markets

International

Tobacco is grown in more than 120 countries. World production is about 7.5 million tonnes of which Australian growers produce 0.2 per cent. China is by far the world's largest producer (40 per cent in 1991) followed by the United States which produced about 10 per cent of the total. Twenty per cent of tobacco leaf production is traded internationally, the remainder being used for the manufacture of tobacco products in the country in which it is grown.

The demand for tobacco leaf is derived from the demand for manufactured tobacco products, about 80 per cent of which are cigarettes. Emerging trends in markets for these products vary between countries.

In industrialised countries per capita consumption of tobacco products has been declining. In countries experiencing rapid economic growth, two countervailing forces influence consumption. Increasing incomes tend to increase demand for better quality (perhaps imported) cigarettes. But increased incomes are usually associated with better education (and information flows) and, to the extent that health risks of smoking are conveyed through education, demand will be reduced.

In the developing countries there is little likelihood of a per capita increase in consumption until incomes increase — and then they will be influenced in the same way as industrialised countries.

The foregoing are generalisations, and factors other than income and stage of economic development are important. In some countries a ‘culture’ of smoking outweighs the effects of high income and better education, and consumption is on the increase. In others, taxation and regulations have a major influence.

In an aggregate context, population growth will continue to be by far the most important determinant of demand. Population growth is lowest in the industrialised world — where per capita consumption is declining, and highest in developing countries, where income is a constraint on increases in per capita consumption.

Domestic

In Australia there are four tobacco growing areas and about 600 growers. The largest area is in the Mareeba-Dimbulah region of northern Queensland where about 60 per cent of the Australian crop is grown. In north-east Victoria, around the Myrtleford district, a further 36 per cent is grown. The remainder of the crop is grown in the Glasshouse Mountains district of southern Queensland and in New South Wales, mainly around the Ashford-Bonshaw area, but also near Coraki and Tooma.

All of the Australian crop is sold on the domestic market. In 1993, the three tobacco product manufacturers purchased 12.7 million kilograms of leaf for $78.2 million. In accordance with the provisions of the TISP, domestic leaf made up 57 per cent of their tobacco leaf requirements for that year. The other 43 per cent was from imports, mainly from developing countries, although the major single source of imports was the United States which accounted for 35 per cent of the total.

In common with other industrialised countries, per capita demand for tobacco products in Australia is declining. This decline is reflected in manufacturers' purchases of tobacco leaf, and in turn, in reduced marketing quotas under the TISP. Per capita consumption is expected to continue to decline for the foreseeable future as the incidence of smoking falls. In 1990, 26 per cent of Australian adults smoked compared with 35 per cent in 1980.

Governments have influenced the domestic consumption of tobacco products by imposing a range of taxes which increase price, by regulating the advertising of cigarettes, restricting adolescents' access to them, banning their consumption in certain locations, and by providing information on the health effects of tobacco consumption. The combined effect of these actions has been to substantially reduce consumption from levels which would otherwise have prevailed.

Tobacco products are the highest taxed products on Australian markets. They are among a small group of commodities which have historically been targeted for taxation because their market characteristics are such that following a price rise, demand falls less than proportionately to the price increase. Consequently, tax-induced price rises result in increased tax revenue despite reduced consumption in response to the price rises. In economic terms, the demand for these products is price inelastic.

Revenue from the taxation of tobacco products now forms a significant part of State and Territory budgets, but different rates of tax between States have provided an incentive to transport products across borders in order to minimise tax payments. The Commission supports moves towards the adoption of uniform State tobacco product tax rates.

The market characteristic which makes tobacco taxes an effective revenue raising instrument (price inelastic demand), reduces the efficacy of taxes as a means of reducing demand for health reasons (except perhaps for adolescents). For that purpose, regulations and information targeted at particular groups are used to supplement the effects of high taxes.

Effects of marketing arrangements

The regulations embodied in successive TISPs and LLCSs have perpetuated an artificial market environment in which growers and manufacturers have been insulated from the discipline of the market. The schemes have been primarily responsible for the development of an inefficient tobacco growing industry structure in which there are too many growers, and too much capacity, to efficiently satisfy the demand for domestic leaf. A backlog of adjustment now requires urgent attention. The need for such adjustment is substantially independent of the termination of the marketing arrangements.

For nearly three decades representatives of growers and tobacco product manufacturers, through ATMAC, have jointly agreed on an aggregate marketing quota for each selling season. Since 1977, the quota has been set at 57 per cent of ATMAC's estimate of manufacturers' total leaf requirements (subject to stock adjustments). The aggregate has then been divided between the three leaf growing States and, in turn, between individual growers according to their base quota holdings.

Growers and manufacturers, through ATMAC, have also recommended the price which has been set for the various grades of leaf in advance of sales and independent of the quantities of the different grades offered for sale.

Under these arrangements growers have had no opportunity to compete with each other on the basis of the quality or type of leaf produced, or on price. The incentives they faced were not related to the requirements of the market but rather to the least cost method of producing a given quantity of tobacco — especially as, until fairly recently, there was little difference between the prices offered for the various grades of leaf. These distorted incentives to growers extended to research into the production of high yielding varieties of tobacco plants rather than varieties with attributes valued highly by manufacturers.

The marketing arrangements have delivered consistently high levels of assistance to tobacco growing activities. Such assistance has been well above the average for agriculture, and for most other economic activities.

The provisions of the TISP have also served to suppress competition between tobacco product manufacturers. Individually they have had no incentive to encourage growers to produce varieties more suited to their own blending requirements because of the way bales are offered for sale and arbitrarily allocated between the three manufacturers. The common price set for each grade has also stifled price competition between manufacturers. In effect, under the TISP, each manufacturer has agreed to purchase an identical mix of grades at a common price.

In recent years, as the demand for tobacco leaf has declined, reductions in selling entitlements have been allocated pro rata across all tobacco growers according to their base quota holdings. Combined with impediments to quota transfer within the industry (discussed below), reduced selling entitlements have left most growers with substantial excess capacity.

Typically, tobacco growers are now producing at less than 60 per cent of their capacity. Many are producing leaf varieties developed for their yield rather than for characteristics valued by manufacturers, and they face further declines in tobacco leaf demand and price.

Future prospects

The future prospects for the Australian tobacco growing industry will depend, among other things, on growers' ability to match international prices for tobacco leaf and meet buyer requirements concerning grade and reliability of supply.

The price disadvantage of local growers against imports is substantial and has not been declining as was intended at the commencement of the current TISP.

The relatively high cost of production and distances from major markets have precluded the export of Australian leaf. There is an international market for tobacco leaf of the type grown in Australia, but at prices well below those currently received by Australian growers for domestic sales.

The export prospects for tobacco leaf are not good. In the short to medium term, future prospects for growers appear to be confined to supplying a smaller share of local tobacco product manufacturers' requirements for tobacco leaf.

Whether local tobacco product manufacturers continue to concentrate on supplying the Australian market is likely to be influenced by factors such as the differentiated nature of tobacco products, production strategies of international business organisations, and local labelling, packaging and excise requirements.

Strategic links may have developed between Australian manufacturers and growers around the supply of the domestic market. But tobacco leaf is traded internationally and the presence of local manufacturing capability does not ensure a longer term demand for Australian leaf or that tobacco product manufacturing will continue to be undertaken in Australia.

Adjustment

Although there has been a continual transfer of land out of tobacco production since the early 1970s, unless there is now a rapid and substantial reduction in the number of growers, and further reductions in the amount of land and equipment devoted to tobacco production, all growers will face financial difficulties. The current level of demand for Australian leaf indicates that, without any further investment in land or equipment, the market could be adequately supplied by half the number of growers in the industry today. Following that adjustment, for those growers remaining in the industry, the more efficient utilisation of their growing and leaf curing capacity will better prepare them for the new production and marketing environment they will face when the TISP and LLCS terminate.

The requirement for the growing industry to prepare for a deregulated environment has been known for a long time. Since 1984, intentions to improve the price competitiveness of Australian leaf have been incorporated in the TISP, with a focus on industry restructuring and adjustment. Attention was to be given to reducing the margin between Australian and world prices, restrictions on quota sale and transfer were to be removed, and manufacturers' stockholding reduced. For a variety of reasons those intentions have not been realised.

One factor over which the industry has had no control is the decline in demand for tobacco leaf caused by increases in the taxation of tobacco products, the strengthening of regulations directed at marketing and consumption, and the provision of information on the health effects of tobacco consumption. But ATMAC's slow response to an obviously declining demand for leaf, and its management of adjustment to a lower level of manufacturers' stockholdings, have exacerbated the industry's adjustment problem.

Growers may well question why they have an aggregate selling entitlement of 8.1 million kilograms for the 1994 season when manufacturers' consumption of Australian leaf is expected to be 11.6 million kilograms. The explanation lies in ATMAC's overestimate, in previous years, of the demand for leaf, and in manufacturers' requirement to reduce leaf stockholdings. Although growers and manufacturers, through ATMAC, share responsibility for this situation, the cost of adjustment will be borne solely by growers.

The TISP itself has been an impediment to adjustment in that it has effectively suppressed competition between growers to supply a declining market.

In addition to government supported institutional arrangements which interfere with the adjustment process, the direct action of governments can sometimes have unintended outcomes. For example, in 1988, the then Queensland Government made a decision to provide $10 million to assist growers to adjust to declining demand for tobacco leaf. Grants from the fund were made to growers between 1989 and 1993. However, the purposes for which grants were made, and the conditions attached to grants, produced an outcome opposite to that which was intended. Growers invested heavily in equipment specific to tobacco growing and became locked in to the industry. The fund effectively stopped rationalisation of the industry in Queensland and indirectly imposed a severe constraint on the interstate transfer of quota.

Grower uncertainty about the future prospects for tobacco growing, about future assistance arrangements, and about the possibility of a quota buy-out, has also been an impediment to adjustment, particularly in the lead up to termination of the TISP and LLCS.

When the inevitable shake out of growers occurs the adjustment task facing the two major growing regions will have an added dimension. Already the Mareeba-Dimbulah and Myrtleford districts are required to adjust to a substantial decline in regional income. When rationalisation occurs, income distribution within the regions will change. Those growers who remain in tobacco growing, and are able to achieve a higher level of capacity utilisation, have the prospect of a reasonably rapid return to profitability. Those who can successfully diversify into other crops may have a further period of low income until new crops, such as grapes, reach maturity. But others who are unable to continue growing tobacco face long periods of under- or unemployment. Developments such as these will place considerable strain on existing social services in these regions.

The Commission has identified a number of impediments to the future adjustment of the tobacco growing industry. They include factors such as the availability of finance for alternative activities, the small size of many existing tobacco farms, and the market prospects for other crops. Also important is the reluctance of many growers to change a lifestyle which has fostered strong ethnic ties within small regional communities, especially for those whose skills are limited to tobacco growing and who are approaching retirement age.

In the Commission’s view, the above impediments to adjustment do not warrant the provision of assistance beyond that which is already available for adjustment purposes. Commonwealth and State Government programs currently available to individuals, together with the phased tariff reduction proposed by the Commission, have the capacity to address the adjustment needs of tobacco growers.

Many tobacco growers are unable to obtain assistance under the Rural Adjustment Scheme (RAS) because they either fail to meet the assets test or cannot demonstrate long term viability. This does not provide a basis to change the RAS eligibility criteria specifically for tobacco growers. When there is more certainty about the future direction of the tobacco growing industry, and about the viability of alternative crops, commercial institutions may be more willing to provide finance for diversification, in which case assistance under the existing RAS criteria may be available.

In both major growing regions, the climate, soil types and quality of water are suitable for the production of a wide range of crops. Although none of the alternative crops will directly replace tobacco production or maintain growers’ past income levels, they have some potential to be grown and marketed profitably. An exception to this generalisation may be some former Dimbulah tobacco farms for which unsuitable soils and distance from markets severely restricts their future prospects.

Growers from each of the growing States have approached their respective governments for assistance to restructure their industry in preparation for the deregulated environment they will soon face. An important element of each of their requests is for a quota retirement, or quota buy-out, scheme as a means of achieving a rapid realignment of growing capacity and demand for Australian leaf.

The Commission acknowledges that a rapid reduction in the number of growers will provide a better and earlier opportunity for those who remain in the growing industry to adjust to a market requiring a higher grade of leaf at a lower price. If this adjustment task is delayed until natural attrition through market forces takes its course, the social and economic cost of the process, on both those who remain and those who leave, will be high.

Victoria implemented a quota retirement scheme, at a cost of $3 million, with the objective of reducing the productive capacity of the growing industry by about 20 per cent. That scheme has been a success in that, although its objective was modest, it acted as a useful circuit-breaker for the uncertainty which was impeding adjustment and provided growers with an improved prospect for survival in the immediate future.

While the Victorian scheme was a useful circuit-breaker for the tobacco growing industry, the Commission cautions against the use of such schemes in other circumstances and for other industries. If expectations are formed on the basis of the availability of producer buy-out schemes for declining industries, or for industries in which there is a backlog of adjustment, those expectations will delay adjustment and generate the backlog — as demonstrated by the current experience of the tobacco growing industry.

Queensland and New South Wales growers have proposed schemes which would retire 50 per cent and 100 per cent of quota respectively. The Commission cautions against attempting to remove more growers and capacity than would have retired in a competitive market environment.

The benefits of any quota retirement scheme will accrue mainly in the short run. In the longer term, the growing industry will need to respond to changing market circumstances, which will be influenced by the marketing arrangements which develop in a deregulated environment. Unless new marketing structures which replace the TISP have provision for competition between growers for market share, especially in a declining market, a repeat of the growing industry's current circumstances is a distinct possibility at some time in the future. In that event, responsibility for further restructuring would rest squarely with growers.

The regional dimension of the adjustment task requires, and is receiving, immediate attention. In the Myrtleford region, local community based initiatives have been prominent, whereas in the Mareeba-Dimbulah region, the Queensland Government has been responsible for the development of a co-ordinated program to facilitate regional adjustment.

In both regions there is a need for emphasis to be placed on the co-ordination of existing programs and schemes by local councils, the community generally, and regional development boards and other government organisations to ensure that such programs are effectively accessed and utilised.

Future assistance

Prior to release of the draft report, the Commission received many requests from growers and others for ‘more of the same’. In an environment totally insulated from the realities of the market, and in times when the demand for tobacco leaf was much higher, the TISP and LLCS may have delivered high individual and regional incomes. But those conditions no longer apply and in today’s context ‘more of the same’ means more of the hardship which was recently delivered under the heavily regulated environment of the TISP and LLCS.

In submissions received since release of the draft report, and at the draft report hearings, the Commission has observed a change in growers’ attitude and understanding of the industry’s circumstances. They now accept that domestic tobacco products manufacturers have options which include moving offshore and importing the finished product, and that continuing high levels of assistance to the growing industry, especially if they incorporate high levels of local leaf content, make that option more attractive.

The Commission was asked to report on an appropriate tariff to apply to imports of tobacco leaf and tobacco products following termination of the TISP and LLCS. In forming a judgement as to what those tariffs should be the Commission has taken into account the existing circumstances of the growing industry which include high assistance and a backlog of adjustment. Also relevant are the options and likely responses of tobacco product manufacturers faced with either a high or low tariff on their inputs and the levels of assistance available to other Australian industries.

For the short term, the Commission considers that an initial *ad valorem* tariff of 25 per cent is appropriate for imports of tobacco leaf. This would continue to provide high assistance in relation to assistance available to most other

Australian industries, but the Commission's preference is not to compound the short term adjustment task already facing the industry. There is no single tariff which could replicate the existing complex assistance arrangements, or which could guarantee that a specified amount of domestic leaf would be used in the manufacture of tobacco products. Nevertheless, it is the Commission's judgement that an initial tariff of 25 per cent represents a reasonable trade-off between maintaining a level of assistance which would ease adjustment pressure on growers, and adding to the input costs of tobacco product manufacturers.

An initial *ad valorem* tariff of 25 per cent would provide growers with the opportunity to clear the adjustment backlog and prepare to respond, in a more open market environment and with a lower level of assistance, to the requirements of tobacco product manufacturers. The Commission considers that by the end of 2001 tobacco leaf imports (with the exception of leaf which is currently imported free of duty) should be subject to an *ad valorem* tariff of 5 per cent — a level similar to the long run targets which apply to imports of other products. The Commission proposes that the initial tariff of 25 per cent be reduced to 20 per cent after one year, to 17.5 per cent after two years, and so on in annual decrements of 2.5 percentage points until the target long-term rate of 5 per cent is reached at the end of year seven.

For manufactured tobacco products the Commission recommends an *ad valorem* tariff of 5 per cent except for cigars, cheroots and cigarillos, for which the Commission recommends a zero tariff.

The Commission has taken into account the established economic, social, health and environmental objectives of governments and considers that its proposed tariff recommendations are not in conflict with those or with Australia's international approach to tobacco and health. Any decrease in the price of leaf which might follow from the Commission's proposals would have an insignificant effect on the final demand for tobacco products given the over-riding influence of Commonwealth excise and State and Territory taxes on the price of tobacco products.

The timing of termination of the LLCS, and implementation of the Commission's proposals, is affected by agreements recently reached under the Uruguay Round of trade negotiations. Under the terms of the Uruguay Round agricultural package, all participants are required to convert all non-tariff trade barriers to tariff-only support. For local content schemes, the agreed mechanism requires the replacement of existing arrangements with tariff-quotas — the due date for implementation being before the expiry of the LLCS (sometime between January and July 1995).

The Commission considers that implementation of the proposed tariff-quota arrangements for imports of tobacco leaf will make it more difficult to ease the path of adjustment for the tobacco growing industry because there would be an abrupt reduction from the current level of assistance. The cost of adjustment to lower levels of assistance would be reduced by avoiding conversion of assistance to a tariff-quota regime. The Commission’s proposals, while also providing, on implementation, a lower level of support than the current arrangements, provide a much smoother and manageable path of adjustment to a lower level of assistance. For these reasons, the Commission has recommended that its proposals be acted on prior to implementation of the Uruguay Round agreement.

FINDINGS AND RECOMMENDATIONS

Findings

1. The price disadvantage of local tobacco growers against imports is substantial and has not been declining as was intended at the commencement of the current TISP.

   Chapter 5, p. 56

2. The tobacco industry marketing arrangements have delivered consistently high levels of assistance to tobacco growing activities. This assistance has been well above the average for agriculture.

   Chapter 5, p. 59

3. The export prospects for tobacco leaf are not good. In the short to medium term, future prospects for tobacco growers will be confined to supplying a share of local tobacco product manufacturers' requirements for tobacco leaf. The size of that share will depend on growers' capacity to meet quality and price requirements.

   Chapter 5, p. 72

4. The weight-based excise system has distorted the production decisions of tobacco product manufacturers and has the potential to distort their leaf purchasing decisions. An excise based on the number of cigarettes (sticks) would also distort production and purchasing decisions.

   Changing the method of charging excise on tobacco products to the less distorting value basis should be given consideration. Tobacco product manufacturers should be given about three years' advance notice of any change.

   Chapter 6, p. 86

5. Slow response to an obviously declining demand for tobacco leaf has exacerbated the tobacco growing industry's adjustment problems.

   Chapter 7, p. 108

6. The TISP and LLCS have not provided an opportunity for growers to compete with each other on the basis of quality or price and have suppressed competition between tobacco product manufacturers.

   Chapter 7, p.110

7. The TISP and LLCS have been primarily responsible for the development of an inefficient industry structure in which there are too many growers, and too much capacity, to efficiently satisfy the demand for domestic leaf. A backlog of adjustment now requires urgent attention. The need for such adjustment is substantially independent of the termination of the current marketing arrangements.

   Chapter 7, p. 112

8. In the Mareeba-Dimbulah region (with the exception of some parts of Dimbulah) and in the Myrtleford region, the climate, soil types and quality of water available are suitable for the production of a wide range of crops. Although none of these crops will directly replace tobacco production and maintain growers' past income levels, they have some potential to be grown and marketed profitably.

   Chapter 7, p. 117

9. Impediments to adjustment are the small size of tobacco farms, regulations relating to subdivision, grower access to finance, lower returns from alternative activities, age and ethnic background of growers, factors restricting off-farm employment prospects, and uncertainty about the prospect of further assistance to remain in, or leave, tobacco production.

   Chapter 7, p. 121

10. A rapid reduction in the number of growers will provide a better and earlier opportunity for those who remain in the growing industry to adjust to a market requiring a higher grade of leaf at a lower price. If this adjustment task is delayed until natural attrition through market forces takes its course, the social and economic cost of the process, on both those who leave and those who remain, will be high.

    Chapter 8, p. 129

11. The Victorian quota retirement scheme has acted as a useful circuit-breaker in that it has injected a degree of certainty into the local community, and has provided growers remaining in the industry with an improved prospect for survival in the immediate future.

    Chapter 8, p. 133

12. Unless new marketing structures which replace the TISP have provision for competition between growers for market share, especially in a declining market, a repeat of the growing industry's current circumstances is a distinct possibility at some time in the future. In that event, responsibility for any further restructuring would rest squarely with growers.

Chapter 8, p. 136

13. Many tobacco growers are unable to obtain assistance under the RAS because they either fail to meet the assets test or cannot demonstrate long-term viability. This does not provide a basis to change the RAS eligibility criteria specifically for tobacco growers.

Chapter 8, p. 138

14. The impediments to adjustment identified in Chapter 7 do not warrant the provision of assistance beyond that which is already available for adjustment purposes. Commonwealth and State Government programs currently available and/or already in place, together with the phased tariff reduction proposed by the Commission, have the capacity to address the long-term adjustment needs of tobacco growers.

    Replacing the TISP and LLCS with tariff-only assistance will allow growers and tobacco product manufacturers to respond more appropriately to the requirements of the market. It will also facilitate more timely adjustment to changing circumstances.

Chapter 8, p. 141

15. The regional dimension of the adjustment task requires, and is receiving, immediate attention. In the Myrtleford region, local community based initiatives have been prominent, whereas in the Mareeba-Dimbulah region, the Queensland Government has been responsible for the development of a co-ordinated program to facilitate regional adjustment.

    In both regions there is a need for emphasis to be placed on the co-ordination of existing programs and schemes by local councils, the community generally, and regional development boards and other government organisations to ensure that such programs are effectively accessed and utilised.

Chapter 8, p. 150

16. The cost of adjustment to lower levels of assistance would be reduced by avoiding conversion of assistance to a tariff-quota regime.

Chapter 10, p. 170

Recommendations

1. The Commission recommends that, on termination of the TISP and/or the LLCS, all imported tobacco leaf, with the exception of leaf falling to Tariff items 2401.10.11 and 2401.20.11, be dutiable at an *ad valorem* General tariff rate of 25 per cent.

2. The Commission recommends that unmanufactured leaf used in the manufacture of cigars, cheroots or cigarillos (Tariff items 2401.10.11 and 2401.20.11) continue to be dutiable at 'free'.

3. The Commission recommends that, on termination of the TISP and/or the LLCS, all imported manufactured tobacco products, with the exception of products falling to Tariff item 2402.10.00, be dutiable at an *ad valorem* General tariff rate of 5 per cent.

4. The Commission recommends that, on termination of the TISP and/or the LLCS, all cigars, cheroots and cigarillos falling to Tariff item 2402.10.00 be dutiable at 'free'.

5. The Commission recommends that, where applicable, the developing country (DC) margin of preference for all tobacco leaf and tobacco products be set 5 percentage points below the General tariff rates recommended to apply on termination of the TISP and/or the LLCS, and that these goods be then included in the general phasing out of DC preference margins.

6. The Commission recommends that, with the exception of leaf falling to Tariff items 2401.10.11, and 2401.20.11, and products falling to Tariff item 2402.10.00, the target long term *ad valorem* General tariff rate for imported tobacco leaf, and manufactured tobacco products, be 5 per cent.

7. The Commission recommends that the target long-term tariff rate of 5 per cent on imported leaf be phased in, from the initial tariff of 25 per cent, over a period of seven years at a rate of 5 percentage points at the end of year one and 2.5 percentage points at the end of each of years two to seven.

8. The Commission recommends that assistance for tobacco leaf and tobacco products be converted to tariff-only support, in accordance with its other recommendations, prior to implementation of the agreement reached for the conversion of local content schemes under the Uruguay Round of trade negotiations.

1 THE INQUIRY

1.1 Scope of the inquiry

The Assistant Treasurer referred the tobacco growing and manufacturing industries to the Commission on 29 October 1993 for inquiry and report within nine months.

The primary focus of this inquiry is the appropriate tariff level(s) which should apply to imports of tobacco leaf and manufactured tobacco products following termination of the Tobacco Industry Stabilisation Plan (TISP) and the Local Leaf Content Scheme (LLCS) on 30 September 1995. The Commission has prepared this report on the understanding that it is the clear intention of the Commonwealth Government that these arrangements will not be extended beyond that date.

The Commission is also required to report on a number of factors affecting the current and future performance of the tobacco growing and manufacturing industries and their relationship to the efficiency of the economy in general. These include:

- trends in local and global markets;
- the structure and competitiveness of the industries;
- the scope for further development of the industries — including the potential for export growth, taking account of Australia's international approach to tobacco and health;
- ways to increase the efficiency of the industries — including the removal of barriers to improved performance;
- impediments to efficient land use — including making alternative uses of land currently used for tobacco growing; and
- ways to facilitate adjustment — including how to minimise the costs of adjusting to lower levels of assistance and the effectiveness of existing rural adjustment policies.

The Commission has also been asked to take account of the established economic, social, health and environmental objectives of governments. The full terms of reference are set out on page xiv.

The inquiry involves two discrete though closely related industries. One consists of the agricultural-based establishments growing and drying tobacco (defined for statistical purposes as comprising Australian Standard Industrial Classification (ASIC) Industry 0193). The output of this industry is used in the other industry, the manufacture of tobacco products (ASIC Industry 2190). The tobacco products industry includes the manufacture of the following products: cigarettes; cigars; cheroots; cigarillos; snuff; and, pipe and roll-your-own cigarette tobacco. Not all these products are presently manufactured in Australia.

In addition to the assistance measures mentioned in the terms of reference, tobacco growing and manufacturing are affected by a number of other government policies, ranging from funding of tobacco research to labelling requirements for tobacco products. The current tariff and excise tariff provisions are presented in Appendix A.

Some of the matters on which the Commission has been asked to report are a reflection of the adjustment pressures currently facing the tobacco industry. As a result of declining demand, the industries already have undergone significant adjustment. In this regard, the Commission has been asked to report on ways of minimising the social costs of adjusting to lower levels of assistance in the future. Hence, how the industries can adjust to these realities forms a significant part of this report.

On 17 March 1994, following representations from growers about the effects of the Uruguay Round trade agreement on the ‘tariffication’ of the Local Leaf Content Scheme (see Chapter 10 for details), the Minister for Primary Industries and Energy, Senator Collins, wrote to the Commission requesting estimates of the tariff which is equivalent to the current assistance arrangements for tobacco growing and the tariff which would be equivalent to the Uruguay Round proposal for tobacco leaf. Appendix B reproduces the Minister’s letter and the Commission’s response.

1.2 Conduct of the inquiry

As it is required to report to the Commonwealth Government within nine months of receiving the reference, the Commission decided to undertake a comprehensive round of informal consultations and inspections rather than holding public hearings prior to releasing its draft report. The discussions and visits, which were undertaken during October to December of 1993 and in February 1994, involved a large number of growers, grower organisations, all manufacturers, State marketing boards, relevant State and Commonwealth Government departments, and a range of organisations promoting health objectives. All major growing areas were visited. The draft report was released in April 1994.

In addition to written submissions, the Commission has based its findings and recommendations on information gained during its discussions, field inspections, public hearings held on the draft report and from published sources. Details of inquiry participants and visits undertaken are provided in Appendix C, while other information sources are set out in the References section at the back of the report. Public hearings to receive comments on the draft report were held during May 1994 in Mareeba, Brisbane, Myrtleford, Melbourne and Sydney.

The Commission wishes to express its thanks to all participants for their co-operation and the spirit in which they responded to the Commission's requests and questioning. Special thanks are extended to growers and manufacturers for their hospitality during visits to their farms and businesses.

1.3 The Commission's approach

In undertaking this inquiry, the Commission must have regard to the guidelines in the *Industry Commission Act 1989* as well as to the specific terms of reference. Those guidelines require the Commission to look beyond the interests of suppliers and users of tobacco and its products. It must look to the wider benefit to the community and consider the effects of current and alternative arrangements on all users, on taxpayers and on the overall allocation of the community's resources.

The Commission has also taken into account the General Agreement on Tariffs and Trade (GATT) on the 'tariffication' of all non-tariff barriers in completing its report (see Chapter 10).

Tobacco-related health and environmental issues also are relevant to this inquiry. The reference asks the Commission to take account of the health and environmental (along with the economic and social) objectives of governments and Australia's international approach to tobacco and health.

1.4 Structure of the report

The report is presented in three parts. Part A reviews and assesses government policies having a direct impact on the future adjustment path for the tobacco industries. Part B presents a more detailed discussion of smoking and health issues and Part C contains the supporting appendices.

In Part A, background information on, and government involvement in, the tobacco growing and manufacturing industries is provided in Chapter 2. Details of the tobacco industries' structure, production and markets are presented in

Chapter 3. Chapter 4 presents information on the manner in which governments influence the domestic production of tobacco leaf and tobacco products. An assessment of the extent of the assistance afforded by the assistance and marketing arrangements to tobacco growing and manufacturing — in the context of an overall assessment of the industries' competitiveness — is given in Chapter 5. The effects of government policies which impact directly on domestic consumption of tobacco products are reviewed in Chapter 6, and adjustment issues are addressed in Chapters 7 and 8. Future assistance arrangements for the industries are discussed in Chapter 9, while the implications of recent decisions made on tobacco as part of the Uruguay Round of GATT are considered in Chapter 10.

In Part B of the report, government health objectives relating to smoking are summarised in Chapter B1, the economics of regulation of smoking is reviewed in Chapter B2 and issues relevant to trying to measure the costs and benefits of smoking are discussed in Chapter B3.

1.5 Recent and concurrent inquiries

In November 1993, the Commonwealth Minister for Primary Industries and Energy convened a Working Group to report on the immediate adjustment needs of the tobacco growing industry and on the adequacy of existing adjustment measures such as the Rural Adjustment Scheme (RAS) and the Government Business Assistance and Marketing Programs. The Working Group's report, which was completed at the end of March 1994, was presented to meetings of the Standing Committee on Agriculture and Resource Management (SCARM) and the Agricultural and Resource Management Council of Australia and New Zealand (ARMCANZ) in April 1994. The report is discussed in Chapter 8.

On 2 December 1993, the Assistant Treasurer directed the Prices Surveillance Authority (PSA) to review all industries which are required, under the *Prices Surveillance Act 1983*, to seek PSA sanction of intended price increases on their 'declared' products. An inquiry into the supply of cigarettes by the three domestic manufacturers, Philip Morris Limited (Philip Morris), Rothmans of Pall Mall (Australia) Limited (Rothmans) and WD & HO Wills (Australia) Limited (Wills), is currently being undertaken and a report is due by 1 October 1994.

2 INDUSTRY BACKGROUND AND GOVERNMENT INVOLVEMENT IN TOBACCO[1]

Australian governments have a long history of involvement with tobacco growing and cigarette manufacturing. Early involvement consisted of protection from import competition and a variety of forms of encouragement to growing, including the free allocation of small parcels of land for tobacco growing and the provision of extensive irrigation facilities.

A succession of Local Leaf Content Schemes and Stabilisation Plans have, each year, provided growers with a guaranteed market (before planting) at a pre-determined price for their leaf. For a long time, growers have received high levels of assistance which has insulated them from the competitive pressures of the marketplace.

During the past decade, the Commonwealth Government has adopted a policy of reducing industry assistance levels. Benefits for the Australian economy as a whole will result from the move to lower protection.

In 1988, the Commonwealth Government announced there would be no further extension of the Stabilisation Plan after 30 September 1993. The Government subsequently extended the plan to 30 September 1995.

Because the demand for manufactured tobacco products has not been very sensitive to price increases, Commonwealth and State Governments have used both the manufacture and the consumption of cigarettes as a source of revenue.

With their winding back of the assistance and marketing support regimes, both the Commonwealth and State Governments are now turning their attention to helping the growing sector adjust to a more open market environment in which the domestic demand for their produce is substantially reduced and is likely to continue to contract in the foreseeable future.

1 Most of the information in this chapter is taken directly from the Australian Tobacco Marketing Advisory Committee's submission to this inquiry. A more detailed discussion of the evolution and changing nature of government involvement in the tobacco growing and manufacturing industries is provided in Appendix D.

2.1 Industry background

2.1.1 The early years

Tobacco seed was brought to Australia by the early settlers and first grown around Parramatta in 1790. By 1840, about 160 hectares of tobacco were under cultivation within 160 kilometres of Sydney.

Growing on a commercial scale began in Victoria, around Myrtleford, in the 1860s and in southern Queensland, around Texas, in the 1880s. By 1889, about 3000 tonnes of air-cured leaf was produced. This level of annual output was not exceeded until over 50 years later.

At the turn of the century, there were 614 producers of tobacco products purchasing both domestic and imported leaf. However, only 103 of these operated from registered factories. The leaf required in that era was mainly the heavier and darker varieties and most tobacco manufactured was so-called ‘cut tobacco’ for pipe smoking, roll-your-own cigarettes, cigar manufacture, snuff or chewing tobacco.

For the first quarter of this century New South Wales was the major producing State, but Queensland production became increasingly important following initiatives by the Australian Tobacco Investigation (a Commonwealth Government body) which, in association with the State Departments of Agriculture, explored the then commercial prospects for tobacco cultivation. In 1928–29, an experimental tobacco farm was established at Mareeba in northern Queensland. Responding to the requests of land seekers, the Queensland Government subsequently made available large areas of Crown land for tobacco growing. By 1932–33, there were about 800 growers in the Cairns hinterland alone.

2.1.2 The 1930s to 1950s

The 1930s was a period of ‘boom and bust’ for the industry, with tobacco being grown in areas having unsuitable soils. This produced undesirable and often unsaleable grades of leaf. During this decade, tobacco was grown in every State and even in the Australian Capital Territory. By this time the number of buyers of leaf had declined to about 30 (mostly small operators). The British Australasian Tobacco Company, which was formed at the turn of the century by the merger of many local cigarette manufacturing companies, was the major buyer in the market, accounting for between 80 and 90 per cent of purchases. Despite this, a Tariff Board inquiry at the time found that, as the number of buyers for each type of leaf and each grade was significant, the market was not controlled by this major buyer and that the auction system used to market leaf was working effectively.

Industry output during the Second World War averaged around 2300 tonnes per annum (it had been 4300 tonnes in 1932–33). In 1944–45, production dropped to below 1400 tonnes due to shortages of labour and materials and low prices for leaf.

Relatively rapid and lasting changes had occurred by the end of the 1940s. The most significant changes were the production of a lighter (colour) type leaf, flue-curing (involving the application of heat) rather than air-curing and a tendency for growing to be concentrated in areas most suited to the production of that lighter leaf, particularly in Queensland and Victoria.

During the 1950s, both the total area under cultivation and output significantly expanded — from 3380 hectares producing 3509 tonnes in 1951–52, to 8619 hectares producing 9215 tonnes in 1959–60. During this period, the majority of buyers left the industry. This was primarily due to a significant shift in consumer preferences to manufactured cigarettes and away from other tobacco products. This meant that economies of scale became much more important for the production of what were termed ‘tailor-made’ cigarettes. By the mid-1960s, only five buyers of the lighter coloured cigarette leaf remained in the market and the market for the heavier, darker leaf was virtually non-existent. Two of the remaining buyers exited the market in the late 1960s.

2.2 Government involvement in tobacco since the mid-1930s

Until the mid-1960s, the principal basis of Commonwealth support for the tobacco growing industry was the statutory percentage usage system for Australian leaf, otherwise known as the Local Leaf Content Scheme (LLCS). Under this system, which commenced on 23 May 1936, manufacturers pay a concessional rate of duty on imported leaf used in manufactured tobacco products providing they use a stipulated percentage of Australian leaf. The percentage has varied since the introduction of the system, when the initial blending requirement was 2.5 per cent for cigarettes and 13 per cent for cut tobacco. This requirement was increased slowly over the period 1936 to 1955, but from 1957 to 1966 the increases in local content requirement became more significant. Since 1966, the statutory requirement has been held at 50 per cent for both cigarettes and cut tobacco.

Following the rapid changes in the 1950s and early to mid-1960s, there were moves for some form of rationalisation and stabilisation for the industry. A balance between supply and demand for Australian leaf was not being achieved and there were continuing problems with grading and pricing. The rapid expansion in production of leaf in the late 1950s and serious marketing difficulties with the 1960–61 crop (which saw 2000 tonnes of leaf left unsold on sales floors) were two important factors which led to the proposal for the development of a long-term Stabilisation Plan.

The proposals for a Stabilisation Plan were then submitted to Commonwealth and State Ministers and the first Tobacco Industry Stabilisation Plan (TISP) commenced, on an interim basis, in the 1965 selling season. Commonwealth legislation — the *Tobacco Marketing Act 1965* — established the Australian Tobacco Board (ATB), which is now known as the Australian Tobacco Marketing Advisory Committee (ATMAC), although appointments to the Board were not made until the beginning of 1966.

Under the various TISPs since 1977, manufacturers have voluntarily agreed to use Australian leaf for 57 per cent of their requirement for domestic consumption.

In order to implement the first Plan, the governments of the tobacco producing States — New South Wales, Victoria and Queensland — introduced complementary legislation conferring appropriate powers for marketing of Australian tobacco leaf on the ATB. The State legislation also provided the necessary powers within each of the States to issue marketing quotas to individual growers. The national quota each year (ie 57 per cent estimated usage) is calculated by ATMAC and recommended to the Commonwealth Minister for Primary Industries and Energy for approval in consultation with the State Ministers responsible for agriculture in New South Wales, Victoria and Queensland.

The marketing powers which were conferred on the ATB by Section 7 of the New South Wales *Tobacco Leaf Stabilisation Act 1967,* Section 5 (1) of the Victorian *Tobacco Leaf Industry Stabilisation Act 1966* and Section 8 of the Queensland *Tobacco Industry Stabilisation Act of 1965* were as follows:

> For the purpose of giving effect to such policy with respect to the marketing of Australian tobacco leaf as is from time to time agreed upon between the Commonwealth, the State and any other States that are declared by the Commonwealth Minister to be tobacco growing states, the Commonwealth Committee, by instrument in writing, may give directions to the State Board with respect to the sale or other disposal by the State Board of Australian tobacco leaf and, in particular, without limiting the generality of the foregoing, may direct the State Board not to sell Australian tobacco leaf of a grade specified in the instrument at a price less than such price as is specified in the instrument in relation to that grade and, while the instrument remains in force the State Board shall comply with the directions contained in the instrument.

Under the stabilisation arrangements, the ATB, and subsequently ATMAC, have been central to the marketing of Australian leaf. ATMAC provides the forum whereby the interests of State and Commonwealth Governments, the growers and the manufacturers are brought together. In practice, the primary function of the ATB and then ATMAC has been the administration, since 1966, of successive Tobacco Industry Stabilisation Plans which have governed the marketing by State organisations of all the tobacco leaf in Australia.

The selling of tobacco leaf is regulated through Tobacco Leaf Marketing Boards established under legislation in each of the tobacco producing States. The State Boards, or more specifically the Quota Committees associated with the Boards, have responsibility for allocation of quota to individual growers. The State Boards also acquire all leaf and market it on behalf of growers.

Research, funded jointly by the Commonwealth and the tobacco industry, was initiated in 1955 and administered until 1986 by the Central Tobacco Advisory Committee, a non-statutory sub-committee of the Australian Agricultural Council. Funding was provided through a statutory levy on growers and manufacturers, which was matched by the Commonwealth on a dollar for dollar basis, up to a pre-determined maximum contribution.

Subsequently, the *Rural Industries Research Act 1985* amalgamated all rural industry research legislation to provide one Act for the administration of rural industry research funds. This Act established the Tobacco Research Council which was in turn replaced, on 1 August 1990, by the Tobacco Research and Development Council. The funding arrangements are similar to those indicated above.

More detailed information on the current assistance arrangements and their impacts is provided in Chapters 4 and 5.

3 THE TOBACCO INDUSTRIES AND THEIR MARKETS

This chapter presents an overview of tobacco growing and manufacturing in Australia and internationally.

Over seven million tonnes of tobacco leaf is produced in the world each year. While China and the United States (US) are the major producers of tobacco leaf, many developing countries are also significant producers. Australia is only a small player in the international market place producing around 0.2 per cent of the world's tobacco leaf.

Production of cigarettes and roll-your-own and pipe tobaccos is dominated by either government-run tobacco companies or a handful of multinational tobacco companies (and their subsidiaries). The tobacco manufacturers that operate in Australia are Philip Morris, Rothmans, and Wills. Worldwide demand for tobacco products is dependent on several factors including income, population growth and legislation. Regions that are experiencing a decline in demand for tobacco products are Australia, the USA and Europe, while regions such as Asia, Africa and some former eastern bloc countries are experiencing an increase in demand.

In Australia, tobacco leaf is grown: in Queensland around Mareeba-Dimbulah and around the Glasshouse Mountains; in Victoria around Myrtleford; and in New South Wales in the Ashford/Bonshaw area and at Coraki and Tooma. Mareeba-Dimbulah is the largest growing area followed by Myrtleford. In 1993, there were 608 tobacco quota holders in the industry. Climate, irrigation and production techniques vary between and within the different growing regions.

Australian growers sold 12.67 million kilograms of tobacco in 1993. In recent times, Australia has not been an exporter of local tobacco leaf but it does export some small quantities of Australian tobacco products to the Asia/Pacific region. Imported leaf makes up 43 per cent of Australian manufacturers' leaf requirements. In 1992–93, imports were mainly sourced from the US, Thailand, Malawi and Greece. Very few cigarettes are imported into Australia but there are some imports of roll-your-own and pipe tobaccos.

Consumption (and hence local demand for tobacco leaf) in Australia is in decline. The incidence of smoking has fallen from 35 per cent of the adult population in 1980 to 26 per cent in 1990.

3.1 Global production of leaf

In total, some 120 countries grow in excess of seven million tonnes of tobacco leaf per annum. As shown in Table 3.1, China is the world's largest producer. In 1991, it produced nearly 40 per cent (2.94 million tonnes) of the world's leaf, while the US produced around 10 per cent. The developing countries of India, Brazil, Turkey and Zimbabwe are also large producers. In 1991, Australia contributed about 0.2 per cent to world tobacco leaf production — similar to the share it produced in 1989 and 1990 — but less than it produced in 1980 (0.3 per cent).

Table 3.1: **Tobacco leaf production in selected countries, 1980–1991**
('000 tonnes)

Country	*1980*	*1985*	*1989*	*1990*	*1991*
China	797	2 320	2 830	2 628	2 940
USA	809	686	620	738	755
India	400	476	493	564	472
Brazil	338	397	462	435	422
Turkey	266	176	270	296	227
Italy	125	174	197	215	200
Zimbabwe	127	109	135	140	178
Indonesia	82	144	147	159	171
Australia	**15**	**14**	**12**	**13**	**13**
Other	2 244	2 357	1 943	1 870	2 049
World total	**5 203**	**6 850**	**7 109**	**7 057**	**7 427**

Sources: United States Department of Agriculture, various issues.

3.2 International trade in tobacco leaf

Much of the tobacco leaf produced in the world is used in the country where it is grown, with only about 20 per cent traded internationally.

The United States Department of Agriculture estimated that in 1990 about 1.5 million tonnes of tobacco leaf were traded internationally. The major exporting countries were the US (223 412 tonnes, or 30.3 per cent of its total production), Brazil (188 000 tonnes, 24.5 per cent) and Greece (129 052 tonnes, 96 per cent). Although China is the world's largest tobacco producer, most of its production is consumed domestically — exports represented about 1 per cent (32 091 tonnes) of production in 1990.

Some 26 per cent of world leaf exports in 1990 came from the developing countries of Brazil, Zimbabwe (122 349 tonnes) and Malawi (83 735 tonnes), which produce tobacco primarily for the export market.

In 1990, the major importing countries were the US (198 845 tonnes), Germany (181 111 tonnes) and the United Kingdom (UK) (128 104 tonnes). Only three other countries imported more than 50 000 tonnes of tobacco, namely the Netherlands (90 929 tonnes), Japan (71 700 tonnes) and Spain (71 248 tonnes).

3.3 Global production of tobacco products

The world's tobacco products manufacturers can be divided into two groups. The first and largest group consists of government-operated tobacco companies operating mainly within eastern European and developing countries, while the other group consists of multinational tobacco companies who have manufacturing operations in many different countries. In 1992, government-operated tobacco companies accounted for about 60 per cent of world cigarette production.

Philip Morris has the largest world market share of the multinational tobacco companies, followed by British American Tobacco (BAT) Industries, RJ Reynolds and Rothmans.

World cigarette production has been rising steadily. Over the period 1983 to 1992, world production rose from 4554 billion sticks to 5392 billion sticks at an annual growth rate of slightly less than 2 per cent. This has been in line with world population growth of 1.6 per cent per annum over this period.

China, which has a government-operated tobacco manufacturing monopoly, produced around 30 per cent (1626 billion sticks) of the world's cigarettes in 1992.

3.4 Global markets for tobacco products

According to Chapman (1992), cigarette consumption accounts for around 80 per cent (by weight) of the world's total consumption of tobacco. A recent study on current and future world tobacco consumption by the Tobacco Merchants Association (TMA) of the United States Incorporated (Doolittle 1993), shows that while some countries are increasing their per capita cigarette consumption, it is falling in others. A similar study by the World Bank (1993) forecasts an increase in adult[1] global per capita tobacco consumption of

1 People over the age of 15 years.

1.9 per cent per annum until the year 2000, with the former eastern bloc countries experiencing the greatest increase in consumption.

According to the TMA study (Doolittle 1993), regions that are experiencing a decline in the rate of tobacco consumption are North America, Western Europe and South America; for example, the rate of consumption in North America is expected to decline at a rate of 2–4 per cent through to the year 2000. Reasons given for the decline in consumption in North America and Western Europe are bans on cigarette advertising and anti-smoking campaigns. The fall in cigarette consumption in South America was correlated to the decline in real per capita income in that region.

The same study also pointed to those regions that are experiencing an increase in consumption, namely Asia, Africa and some former eastern bloc countries. This was attributed to general population increases (Asia and Africa) and to rising per capita income and greater availability of cigarettes (Asia and the former eastern bloc countries). In particular, China’s aggregate cigarette consumption has increased due to a combination of increasing national income, population growth and greater availability of cigarettes. These trends are expected to continue through to the year 2000.

3.5 Tobacco leaf production in Australia

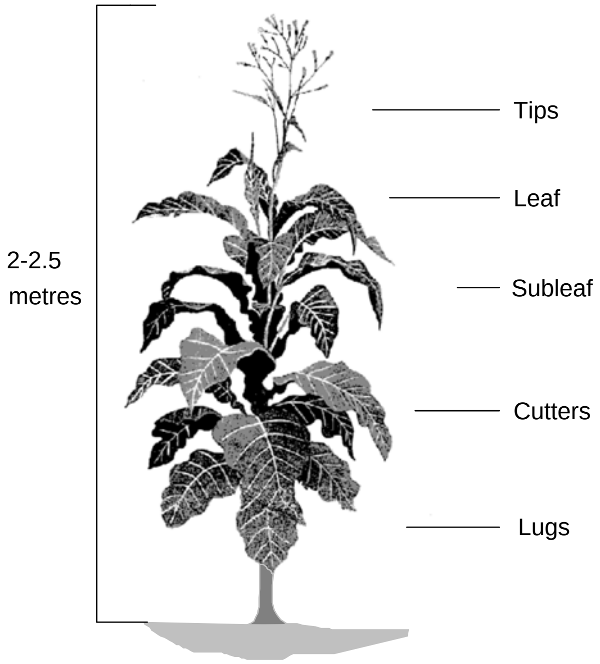
3.5.1 Tobacco growing

To produce high quality tobacco leaf in Australia, the tobacco plant requires a well drained sandy soil of generally low fertility, uniform warmth during the growing period, little wind, no frost and relatively high humidity. The tobacco plant has a high water requirement and thus is generally grown under irrigation.

The plant grows to a height of about 2–2.5 metres and carries about 20 leaves. The leaves vary in shape and size from the bottom to the top of the plant (see Figure 3.1). Fully mature leaves may be more than 60 centimetres long and 40 centimetres wide. The two most commonly grown tobacco varieties in Australia are Speight G28 and ZZ 100.[2]

2 Cigar tobacco is not grown in Australia.

Figure 3.1: **The tobacco plant**



There are four broad stages in the production of tobacco leaf. The first stage involves the planting of seeds in seedbeds. After 8–10 weeks, the second stage commences when the seedlings are transplanted from their seedbeds.

Plants are mature for harvesting (the third stage) after another 10–12 weeks. Picking is done by hand, allowing the leaf to be straight-laid which is a requirement of the Australian manufacturers. While there have been trials with mechanical harvesters in Australia, none have been successful in presenting leaf in a straight-laid form. In some other countries, for example the US, where tangled leaf is acceptable to manufacturers, mechanical harvesting is practised.

Because leaves ripen from the base of the plant to the top, harvesting takes place over about 10 weeks, requiring several picks of the same plant.

The final stage of tobacco leaf production involves curing, baling and sorting tobacco leaf for sale. Curing (8–9 days) is the controlled drying of the picked leaves to bring out the texture, colour and aromatic characteristics of the leaf. All of the tobacco grown in Australia is flue-cured, the most commonly used curing method in the world. Table 3.2 presents an Australian tobacco growing calender.

Table 3.2: **Tobacco growing calendar**

	Mareeba	*Southern Queensland and NSW*	*Myrtleford*
January		Harvest	Harvest
February	***Tobacco sales***	Harvest	Harvest
March	**ATMAC recommends national marketing quota for the next season**		
	Tobacco sales Sow first seedbed crop	Harvest	Harvest
April	***Tobacco sales***		
May	Transplant first seedlings	***Tobacco sales***	***Tobacco sales***
June	Transplant first seedlings Sow second seedbed crop	***Tobacco sales***	***Tobacco sales***
July	***Tobacco sales***	***Tobacco sales***	Sow seedlings
August	Harvest first crop Transplant second seedlings	Sow seedlings	***Tobacco sales*** Sow seedlings
September	Harvest first crop		
October	**ATMAC recommends distribution of quota by States**		
	Harvest first crop Harvest second crop		
November	**ATMAC recommends prices for the next season**		
	Harvest first crop Harvest second crop	Transplant seedlings	Transplant seedlings
December	Harvest second crop		

Source: Compiled by the Commission in consultation with grower participants and ATMAC.

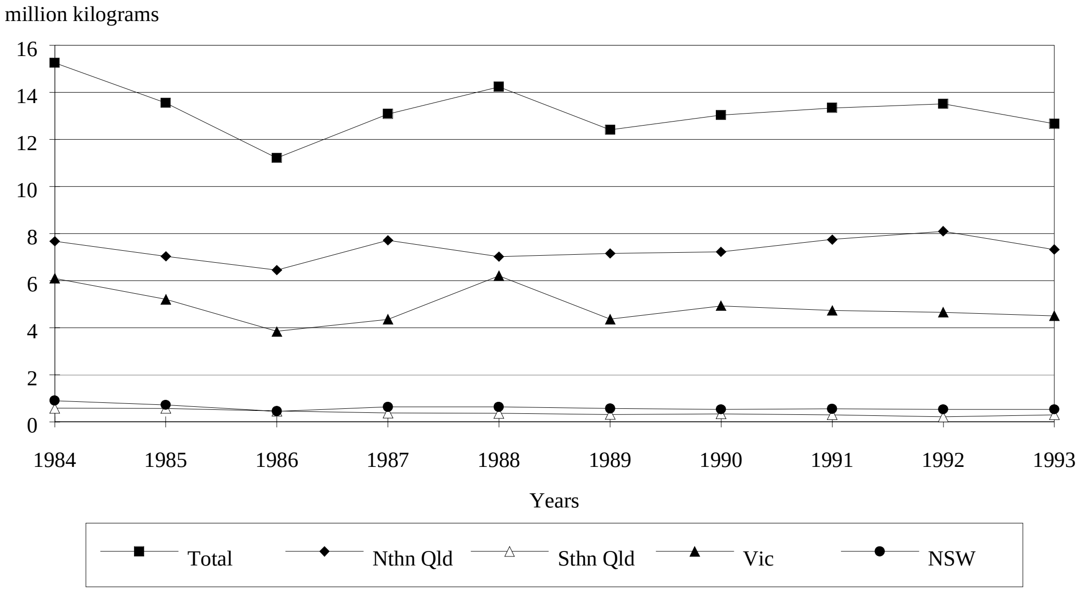
3.5.2 Leaf production

The production and sale of tobacco leaf in Australia is currently regulated through a marketing quota system. Basic quota is allocated to growers. Once a grower owns basic quota (which can be bought and sold) the grower must then obtain a selling entitlement from the State Quota Committees (see Chapter 4 for a more detailed discussion of quota). All of the tobacco grown by selling entitlement holders that does not exceed their selling entitlement limit (and reaches a minimum grade), must be purchased by local manufacturers according to an annually set Grade and Minimum Price Schedule (see Chapter 4).

In 1993, in line with quota and selling entitlement allocations, Australian growers sold 12.67 million kilograms of (green)[3] tobacco leaf to manufacturers for $78.2 million. Northern Queensland growers produced 57.8 per cent of the total crop sold, Victorian growers 35.6 per cent, New South Wales 4.2 per cent and southern Queensland 2.4 per cent.

Between 1987 and 1992 the amount of tobacco leaf grown fluctuated around the national quota allocation of 13.5 million kilograms (see Figure 3.2). For 1993, the quota level was reduced to 12.5 million kilograms. The quota level for 1994 has been set at 8.1 million kilograms (a reduction of around 35 per cent from the 1993 quota level). Chapter 4 discusses the reasons for the reduction in quota.

Figure 3.2: **Sales of tobacco (green) leaf, 1984–1993** (million kilograms)



Source: ATMAC 1993.

3 Green leaf weighs more than dry leaf. Green leaf is whole with varying moisture content, while dry leaf has been threshed and has had moisture corrected to the standard level. Green leaf can be converted to a dry weight equivalent using a factor of 0.94. The 6 per cent loss is moisture and threshing loss (or dust).

3.5.3 Leaf production regions

Tobacco leaf is grown in four regions in Australia: in the Mareeba-Dimbulah region in northern Queensland; in the Glasshouse Mountains region in southern Queensland; around Myrtleford in north-east Victoria; and in New South Wales mainly in the Ashford/Bonshaw area, but also at Coraki and Tooma. Except for tobacco farms in New South Wales, growing is regionally concentrated.

Mareeba-Dimbulah is the largest growing region — some 2378 hectares were planted to tobacco in 1993. Myrtleford is the next largest region (1800 hectares in 1993), followed by New South Wales (225 hectares) and southern Queensland (116 hectares).

In 1993, there was a total of 608 tobacco quota holders — 349 in Mareeba-Dimbulah, 28 in southern Queensland, 206 in Myrtleford and 25 in New South Wales. Although the number of quota holders does not exactly reflect the number of farming units (for example, in 1994 there are 292 farming units in Mareeba-Dimbulah although there are 344 quota holders), quota holders serves as a good proxy for the number of farmers. In recent years, there has generally been an increase in tobacco grown in Mareeba-Dimbulah and a reduction in other areas. There has also been a reduction in the total number of quota holders — leaving fewer growers to grow larger crops (see Table 3.3).

Table 3.3: **Change in number of quota holders and average selling entitlement size, 1984–1993**

	Number of quota holders				*Average selling entitlement size ('000 kg)*			
Year	*Qld*	*Vic*	*NSW*	*Total*	*Qld*	*Vic*	*NSW*	*Total*
1984	542	286	38	866	15.48	19.06	21.91	15.87
1985	512	267	36	815	18.71	20.41	20.96	17.98
1986	490	251	31	772	17.12	21.71	23.29	17.60
1987	459	245	30	734	19.43	22.27	24.84	19.49
1988	446	245	32	723	17.35	20.48	23.29	18.67
1989	432	243	28	703	17.91	20.65	26.62	19.20
1990	385	228	26	639	20.36	22.00	24.75	21.13
1991	385	217	23	625	20.50	23.12	25.67	21.60
1992	380	212	23	615	20.78	23.66	25.54	21.95
1993	377	206	25	608	19.44	22.55	21.01	20.56

Sources: Personal communication with Queensland Quota Committee, Tobacco Leaf Marketing Board of Victoria, Tobacco Leaf Marketing Board of New South Wales data, ATMAC (Sub. 11, p. 15).

3.5.4 Differences in regional and farm characteristics

There are significant differences in farm characteristics both between and within regions. These differences are reflected in the competitiveness of growers in different regions (see Chapter 5).

In 1990, Mareeba-Dimbulah tobacco farms had an average size of about 32 hectares, while the average farm size in New South Wales and Myrtleford was 46 and 38 hectares, respectively. Only a small proportion of a farmer's land is planted to tobacco in any one year. On average, New South Wales growers used an area under tobacco of slightly more than 12 hectares while Myrtleford growers used 9 hectares and Mareeba-Dimbulah 8 hectares.

Climatic differences between regions are the primary cause of differences in farming practices between regions. The tropical climate of Mareeba-Dimbulah allows growers to plant two crops per year during the dry season. The more temperate climate in other regions prevents growers from growing more than one crop. Mareeba-Dimbulah farmers also have the highest tobacco yield of any growing region — an average of 3081 kilograms per hectare in 1993 compared to New South Wales (2379 kilograms per hectare), Myrtleford (2503 kilograms per hectare) and southern Queensland (2577 kilograms per hectare) farmers. In 1993, growers in southern Queensland received the highest average prices for their leaf ($6.37 per kilogram), followed by growers in Mareeba-Dimbulah ($6.29 per kilogram), Myrtleford ($6.00 per kilogram) and New South Wales ($5.43 per kilogram).

There are also differences in production techniques between each of the regions as a result of climatic conditions. For example, because Mareeba-Dimbulah farmers grow their crop in the dry season, they must irrigate their crops regularly. Victorian growers also need significant irrigation and pump their water from the nearby Ovens, Mitta Mitta and King rivers. Coraki and Glasshouse Mountains growers on the other hand receive good rainfall during the growing season and only need to supplement watering (from dams on their properties) when rainfall is low.

Other differences between and within regions in production techniques include crop rotation and insect control. Some growers who have the necessary amount of suitable land available are able to rotate their crops, generally on a three-year cycle. A number of growers in Myrtleford do not rotate their crops due to their lands' susceptibility to flooding or insecticide/herbicide build-up. Chemical use within and between regions differs due to the presence of different insects and soil-borne diseases. Different chemicals are used to prepare the ground, maintain a healthy plant and also to fumigate stored, cured leaf to prevent infestation by the tobacco beetle (Queensland and New South Wales) or the tobacco moth (Myrtleford).

Differences also occur in the dependency of farms on tobacco. A Queensland Department of Primary Industries (QDPI)/ACIL Economics and Policy (1990) survey of tobacco growers in Mareeba-Dimbulah, Myrtleford and New South Wales[4] indicated that around 67 per cent of all growers were specialist tobacco growers, that is they received over 95 per cent of their farm income from tobacco. Northern Queensland had the highest proportion of specialist growers (77 per cent) followed by Victoria (73 per cent) and New South Wales (25 per cent). However, several growers have since diversified their operations. A more recent survey of growers of the Mareeba-Dimbulah area by the Cairns Economic Research Unit (1994, attached to Mareeba Shire Council, Sub. 49), indicated that of the 296 tobacco farms involved in their survey, only 23.9 per cent of those farms grew tobacco exclusively. The remaining 225 growers had either planted some other crop — such as mangoes, lychees or pumpkins — or bred cattle to supplement their tobacco income. Some Myrtleford growers have used crops such as wine grapes, blueberries and medicinal herbs to supplement their tobacco incomes. (See Chapter 7 for a more detailed discussion of alternative crops/land uses.)

3.6 Exports and imports of tobacco leaf

3.6.1 Exports of Australian tobacco leaf

The Australian Tobacco Marketing Advisory Committee (ATMAC) indicated that exports of local tobacco leaf (as distinct from re-exports of semi-processed imported leaf) peaked at 436 000 kilograms in 1982. However, in more recent times, exports of Australian leaf have generally been restricted to the occasional small sample shipment to test overseas markets.

A 1993 study by the Tobacco 2000: Steering Committee into the feasibility of exporting Queensland leaf, concluded that there would be a market for Queensland leaf, but at prices far below those that domestic growers are currently receiving. Export potential is discussed further in Chapter 5, Section 5.5.

4 The survey covered 77 growers which were chosen according to location and size to enable an effective description of economic performance, farm structure and farming practices.

3.6.2 Imports of tobacco leaf into Australia

Local manufacturers' demand for imported leaf is principally determined by the Tobacco Industry Stabilisation Plan[5] in combination with consumer demand for cigarettes in general, and specific blends (flavours, aromas) in particular. Wills (Sub. 31, p. 9) said that, as a general rule, imported leaf types are more aromatic and are used to blend with Australian leaf. Philip Morris (Sub. 38, p. 19) stated that much of the imported leaf is not a substitute for Australian leaf as Australian growers produce a style of tobacco known as 'filler' tobacco, or tobacco which does not substantially affect the taste qualities of the cigarette. This point was contested by ATMAC (Letter, 25 May 1994), who claimed that 'filler' tobacco can affect taste qualities. Rothmans (Sub. 39, p. 7) stated that a substantial proportion of the Australian crop comprises high quality leaf.

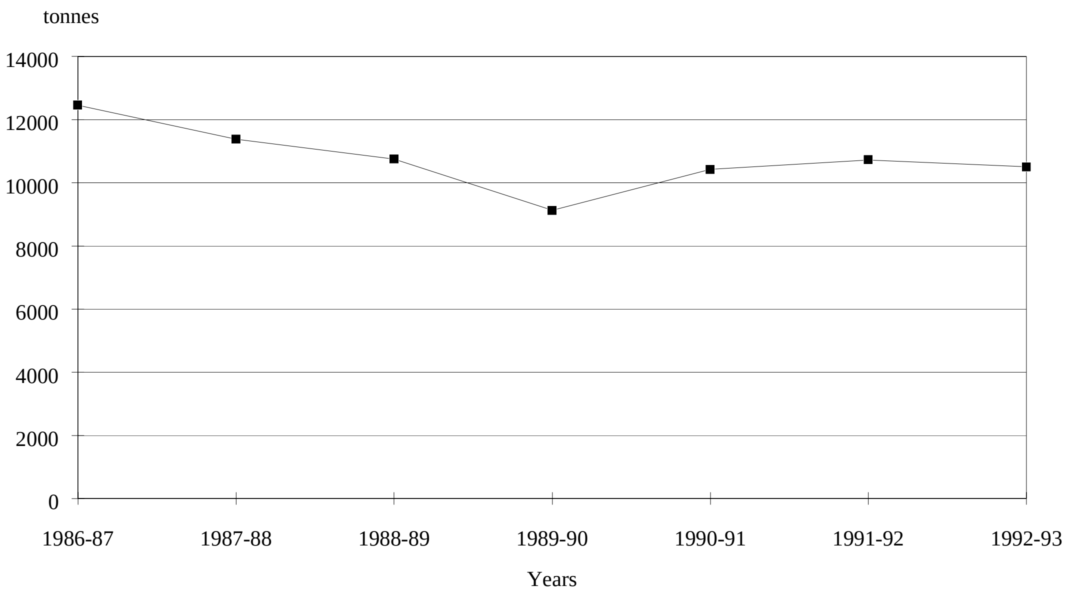
In 1992–93, Australian tobacco manufacturers imported 10 507 tonnes (dry weight)[6] of tobacco leaf, of which some 2454 tonnes were of leaf imported from Taiwan (1753 tonnes) and Japan (701 tonnes) for local processing and subsequent re-export. About 31 per cent of imports for domestic use (2479 tonnes at an average import price of $8.71 per kilogram) were sourced from the US.

Leaf imports from Thailand (1115 tonnes at an average import price of $5.42 per kilogram) represented about 14 per cent of leaf imported for domestic use, while leaf sourced from Malawi (1038 tonnes at $7.42 per kilogram) accounted for about 13 per cent. Greece was the next largest source of imports, supplying 900 tonnes at an average import price of $5.27 per kilogram. Leaf from Zimbabwe (825 tonnes at $5.69 per kilogram) represented about 10 per cent of imports for domestic use. There has been a general decline in the quantity of imports since 1986–87 (see Figure 3.3).

5 Despite the Local Leaf Content Scheme, which requires manufacturers to limit their total imported leaf requirements to 50 per cent to be eligible for concessional duty on imports, manufacturers have entered into a voluntary agreement under the Tobacco Industry Stabilisation Plan to limit their use of imported leaf to 43 per cent.

6 Tobacco imported into Australia has been threshed and therefore is not directly comparable in weight to green leaf bought by manufacturers from Australian growers.

Figure 3.3: **Imports of unmanufactured tobacco leaf into Australia, 1986–87 to 1992–93[a]**
(tonnes, dry weight)



a The figure for 1992–93 includes some 2454 tonnes of leaf imported from Taiwan and Japan for local processing and subsequent re-export.

Source: ATMAC 1994.

3.7 The Australian tobacco manufacturing industry

3.7.1 Manufactured products

Manufacturers use leaves from different parts of the plant for different purposes. Lugs and cutters (see Figure 3.1) are used to provide bulk and good burn quality in cigarettes. The leaf at the centre and top of the plant is used to provide smoking qualities such as aroma, nicotine content and flavour. Leaf grown in different countries (and regions within countries) have different qualities (for example, colour, flavour and aroma). Consequently, manufacturers blend leaf from different countries (or regions) to produce a cigarette with a specific flavour.

In 1993, 96 per cent of the domestic tobacco crop was used for cigarettes. The remainder is used for pipe or roll-your-own tobaccos.[7]

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[7] The production of cigars, cigarillos and cheroots in Australia ceased in 1986.

3.7.2 Industry structure

There are three manufacturers of tobacco products in Australia: Philip Morris (Australia), Rothmans of Pall Mall (Australia) and WD & HO Wills (Australia). Philip Morris bases its redrying/threshing and production operations in Melbourne, while Rothmans has its production plant in Sydney, New South Wales and its redrying/threshing plant in Bundamba, Queensland. In addition to its own brands, Rothmans also manufactures some RJ Reynolds brands under a licensing agreement. Wills production plant is located in Sydney. The company had previously owned and operated two threshing plants, one in Brisbane and the other in Melbourne, but closed these down in 1978 and 1988, respectively. Wills now uses the redrying/threshing facilities of the other manufacturers.

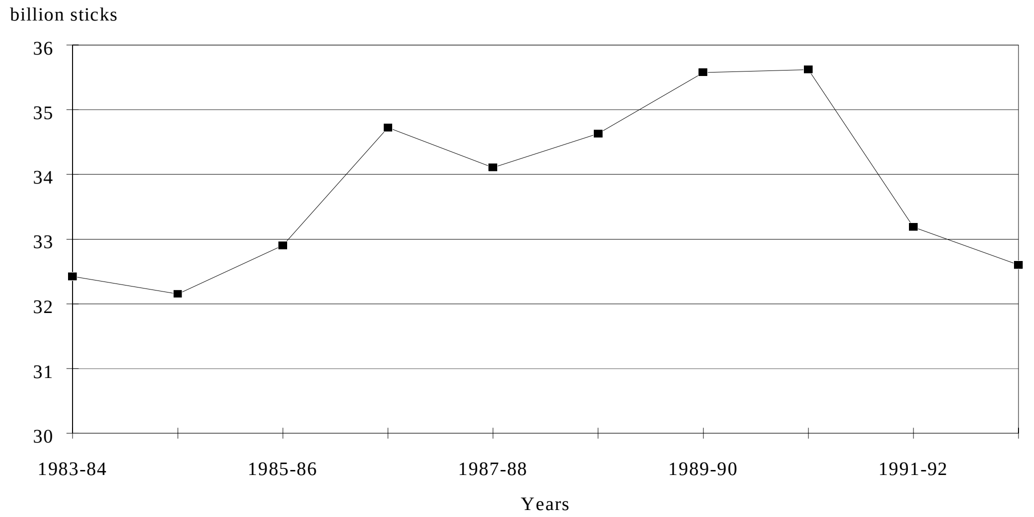
Each of these companies is part of a multinational group of companies. Philip Morris is a unit of the Philip Morris Group of Companies and Rothmans is a subsidiary of Rothmans Holdings Limited. Wills is wholly owned by WD & HO Wills Holdings whose parent is BAT Industries. All the parent companies have their head offices in the US.

In 1993, the three local tobacco manufacturers employed some 4600 persons to produce and distribute their tobacco products. Rothmans was the largest employer, employing some 1900 people, while Wills employed 1500 and Philip Morris 1200. Since 1985, employment has fallen by around 40 per cent. The Federated Tobacco Workers Union of Australia (Sub. 35, p. 1) stated that this fall in employment was due mainly to improvements in production technology and also the decline in the incidence of smoking.

3.7.3 Production and market shares

In 1992–93, the three Australian tobacco manufacturers produced 250 different types of cigarettes amounting to 32.6 billion cigarette sticks. This was the second consecutive year of a fall in cigarette production and the lowest number of cigarettes produced in Australia since 1984–85 (see Figure 3.4). Australian cigarette production had plateaued at 35.6 billion cigarette sticks in 1989–90 and 1990–91 after a rise in production from 1984–85. Demand is expected to continue to fall; for example, Wills (Sub. 31, p. 43) estimates that domestic production will be down about 3–5 per cent in 1993–94.

Figure 3.4: **Australian cigarette production, 1983–84 to 1992–93** (billion sticks)



Source: ATMAC 1994.

The value of the three manufacturers' output in 1991–92 was $950.8 million (at manufacturers' prices).[8] This represented a real increase, over the value of production in 1982–83, of some $53.4 million — or growth of around 1 per cent per annum over that period.

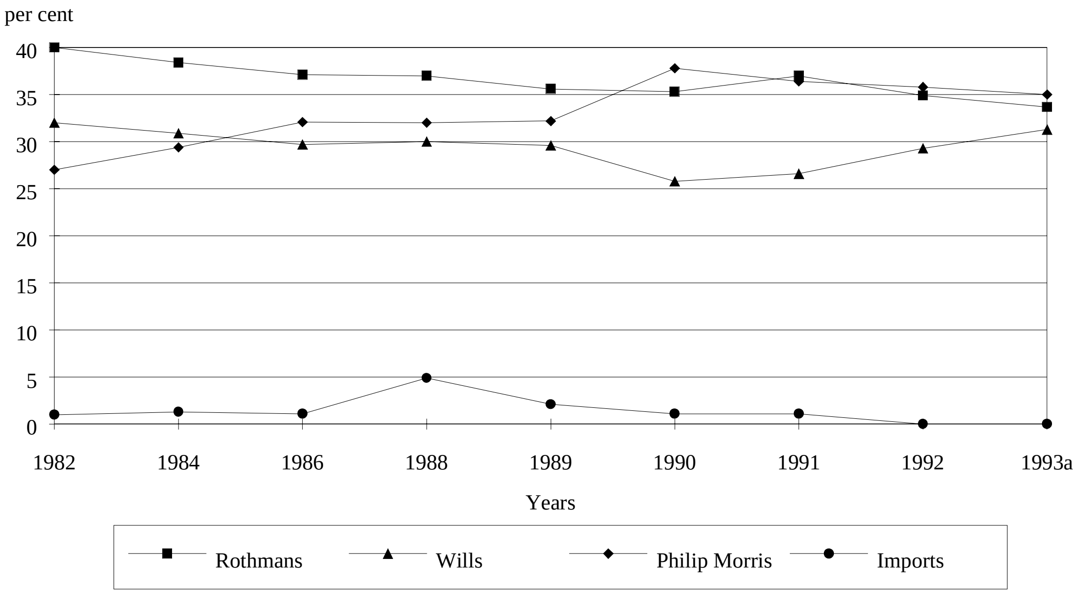
The difference in market share between the three local cigarette manufacturers has become smaller since 1992 (see Figure 3.5). In 1993, Philip Morris had about 35 per cent of the cigarette market, followed by Rothmans (34 per cent) and Wills (31 per cent).

In line with changes in consumers' preferences and demands, the amount of pipe tobacco produced in Australia has been falling — from 146 tonnes in 1989 to 102 tonnes in 1993. Wills is the major manufacturer of pipe tobaccos in Australia. In 1993, the company had a 56 per cent share of this market, with the remainder of the market accounted for by imports.

There has been an increase in recent years in the market for roll-your-own tobaccos (up 9 per cent from 1991 to 1993). However, over the longer term, the market share of locally produced roll-your-own tobacco has been falling. Wills, the leading producer of these tobaccos in Australia, has 41 per cent of the market. Rothmans also manufactures some roll-your-own tobacco at its Bundamba plant but has only a very small market share. Imported roll-your-own brands have captured over 50 per cent of the market.

8 Derived from ABS (1993b) figures.

Figure 3.5: **Estimated market share of cigarette manufacturers, 1982–1993**
(per cent)



a At April 1993.
Source: Victorian Smoking and Health Program 1993.

3.7.4 Imports of manufactured tobacco products

In 1992–93, 967 tonnes of cigarette and pipe tobaccos, and 72 tonnes of cigars, were imported into Australia. Cigarette tobaccos, which include both fully manufactured cigarettes[9] (FMCs) and roll-your-own tobaccos, accounted for about 84 per cent (875 tonnes) of these imports, and have increased significantly in volume since 1989–90 (600 tonnes) as consumers' preference for imported roll-your-own tobaccos has increased. Imports of pipe tobaccos have fallen steadily from 175 tonnes in 1986–87 to 92 tonnes in 1992–93 (see Figure 3.6). In 1992–93, the Netherlands was the major supplier of cigarette (765 tonnes) and pipe (36 tonnes) tobaccos. The UK supplied the second largest volume of cigarette tobaccos (38 tonnes). It was also the second largest supplier of pipe tobaccos (26 tonnes).

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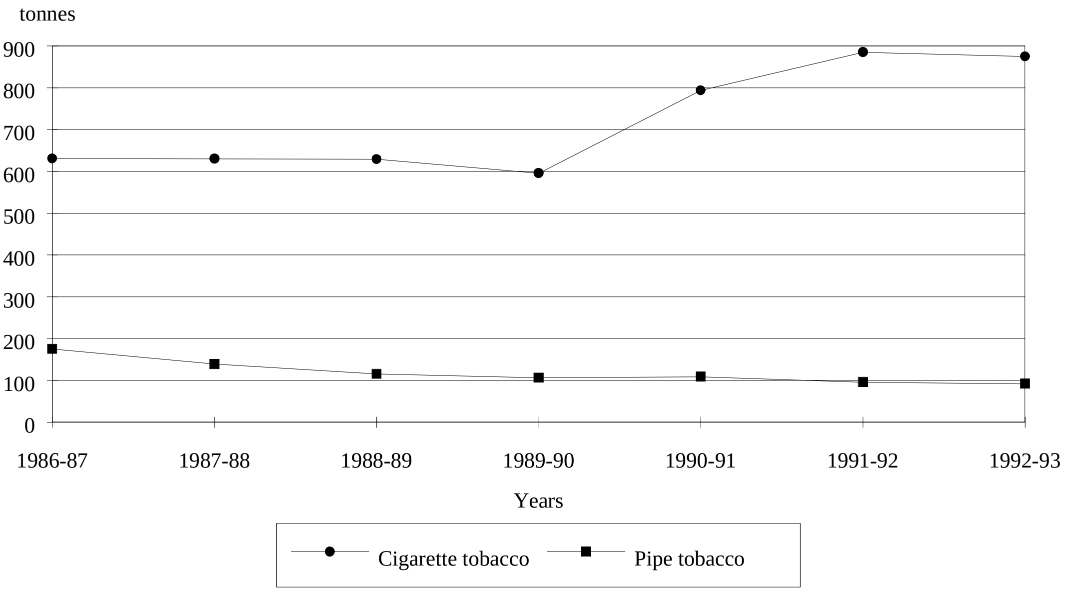
[9] The number of cigarette sticks imported is not available as imports of cigarettes are measured in kilograms.

Figure 3.6: **Imports of manufactured cigarette (including FMCs and roll-your-own) and pipe tobaccos; 1986–87 to 1992–93** (tonnes, product weight)



Source: ATMAC 1994.

The major importer/distributor of cigars and roll-your-own and pipe tobaccos in Australia is Stuart Alexander Pty Ltd. In 1993, Stuart Alexander had a tobacco trading turnover in excess of $80 million and accounted for over 50 per cent of the roll-your-own market and 50 per cent of the cigar market.

3.7.5 Exports of manufactured tobacco products

In 1992–93, Australian manufacturers exported manufactured tobacco in the form of cigarettes, tobacco for cigarettes and tobacco for roll-your-own uses valued at $21.3 million — a small increase from 1991–92 exports of $20.8 million. Papua New Guinea ($4 million) continues to be the major destination for exports. Wills and Rothmans have cigarette manufacturing plants located there and import semi-processed tobacco from Australia to be made into cigarettes which are then either sold in Papua New Guinea or exported to countries in the Asia/Pacific region. Other main destinations for Australian tobacco product exports in 1992–93 included New Caledonia ($3.1 million), New Zealand ($2.2 million), Nauru ($1.3 million), Vanuatu ($1.2 million), Kiribati ($1.2 million) and Tonga ($1 million) — all significant South Pacific island holiday destinations for Australian tourists.

3.8 Domestic consumption

In Australia, cigarette (including roll-your-own) consumption represents about 90–95 per cent of total tobacco consumption. As shown in Table 3.4, in 1990, 26 per cent of all adults (people over the age of 15 years) smoked cigarettes. This represented a fall in the incidence of smoking from 1980 when 35 per cent of adults smoked. Although the adult population increased by 21 per cent over the period, the number of smokers was estimated to have fallen from 3.9 million in 1980 to 3.5 million in 1990 — a fall of around 9 per cent (Victorian Smoking and Health Program 1993, p. 17).

Table 3.4: **Estimated cigarette and tobacco consumption, 1980–1990**

Year	*Percentage of the population over 15 years old who smoke*			*Estimated number of smokers*	*Total annual consumption of tobacco*	*Number of sticks consumed*	*Tobacco consumed*
	Male (%)	*Female (%)*	*Total (%)*	*('000)*	*(mkg, dry)*	*(per smoker per day)*	*(grams per smoker per day)*
1980	40	31	35	3 895	26.15	23.60	18.39
1983	37	30	33	3 896	24.65	24.40	17.33
1986	33	29	31	3 816	23.92	23.84	17.17
1989	30	27	29	3 757	23.55	23.48	17.17
1990	na	na	26	3 531	23.29	27.62	18.07

na not available.
Source: Adapted from Victorian Smoking and Health Program 1993 and ATMAC (various issues).

The amount of tobacco consumed per smoker per day fell marginally from 18.39 grams in 1980 to 18.07 grams in 1990, or around 2 per cent. This is primarily due to cigarettes containing less tobacco today as manufacturers have sought to reduce their costs by 'puffing-up' cigarettes (using a process that expands tobacco). The main incentive to do this has come from the excise tax rate being applied to the weight of cigarettes.[10]

While total annual tobacco consumption has declined by around 11 per cent, the actual number of cigarette sticks consumed has risen by about 17 per cent over the decade to 1990, possibly reflecting smokers attempting to get the same amount of nicotine. Although 25 cigarettes per packet has been the most popular pack size since 1983–84, its popularity has fallen from 64 per cent of the market in 1983–84 to 35 per cent in 1992–93. Furthermore, while only

[10] Australian-produced cigarettes are on average 25 per cent lighter than imported brands.

7 per cent of cigarette packs were larger than 25s in 1983–84, by 1992–93 more than 60 per cent of cigarette packs sold were larger than 25s (see Table 3.5).

Table 3.5: **Australian market by pack size, 1983–84 to 1992–93** (per cent)

Number of cigarettes in pack	*1983–84*	*1986–87*	*1987–88*	*1988–89*	*1989–90*	*1990–91*	*1991–92*	*1992–93*
15	1.3	1.4	1.4	0.5	na	na	na	na
20	28.3	19.5	13.3	9.9	8.0	5.4	4.0	3.4
25	64.3	45.7	47.6	47.0	44.0	39.0	37.0	35.4
30	7.4	33.1	34.2	29.9	25.0	21.6	16.2	17.9
35	na	0.2	3.5	12.3	14.7	13.0	11.3	10.2
40	na	na	na	0.5	8.6	15.5	14.4	14.8
50	na	na	na	na	na	5.2	17.1	18.3

na Packet size not available in these years.
Source: Victorian Smoking and Health Program 1993.

Wills (Sub. 31, p. 43) expects the consumption of cigarettes to decline at a rate of 3–5 per cent per annum through to the year 2000. Australian Bureau of Statistics (ABS) (1992b) data indicates that the proportion of expenditure by households on tobacco products fell from 1.6 per cent of total expenditure in 1984 to 1.4 per cent in 1989. This is the last year for which these data are available.

The demand for pipe tobacco is declining rapidly and in 1992 accounted for less than 0.07 per cent of tobacco consumed in Australia.

4 GOVERNMENT INFLUENCE ON DOMESTIC PRODUCTION OF TOBACCO LEAF AND PRODUCTS

Both the Tobacco Industry Stabilisation Plan (TISP) and the Local Leaf Content Scheme (LLCS) are due to terminate on 30 September 1995.

In combination, these schemes sheltered growers from market realities for many years. They reduced competition from imports and provided tobacco leaf growers with a guaranteed market and price.

To date, some important objectives of the current Plan have not been achieved. World price parity has not been achieved. Nor is the reduction in manufacturers' stocks being achieved in a smooth manner. The interstate transfer of quotas has also been impeded.

Probably in response to this, a number of adjustments have taken place during the last two years. Changes have been made to the way price and leaf grades are determined, introducing greater variety and price differentiation. A new concept using an international classification system is also being trialed.

Selling entitlements have been reduced by over a third and, in 1994, for the first time since the schemes were introduced, the nominal average minimum price for leaf was reduced.

New ways of determining the grade of tobacco and settling disputes have been implemented, resulting in lower costs and fewer disputes.

As required by the current TISP, both the manufacturers and the growers are seeking to develop alternative selling arrangements to avoid market disruption on termination of the Plan. As yet, no State has determined the final form this will take. Any new marketing arrangements will have to be authorised under Section 88 of the Trade Practices Act 1974.

Most manufactured tobacco products face specific weight-based tariffs. These and the current weight-based excise system can be viewed as barriers to trade in tobacco products. The excise also reduces the demand for tobacco leaf by manufacturers.

While the TISP has provided manufacturers with more certainty than is normally faced in freely-operating markets — by eliminating price competition and competition for good quality leaf — these gains must be balanced against the cost of higher prices and enforced purchasing of domestic leaf.

This chapter details government policies currently affecting the tobacco growing and manufacturing industries. An historical overview of the development of government involvement has already been presented in Chapter 2.

Policies and programs which directly affect demand rather than production are discussed in Chapter 6.

4.1 Influence on the growing sector

The main instruments used to assist tobacco growing are the Tobacco Industry Stabilisation Plan (TISP) and the Local Leaf Content Scheme (LLCS). The elements of the TISP include minimum price determination and the determination and allocation of marketing quota. Under the LLCS, concessional entry of unmanufactured tobacco is granted to manufacturers who meet local content requirements.

4.1.1 The Tobacco Industry Stabilisation Plan

The first TISP was established in 1965. This and subsequent Plans were administered by the Australian Tobacco Board (ATB) until 1990. Since 1990 the Plan has been administered by the Australian Tobacco Marketing Advisory Committee (ATMAC). ATMAC is a statutory authority of the Australian Government established under the *Tobacco Marketing Act 1965*.

In addition to the legislation, there are a number of elements outlined in each TISP on a range of relevant matters: how the local price will be set; how the Grade and Minimum Price Schedule will be determined; how the level of quota will be set and then allocated between the States; how these will be converted to quotas for individual growers; how disagreements on grades between buyer and seller will be arbitrated; and how much of the tobacco bought by manufacturers will be sourced locally (voluntary agreements).

ATMAC has formal responsibility to advise the Minister for Primary Industries and Energy with respect to interstate and export marketing of tobacco leaf and, with the consent of the Minister, to advise the State Tobacco Leaf Marketing Boards on the same matters.

In practice, the ATB's and subsequently ATMAC's primary function has been the administration since 1966 of successive TISPs which have governed the marketing by State organisations of all the tobacco leaf produced in Australia. This function derives from provisions of the New South Wales *Tobacco Leaf Stabilisation Act 1967,* the Victorian *Tobacco Leaf Industry Stabilisation*

Act 1966 and the Queensland *Tobacco Industry Stabilisation Act 1965*. These empower ATMAC to direct State Tobacco Leaf Marketing Boards not to sell Australian tobacco leaf of a specified grade at a price less than that specified by ATMAC. ATMAC's role therefore is both regulatory and advisory. Its power to formulate plans with respect to the export of tobacco leaf is not currently exercised.

ATMAC provides the forum whereby the interests of State and Commonwealth Governments, the growers and the manufacturers are all represented and brought together to maintain the marketing system. ATMAC is composed of 10 members: a Chairman who is the member representing the Commonwealth; three representatives of the State Governments; three representatives of tobacco growers; and three representatives of tobacco manufacturers.

The operations of ATMAC are financed by parliamentary appropriation from consolidated revenue against funds collected under the *Tobacco Charge Acts 1955*, which impose charges on both growers' sales of Australian leaf and manufacturers' purchases of Australian leaf. For the recent selling seasons, the levy has been 1.5 cents per kilogram for the purposes of funding ATMAC operations, and 2.7 cents per kilogram representing the industries' contribution to research and development activities. The aggregate 4.2 cents per kilogram was charged twice — both on all Australian leaf sold <u>and</u> on purchases of leaf. (See Section 4.1.3 for a discussion of tobacco research and development.) Total funds raised for ATMAC in 1993 were $376 792.

The State Tobacco Leaf Marketing Boards (in which the tobacco crop is vested) administer quota transfer and market the crop on the growers' behalf.

Stabilisation arrangements

In November 1988, the Minister for Primary Industries and Energy announced the Commonwealth Government's support for a further and final Stabilisation Plan commencing in 1989 and terminating on 30 September 1993.

At the same time, it was announced that the Australian Tobacco Board would be renamed the Australian Tobacco Marketing Advisory Committee to reflect its major advisory role and it was asked to play a major part in developing market-oriented selling arrangements to apply after the Stabilisation Plan ends.

The 1989–1993 term was subsequently extended to 1995. This was requested by ATMAC, on the basis that it would allow sufficient time for industry to finalise alternative marketing arrangements to apply from the 1996 selling season. Some of the elements of the Plan were also amended at the time the Plan was extended. Appendix E provides details of the amended TISP.

The 1989–1995 TISP retains marketing quotas and administered pricing arrangements — the key features of all previous plans — as well as the firm but unenforceable undertaking by the three existing Australian tobacco manufacturing enterprises to use 57 per cent Australian leaf. This has been a feature of TISPs since 1977.

In an effort to encourage greater efficiency in the industry and gradually reduce assistance, a number of modifications to the 1984–1988 Plan were made. These modifications were designed to:

- make the Australian price for tobacco leaf competitive with imports during the term of the Plan;
- modify the Grade and Minimum Price Schedule over time so as to ensure that it reflects market requirements;
- reduce the requirement for manufacturers' stockholdings to the equivalent of 10 months' usage by 31 December 1993 (subsequently changed to 31 December 1995); and
- make quotas freely transferable both intrastate and interstate subject only to normal administrative arrangements and timings required by State Quota Committees for the effective management of the Plan (ATMAC 1992, pp. 34–35).

While previous schemes had similar objectives, they were all somewhat different. For example, the immediately preceding scheme had as its objective the reduction of the gap between Australian and international prices rather than the elimination of the gap; also rather than have Australian grown leaf reflect market requirements the emphasis in the preceding Plan was on improving leaf quality; the goal was to reduce stockholdings to 13 rather than the 10 months' usage as required under the current Plan; and rather than stating that quotas would be freely transferable between States, the 1984–1988 Plan only stated that 'Allowances will be made for any interstate transfers of quota approved by the respective State Ministers' (ATB 1988, p. 27).

To date some important objectives of the final Plan have not been achieved. First, although the intention was to bring Australian tobacco prices to world parity, this has not been achieved. Large increases in world production relative to demand have resulted in significant price reductions. While this is likely to be a temporary problem, the difference in labour costs (and to a lesser extent some other input costs) between Australia and developing countries is likely to be an ongoing reason why Australian growers will have difficulty competing with imports solely in the basis of price.

It has been suggested that currency devaluations in certain developing countries are used to retain the competitive edge of growers in those countries. In this regard, some growers described the situation in 1992, where up until June 1992 Australia's price disadvantage had dropped from $1.35 to 80 cents per kilogram but Zimbabwe subsequently devalued its currency and the Australian price disadvantage returned to $1.34 per kilogram. (See Chapter 5 for a more detailed discussion of price comparisons.)

Second, while it was expected that the reduction in manufacturers' stocks would be achieved smoothly over the period of the Plan, this has not happened. While manufacturers' stockholdings were reduced to the equivalent of just over 11 months' usage from 1988 to 1991, stockholdings increased to the equivalent of 13.2 months' usage in 1992 and were at 14.3 months' usage at the end of 1993. It is still possible that the goal of 10 months' usage will be achieved by the end of 1995 (see Appendix G).

Finally, the market for quota was distorted and interstate quota transfers from Victoria to Queensland were prevented as a consequence of a Queensland Government decision in 1988 to provide $10 million to Queensland growers to aid industry adjustment. Appendix F describes the effects of the Queensland tobacco fund.

Quotas

Marketing quotas have been used in all the TISPs to ensure strict supply management and thus control any pressure to grow more and put downward pressure on the price of tobacco.

The 1989–1995 TISP requires that each year ATMAC recommends to the relevant Ministers a national marketing quota for the next selling season, taking into account factors including the need for consensus amongst growers and manufacturers and usage and the level of manufacturers' stocks.

Once determined, the aggregate quota is divided among the three growing States. The Quota Committees of the State Tobacco Leaf Marketing Boards then allocate quota entitlements to individual growers.

Table 4.1 shows how the national quota was divided among the States in recent years.

Table 4.1: **Allocation of tobacco leaf marketing quota by State, 1992–1994**
(kilograms green weight)

State	*1992*	*1993*	*1994*
New South Wales	587 297	525 178	340 315
Victoria	5 016 808	4 645 193	3 010 085
Queensland	7 895 895	7 329 629	4 749 600
Total	**13 500 000**	**12 500 000**	**8 100 000**

Source: ATMAC (Sub. 11, p. 9).

A different method of quota determination was introduced in March 1993. The changes included the projection forward for the next two years of the latest falls in consumption, and the introduction of a stock reduction factor taking into account the size of manufacturers' stockholdings and the requirement to achieve 10 months' usage by the end of 1995. These changes resulted in the recent decreases in quota. The national quota was reduced from 12.5 million kilograms for the 1993 selling season to 8.1 million kilograms for 1994. ATMAC stated:

> The overall increase in manufacturers' stocks has resulted from a larger than anticipated reduction in apparent consumption of tobacco leaf. To meet the requirement to reduce the stock holdings to 10 months' usage by the end of stabilisation, the national marketing quota was reduced by 7.4 per cent in 1993 to 12.5 million kilograms and a further 35.2 per cent in 1994 to 8.1 million kilograms. (Sub. 11, p. 9)

These changes were a strong contrast to previous years where the quota level had remained unchanged from 1987 to 1992 at 13.5 million kilograms.

The Tobacco Leaf Marketing Board of Queensland (TLMBQ) said:

> The stockholding blow-out that was experienced in 1992 and 1993 is expected to be reversed in 1994 under the amended quota setting mechanism. On the projection that consumption will fall by 4.0% in 1994 (identical to that in 1993) it is predicted that stockholding at 31/12/94 should be down to 11.3 months. (Sub. 29, p. 8)

Analysis by the Commission (see Appendix G) shows that three factors account for the reduction in manufacturers' purchases of tobacco leaf between 1991 and 1994. They are:

- reduced consumption of leaf — 1.8 million kilograms;
- overestimate of consumption — 1.8 million kilograms; and
- stock adjustment — 1.7 million kilograms.

The major part of the stock build-up referred to by ATMAC occurred in 1992 when leaf purchases exceeded consumption by 1.2 million kilograms. In that year, ATMAC recommended a national marketing quota of 13.5 million kilograms, the same level as for 1991. There was therefore no reduction in consumption anticipated, nor was there any provision to reduce manufacturers' stockholdings in that year.

The anticipated decline in manufacturers' leaf stocks by the end of the 1994 season will simply return stockholdings to their equivalent end of 1991 season level.

In a supplementary submission to the Commission, and at the draft report hearings, ATMAC argued that at the time quota was determined for the 1992 selling season there was no basis to anticipate the decline in leaf consumption which occurred in that year. Quota for the 1992 selling season was set in March 1991.

The Commission acknowledges that the <u>extent</u> of the decline in consumption may have been difficult to determine. However, in view of the information which was available at the time, the 1992 quota recommendation was made, it was clear that demand for leaf was declining. For example:

- annual consumption of tobacco had been on a downward trend since at least the mid-1970s (see Figure 7.2);
- over the same time, cigarette manufacturers had progressively adopted technologies which reduced the amount of tobacco required to produce a given quantity of cigarettes; and
- in 1989, Queensland growers were provided with $10 million restructuring assistance in the expectation that demand for tobacco leaf would decline following the introduction of State taxes on tobacco products.

Furthermore, in March 1991, a paper prepared by the ATMAC secretariat advised the Committee that, when recommending the 1992 quota, 'it may be prudent for the Committee to make some provision for a **further** fall in consumption' (emphasis added) (ATMAC, Sub. 86, p. 3). The same paper outlined three scenarios for the 1992 quota, the most optimistic of which was for consumption of leaf to remain at the 1990 level for 1991 and 1992. The quota indicated for that scenario was 13.16 million kilograms. The other scenarios, which assumed a 0.5 per cent and a 1 per cent decline in consumption, indicated quotas of 12.83 and 12.51 million kilograms respectively.

In view of the above, the Commission has difficulty understanding why the national marketing quota was kept at 13.5 million kilograms for the 1992 selling season.

Quota transfer

In ATMAC's 1992 Annual Report, it was stated:

> The general policy of State Marketing Boards was to improve the industry by ensuring that transfer of quota was to farms with adequate and suitable soil, water and equipment which can be expected to produce leaf of good quality. (ATMAC 1993, p. 18)

In 1992, interstate transfer of quota from Victoria to Queensland was prevented by the Victorian Minister for Food and Agriculture on the grounds that the price of quota had been artificially raised by the Queensland Government. According to ATMAC (Sub. 11, p. 14): 'Only New South Wales quota entered the interstate transfer program, mainly to North Queensland'. A total of 746 tonnes of quota has moved from New South Wales into Queensland from 1984 to 1993 (TLMBQ, Sub. 29, p. 4). This occurred even though from April 1984 to June 1987, any application for interstate transfer of quota from New South Wales was subject to the retention of 25 per cent of the quota by the State's Tobacco Leaf Marketing Board.

Since June 1992, quota has had no market value and there have been no further sales of quota, although some short-term leasing has continued. Some restrictions still apply. In Victoria, quota can only be leased to established growers (ie those already holding quota) and, except for 'acts of God' and other special circumstances, quota cannot be leased after December in any season. There is more demand for leases of quota after December and toward the end of the growing season than before the growing season commences. A further constraint is that a quota owner cannot lease for more than two out of five consecutive years. Queensland attaches similar conditions to quota leasing. All applications must be made by 1 September in northern Queensland and by 1 November in southern Queensland, although this can be changed at the Quota Committee's discretion. In contrast, in New South Wales leasing quota is not restricted to established tobacco growers; all leasing must be completed by October of each year and there can be no subsequent leasing of quota. Instead such quota becomes a State shortfall and is shared by all growers against the State's excess of production over quota.

Price and leaf grade determination

On the recommendation of ATMAC, the average minimum price for Australian flue-cured quota leaf is determined by the Ministers responsible for agriculture in the Commonwealth and the tobacco producing States of Queensland, Victoria and New South Wales.

In making its recommendation, ATMAC is required to recognise the need to bring the Australian tobacco leaf to price competitiveness with imports during the term of the 1988–1995 Plan.

ATMAC conducts annual reviews of the Grade and Minimum Price Schedule and reviews and modifies the Schedule. It is required to attempt to ensure that the Schedule reflects market requirements. Any modifications may include the elimination or addition of grades. In the period 1988 to 1993, 12 little used and inferior grades of leaf were eliminated from the Schedule.

The Grade and Minimum Price Schedule is constructed by allocating prices to grades based on a running seven-year average of grade fall-out to yield the average minimum price determined for each selling season. In determining the recommended average minimum price, ATMAC is required ‘to recognise the need ... for Australian leaf to be price competitive with imports’ (see Appendix E). ATMAC takes into consideration the import substitution prices obtained from information provided separately by each manufacturing company. The import prices are used as reference prices.

ATMAC’s requirements for price and grade determination are outlined in the TISP as contained in the ATMAC Annual Report and are reproduced in Appendix E in this Report. The new and previous Grade and Minimum Price Schedules are contained in Appendix H. The grades are put into groups with each group attracting a specified price.

ATMAC proposed that the average minimum price for 1993 be $6.13 per kilogram which was the same level as for 1991 and 1992, with the 10 price groups as well as the number and positions of grades within the price groups in the Schedule being unchanged. There were up to 13 grades in any one price group.

For 1994, the average minimum price is $6.03 per kilogram. Although the real average price has been lowered in recent years, this is the first time that the nominal price has been reduced since the commencement of stabilisation plans.

For 1994, ATMAC replaced the previous 10 price groups with 24 price groups and introduced greater price differentiation. There are now a maximum of eight grades within any one price group. The top group has been set at $7.43 per kilogram and the bottom group at $2.52 per kilogram. In 1993, the top group was set at $7.40 per kilogram and the bottom group at $3.40 per kilogram.

According to the Tobacco Leaf Marketing Board of Victoria (TLMBV):

> Historically, the grade and price schedule did not encourage improvements in leaf quality as the price differential between top and bottom grades were not significant enough to encourage quality tobacco production. More recently however the adoption of twenty-four group prices positively reflects quality differences and encourages more efficient producers to respond to the incentive to produce higher grade tobacco. (Sub. 34, p. 4)

The TLMBQ noted the following improvements:

> On the current Grade and Price Schedule (1994) there have been even more dramatic changes than in previous years in that not only have relativities changed but price range also has been increased, with the lower end of the Schedule being reduced to 252 cents. (Sub. 29, p. 11)

Furthermore, in 1994, a new concept using an international classification system is being trialed for the Grade and Minimum Price Schedule. A draft version of the system appears as Appendix I. The system was developed by the Grade and Price Working Party and is based on letters and numbers relating to plant position, quality, colour and special factors which are recognised throughout the world (although each country has its own grading system). At the end of the year the results of the trial will be assessed and a decision made as to whether to continue for another year, to fully adopt the international system or to discard it.

ATMAC has compared the domestic prices with international prices. Up until 1993, the gap appeared to be narrowing[1], and the import substitution price was determined to be 24 per cent lower than the 1992 Australian price which averaged $6.13 per kilogram. Subsequently, the price gap has widened even though for 1993 the average minimum price for Australian leaf remained at the same level of $6.13 per kilogram. This issue is discussed in Chapter 5.

Tobacco leaf sales

The State Tobacco Leaf Marketing Boards acquire all leaf and market it on behalf of the growers.

Tobacco sales are conducted at Mareeba, Brisbane and Myrtleford during the period from February to August/September. Sales are made at predetermined prices after agreement is reached on the grade of leaf offered, and lots are allocated to manufacturers subject to their overall leaf requirements. Under this method each manufacturer receives an identical mix of grades.

Sales proceeds are paid to growers net of State Tobacco Leaf Marketing Board charges and Commonwealth levies.

Determining the grade of any specific bale of tobacco is part science and part art, not unlike the classing of wool before objective testing was introduced. There is, therefore, a degree of subjectivity involved. This can lead to disputes between growers and buyers.

In recent years, new procedures for determining the grade of tobacco have been adopted, resulting in lower costs and fewer disputes. Whereas in the past almost 40 per cent of gradings were disputed (ATB 1986, p. 8), in 1992 only

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1 There are different ways to measure the price disadvantage of Australian tobacco. See Chapter 5 for an extensive analysis of price disadvantage.

4.4 per cent of quota grade bales sold were submitted to ATMAC's Arbitrator for determination of grade (ATMAC 1992, p. 15). For the current season, further changes have been made, so that during the 1994 sales there was no dedicated arbitrator available to help settle disputes over grades. However, there is still an arbitration process whereby bales of leaf, on which the appraised grade is disputed, are submitted to ATMAC's arbitration team which comprises one senior buyer and one senior member of the grower appraisal team. This has provided a cost saving to the industry.

Future marketing systems

While the current arrangements are exempt from Trade Practices Commission (TPC) scrutiny, the removal of Commonwealth support for the TISP in 1995 will mean that any new marketing arrangements will have to be authorised under Section 88 of the *Trade Practices Act 1974*. The TISP requires both the manufacturers and the growers 'to seek to develop alternative selling arrangements to avoid market disruption on termination of the Plan'. (See Appendix E.)

Growers face uncertainty about how much leaf manufacturers will buy post-1995. Similar uncertainty is faced by many producers of agricultural products. Tobacco growers have recently sought the commitment of buyers to new marketing arrangements.

In 1991, ATMAC established the Australian Tobacco Leaf Corporation, a private corporation, to develop a proposal for marketing leaf post TISP and submitted it to the TPC for authorisation. If the proposal had been accepted the Corporation would have comprised the three State Tobacco Leaf Marketing Boards and the manufacturers.

The arrangements for which authorisation was sought were almost identical to those for setting price, grades and quantities under the TISP. The major difference being that the proposed scheme was voluntary.

The proposal was subsequently rejected by the TPC for the following reasons:

- the arrangements on prices would not have necessarily delivered a better price to growers and could eliminate what competition there may have been between manufacturers on price;
- selling entitlements would provide continued protection for the less efficient growers and thus delay adjustment rather than assist it; and
- a judgement that the growers would be better served if they put their resources towards gathering information to improve their bargaining position with manufacturers.

In relation to the first and last points, the TPC stated:

> there are alternative methods by which growers could collect the information necessary to negotiate with manufacturers which would be effective and not involve such significant anticompetitive effects. For example, the funds the growers are willing to spend to subsidise the proposed scheme could be used to gather information on world prices. ...
>
> the proposed price setting mechanism achieves little for the grower in terms of raising prices in the long term, but will eliminate what competition there may be between the manufacturers and act against creating greater efficiency at the grower level. Growers would be in a stronger position when negotiating with manufacturers if they were well informed as to the actual world prices and world trends rather than relying on the average of the three manufacturers' calculated world price as the starting point of negotiations. (TPC 1992, pp. 23–4)

The TPC considered that the anti-competitive effects of the proposed scheme outweighed any public benefits (TPC 1992, p. iii).

The TLMBV and the Tobacco Growers of Victoria are developing a framework for a grower-based organisation. It is intended that the new proposal will address all facets of the *Trade Practices Act 1974* to ensure a workable solution and have acceptance by manufacturers (TLMBV, Sub. 34, p. 8).

The TLMBV also made the following comments at the hearings:

> ... part of the [$3 million adjustment] package was the Tobacco Leaf Marketing Board would be dismantled and its assets would go across to an organisation yet to be established ...
>
> It's anticipated ... that particular organisation will be comprised of those growers that remain and their shares in that co-operative will be in direct relationship to the proportion of a grower's basic quota that they would hold in the last year of stabilisation ...
>
> It's anticipated that the changeover will take place at the end of September. The board will terminate and the co-operative will commence on 1 October. So a large number of the questions that need to be resolved will be resolved by the members of that co-operative, ... , of those remaining growers in the industry. (Transcript, pp. 354–5)

Subject to TPC approval, it is envisaged that, starting in 1995, the co-operative will negotiate quantity and grade prices with each of the manufacturers separately for the 1996 season.

On 10 August 1992, the Queensland Government announced it had agreed to the application of the existing provisions of the Queensland *Primary Producers' Organisation and Marketing Act 1926* to the TLMBQ for the development and operation of a tobacco marketing scheme in Queensland. This would be for a period of five years and at the end of that time the industry would be expected to be in a position to market its crop without statutory support. The TLMBQ (Sub. 29, p. 3) envisages that statutory powers will be relinquished and replaced by a marketing co-operative or corporation. Similarly, changes to long-standing marketing arrangements have already been developed for other Queensland primary industries. They are designed to assist the TLMBQ in negotiations with manufacturers and the other State Tobacco Leaf Marketing Boards in regard to the marketing arrangements to apply post September 1995.

According to the Queensland Government:

> Alternative options for future marketing arrangements are still being considered by the Queensland tobacco industry. The Queensland Government is assisting industry in evaluating all feasible options which could include using a non-statutory entity such as a new primary producers' co-operative or an existing co-operative. A strategic planning exercise is presently being carried out by the Tobacco Leaf Marketing Board. (Sub. 80, p. 2)

The Queensland Government also stated:

> ... the decisions of 10 August 1992 do <u>not</u> prevent the TLMB [Tobacco Leaf Marketing Board] from electing to pursue an earlier move towards a more commercial marketing structure. The Board is currently being assisted in its consideration of alternative commercial marketing arrangements by the Department of Primary Industries.
>
> ... the [*Primary Producers' Organisation and Marketing Act 1926*] currently allows producers to vote to terminate a marketing board with the assets and liabilities of the marketing board to then be transferred to a nominated primary producer co-operative association, free of stamp duty. Similar provisions in regard to transfer of assets and liabilities to a company have been proposed but not yet enacted. (Sub. 47, p. 15)

The Tobacco Leaf Marketing Board for New South Wales stated that its current term expires on 5 August 1995 and that:

> No good reason is seen at this stage for the date to be extended.
>
> Marketing mechanisms post 1995 have not yet been decided. Given the current number of New South Wales quota holders (22) the financial impost of achieving an independent marketing structure does not seem to be justified. Growers' interests may best be accommodated by seeking arrangements with either or both of the adjoining States. (Sub. 48, p. 3)

4.1.2 The Local Leaf Content Scheme

The financial incentives given to manufacturers to participate in the LLCS operate through the concessional provisions prescribed under Schedule 4 of the Customs Tariff (see Appendix A). These provide for concessional rates of duty for imports of unmanufactured tobacco for use in the manufacture of cigarettes and other tobacco products. In order to qualify for concessional entry, tobacco manufacturers must source at least 50 per cent, by weight, of their total leaf requirements domestically. The Australian Customs Service (ACS), in liaison with ATMAC (on an informal basis only) and the Commonwealth Department of Primary Industries and Energy, is responsible for recommending to the Minister for the Department of Industry, Science and Technology that import concessions be granted to individual manufacturers. Tariffs on imports of leaf under the concessional provisions are significantly lower than the non-concessional rates otherwise applicable. For leaf for use in cigarettes, the concessional rate is $0.47 per kilogram and for leaf for use in manufactured cut tobacco products[2] the concessional rate is $0.33 per kilogram. The non-concessional rates currently are 15 per cent for both categories or, if lower, $1.42 per kilogram for leaf for use in cigarettes and $1.07 per kilogram for leaf for use in cut tobacco products.

The concessional rates are due to terminate on 1 October 1995. Non-concessional imports were subject to higher specific rates of duty. These were converted to an *ad valorem* tariff, so that at 1 July 1988 the *ad valorem* rates for imported leaf were 23 per cent (General rate) and 18 per cent (developing countries). Each of these was reduced by two percentage points on 1 July in each succeeding year to 1992 to the current rates of 15 per cent and 10 per cent respectively.

In March 1991, when the Commonwealth Government announced that tariffs on most agricultural products would be phased down to 5 per cent between 1 July 1993 and 1 July 1996, no decision was made on longer-term assistance for the tobacco growing, dairy and sugar industries because they were all currently under inquiry by the Industry Commission or an inquiry was foreshadowed. The Government said that it ‘is disposed to reduce assistance over the longer term for dairy, sugar and tobacco, equivalent to those now being announced in other industries’ (Department of Prime Minister and Cabinet 1991, p. 3.13).

When Senator Cook announced on 4 May 1994, in the Working Nation White Paper, that the phase-out of the developing country margin of preference of the most advanced developing countries would be extended to cover almost all of

[2] ‘Cut tobacco’ is tobacco for use in roll-your-own and pipe tobacco products.

the remaining commodities; imports of cheese, sugar and unmanufactured tobacco were excluded (Australian Customs Service, 1994).

The LLCS makes available assistance to domestic production over and above that provided by the non-concessional rate of duty because manufacturers receive duty concessions on their purchases of imported leaf. This additional assistance can be viewed as a subsidy to domestic leaf producers. According to the calculations presented by Wills, in 1992 manufacturers made a duty saving of $5.7 million resulting from the LLCS (Sub. 31, p. 7). But Wills (Sub. 31, p. 7) also stated the manufacturers paid 'a premium of $13.1 million for the Australian crop' so that the net cost to manufacturers was $7.4 million.

A further point relates to the requirement that manufacturers hold a certain level of stocks. To the extent that the minimum stockholding requirement for domestic leaf exceeds commercial requirements the benefits to manufacturers participating in the Scheme will be reduced. Though this, in turn, must be balanced by the subsidy paid by growers to the manufacturers to hold these stocks.

4.1.3 Research and development

The majority of research and development for the Australian tobacco leaf growing industry is carried out in State Government owned facilities in Mareeba and Myrtleford, but funded largely through industry levies and a contribution from the Commonwealth Government.

The *Rural Industries Research Act 1985* established the Tobacco Research Council. This was replaced by the Tobacco Research and Development Council (TRDC) on 1 August 1990 under the Tobacco Industry Research and Development Council Regulations made pursuant to the *Primary Industries and Energy Research and Development Act 1989* (ATMAC, Sub. 11, p. 16).

The TRDC is jointly funded by industry levies and contributions by the Commonwealth Government. The industry levy is 2.7 cents per kilogram of leaf sold, imposed equally on both manufacturers and growers, and thus totalling 5.4 cents per kilogram. Under the Commonwealth Government's policy on rural research funding, since June 1991 Commonwealth Government funding for any rural activity has been limited to 0.5 per cent of the gross value of production, based on a moving average for three financial years. As growers and manufacturers contribute well over 0.5 per cent of the value of production, the 0.5 per cent is fully met by the Commonwealth Government.

The principal objectives of the TRDC, as specified in the five-year research and development plan are to:

- improve leaf quality;
- reduce the costs of leaf production[3];
- develop sustainable farming systems;
- develop cost effective and efficient mechanisms to facilitate the dissemination and adoption of research results;
- respond effectively to expected significant reduction in research funding; and
- maintain and develop the skills of scientists and technicians in tobacco research and development.

Appendix J, Table J.1 lists the funding sources and the expenditure items, including the research projects, of the TRDC.

Recently, particular attention has focussed on extension services, aiming to '... ensure that "best practices" are adopted as quickly as possible throughout the growing sector of the industry' (TRDC 1992, p. 4).

ATMAC pointed out that:

> The industry is both labour and capital intensive and despite recent advances in farm mechanisation is seeking further labour saving systems/devices. Attempts have been made through the research program conducted by the Tobacco Research and Development Council to address these issues as well as the issue of improvement in leaf quality. (Sub. 11, p. 5)

4.1.4 Impact of current arrangements on the growing industry

In sum, the current arrangements have insulated growers from the vicissitudes of the market. Until recently they were guaranteed a market and a price for tobacco grown under quota. As the termination of the TISP and the LLCS has approached, growers and their representatives have become more conscious of the need to make adjustments to quota, price and grading procedures. Since these adjustments were not made earlier and more gradually, the recent adjustments being faced by growers are sudden and substantial.

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[3] The areas particularly nominated include developing optimal crop nutrition regimes for the major tobacco cultivars and soils, developing more cost effective irrigation schedules, and continue developing pest and disease resistant tobacco varieties (ATMAC, Sub. 11, p. 18).

4.2 Influence on the manufacturing sector

On 19 November 1988, the Commonwealth Government announced that those manufactured tobacco products paying *ad valorem* tariffs of 15 per cent would be phased down to 10 per cent by 1 July 1992, while manufactured product tariffs with an *ad valorem* equivalent of less than 10 per cent will not be changed. Most manufactured tobacco products have continued to face specific weight-based tariffs throughout this period. The tariff on most tobacco products has not been converted to an *ad valorem* equivalent. The only exception being ‘other’ and ‘snuff’ tobaccos.

Cigars, cheroots and cigarillos are levied at the weight-specific rate of $67.37 per kilogram (General rate) less 5 per cent for products from developing countries. The General rate for cigarettes is $66.00 per kilogram, less 5 per cent for developing country imports. Papua New Guinea, New Zealand and Forum Islands sourced products enter at the duty free rate of $63.56 per kilogram for all four of these products, this being equivalent to the excise tax on products manufactured in Australia.

The notional protective element of the tariff is $3.71 per kilogram for cigars, cheroots and cigarillos and $2.44 per kilogram for cigarettes. The rest is the notional excise component.

The Commission understands that whenever the excise increases by the Consumer Price Index plus 5 per cent, both the notional protective and excise components of the specific tariffs also increase in the same proportion. In other words, the protective element is regularly increased, albeit by a relatively small proportion.

4.2.1 The tobacco excise system

Commonwealth excise on tobacco products is levied on the basis of the weight of tobacco products. All three domestic tobacco product manufacturers acknowledge that this weight-based excise system has influenced their production decisions in terms of their product ranges and technologies employed in the manufacturing process.

The weight-based excise system has provided an incentive for manufacturers to reduce the weight of cigarettes below the level it would otherwise have been. They have responded to this incentive by reducing the dimensions (length and diameter) of some of their products, and by developing and adapting technologies which ‘expand’ tobacco so that the weight of a given volume of tobacco is reduced.

According to Wills:

> The weight-based system is *solely* responsible for Australia producing lighter weight cigarettes than anywhere else in the world.
>
> ... The net result of the weight-based system is that Australian cigarettes contain 25 to 30 per cent less tobacco than cigarettes in other countries. (Sub. 31, p. 20)

By influencing the range and size of cigarettes manufactured, and the production technologies employed, the weight-based excise system will have affected the type of tobacco used in the production process and the composition of imports. Clearly, the demand for tobacco amenable to ‘expansion’ will have been higher than otherwise would be the case, and since the weight-based excise has a bias in favour of tobacco used in the more expensive tobacco products, the demand for such tobacco will also have been higher than otherwise. The Commission notes that the most expensive tobacco used by domestic manufacturers is currently imported, primarily from the United States.

5 COMPETITIVENESS AND ASSISTANCE TO THE TOBACCO INDUSTRIES

The current tobacco industry marketing arrangements have insulated the industry from international markets. The future prospects of Australian tobacco growing depend on growers' ability to match international prices for leaf and meet buyer requirements concerning grade and reliability of supply. Only recently have these challenges been given serious thought.

The price disadvantage of local growers against imports is substantial and has not been declining as was intended at the commencement of the current plan in 1988. Although there could be factors which would lead local manufacturers to pay a premium for local leaf, the level of any premium is not known.

The relatively high priced production has precluded — except in unusual circumstances — the export of Australian leaf. There is an international market for tobacco leaf of the type grown in Australia, but at prices well below those received by Australian growers for domestic sales.

The termination of the current tobacco industry marketing arrangements could bring about substantial industry and tobacco growing regional adjustments. While all growers face significant disadvantages in terms of international competition, there are substantial differences in the potential adjustment pressures faced by individual growers.

Assistance to tobacco products manufacturing is low. Tariff protection provided to outputs has recently been more than offset by the additional cost of tobacco leaf inputs. Import penetration of the Australian market is negligible and exports are a small portion of local output. The continuing concentration of local manufacturing capacity on the Australian market is likely to be influenced by factors that are not taken into account in formal assistance calculations, such as the differentiated nature of tobacco products, production strategies of international business organisations, and local labelling, packaging and excise requirements.

Strategic links may have developed between Australian manufacturers and growers around the supply of the domestic market. However, because tobacco leaf is freely traded internationally, the presence of a local manufacturing capability does not ensure a longer-term demand for Australian leaf nor, for that matter, that the local manufacturing industry will remain in Australia.

5.1 Introduction

The future prospects of the Australian tobacco growers depend, amongst other things, on growers' ability to match international prices for tobacco products and meet manufacturers' requirements concerning grade, reliability of supply and presentation of crop.

Many types and grades of tobacco are traded internationally with different countries or regions supplying particular leaf products. Each leaf product attracts a different price depending on its perceived, or real, quality and end use attributes. The value attached by buyers to any one tobacco leaf product involves a high degree of judgement determined by their interpretation of consumer preferences. Leaf products are combined, or blended, through a manufacturing process to produce a range of cigarettes that differ in taste and marketability.

The manufacturers and marketers of tobacco products believe that consumer purchasing decisions are very sensitive to changes in cigarette flavour or smoking characteristics. Because of this high degree of differentiation between tobacco leaf products, marketers are likely to aim for gradual change. For growers, there may be a gradual shift between leaf types or qualities demanded, or between domestic and import supplies (or *vice versa*). Adjustment processes involving the interaction of growers, manufacturers and consumers are likely to be slow. There may be short-term fluctuations in leaf prices and these changes may differ between leaf types and grades. In the longer run, leaf prices could be expected to move roughly in parallel as buyers review their sourcing decisions and growers adjust leaf supply to demand.

The present shape and structure of the growing industry is dependent on consumer preferences and grower and manufacturer responses to those pressures. It is also dependent on the Government support that has been afforded the industry through the Tobacco Industry Stabilisation Plan (TISP) and the Local Leaf Content Scheme (LLCS), hereafter referred to as the 'tobacco industry marketing arrangements'. These arrangements have provided a cushion between international markets and domestic producers. The arrangements reserve a fixed share of the Australian tobacco leaf market for local produce and in so doing provide substantial assistance to local growers.

Estimating current assistance to tobacco growing and determining a tariff that would provide an equivalent level of assistance is complicated by the structure of the market for tobacco products, the nature of the tobacco industry marketing arrangements and the difficulty of establishing exact import substitution prices for domestically grown leaf.

The tobacco industry marketing arrangements expire on 30 September 1995. Amongst other things, the Commission has been asked to report on the structure and competitiveness of tobacco growing and manufacturing industries. This chapter calculates the assistance that is afforded the local growing and manufacturing industries. It focuses on information about import substitution costs and local prices by grade. This information is used to estimate the increase in local producers' income resulting from prevailing marketing arrangements and the assistance that these provide. It also considers prevailing tariffs and industry practices in assessing what the level of assistance indicates about the industries' future prospects.

Some minor adjustments to the analysis presented in Chapter 5 of the draft report have been made to price differences and assistance estimates in order to take into account comments received from participants.

5.2 Provision of assistance

Tobacco leaf production in Australia is oriented to the domestic market. Assistance to tobacco growing derives largely from the tobacco industry marketing arrangements that insulate local growers from international markets. The marketing arrangements provide local growers with protection against import competition enabling them to charge above the international price for comparable grades of tobacco. The relatively high selling price of Australian leaf and distances from major markets have generally precluded the export of Australian leaf. As an exception, Philip Morris reported that it secured a contract in 1993 to sell semi-processed leaf to Taiwan, but that the business was opportunistic and unlikely to be repeated. To meet the order, the company made over quota purchases of leaf from growers (Philip Morris, Sub. 38, p. 19).

5.2.1 Income from sale of leaf products

Marketing of tobacco leaf products

One of the major elements in the marketing of tobacco leaf in Australia is the run-of-crop system of sale. Under this system, all graded tobacco leaf submitted by individual growers, up to each grower's quota, must be acquired by the buyers. The grower is advantaged by being able to market all graded leaf products of each plant.

Because manufacturers must buy all graded quota leaf from growers, the manufacturers have the incentive, on one hand, to ensure that all leaf purchased is useable in tobacco blends and carries the appropriate price relative to other

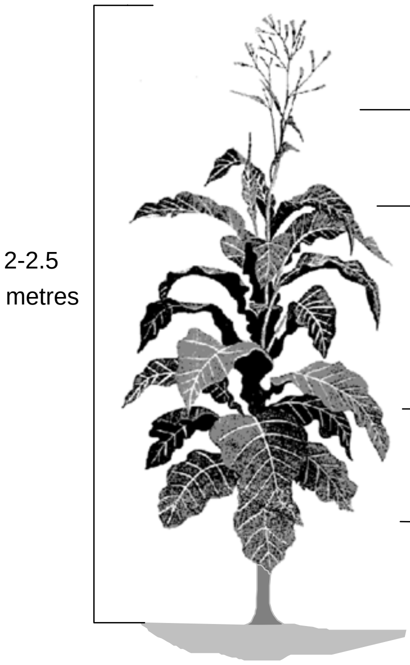
Australian grades. This requirement is effected through the Grade and Minimum Price Schedule developed within the Australian Tobacco Marketing Advisory Committee (ATMAC) and its committees. On the other hand, where the run-of-crop does not meet all manufacturers' requirements, imports must be chosen selectively to complement local leaf for the manufacture of cigarettes with the desired characteristics. For example, each of the manufacturers places a high value on the taste characteristics of United States (US) tobacco leaf and hence these include a substantial volume of leaf from this source in import supplies. Although the tobacco industry marketing arrangements provide an element of orderly marketing, they disadvantage buyers by limiting purchasing decisions between Australian growers offering different grades and qualities of leaf and between Australian growers and imports.

The current tobacco crop mix built up under the run-of-crop system may not be a good indicator of the mix of local leaf products which would meet manufacturers' requirements in a deregulated environment. In a deregulated environment, growers may find that they can improve their import competitiveness by concentrating on different plant varieties or leaf types. Manufacturers may choose to stop buying certain grades from Australian growers substituting these for other imported grades. Lower quality grades may be most vulnerable in this respect. Even under the current system, there have been changes in the importance of leaf from different parts of the plant, as growers have exploited price differences in the Grade and Minimum Price Schedule. Figure 5.1 shows that 'leaf' is currently the major revenue earner for tobacco growers. The subleaf (in the third position from the top of the plant) has grown in importance between 1989–90 and 1992–93.

How the purchasing decisions of buyers would evolve in a market environment without a regulated run-of-crop marketing system is difficult to predict. An indication of the strategic thinking concerning future requirements is provided in submissions by manufacturers. Philip Morris said that:

> The potential for Australian growers, to be competitive, however, is significantly enhanced if they move from producing tobacco in the lower priced, filler end of the market to producing for the mid level, semi-aromatic sector where the prices for the product are higher. ...
>
> A large proportion of lower grades will find no market with manufacturers, and growers who continue to produce these grades will be unlikely to survive. (Sub. 38, pp. 20–22)

Figure 5.1: **Production and revenue by tobacco plant position** (per cent)



		1989-90	*1992-93*
Tips	revenue	9.9	10.9
	production volume	10.2	10.5
Leaf	revenue	48.8	43.0
	production volume	49.8	44.3
Sub-leaf	revenue	28.6	38.2
	production volume	27.3	35.8
Cutters	revenue	5.0	2.9
	production volume	4.8	3.0
Lugs	revenue	7.8	5.1
	production volume	7.8	5.7

Source: Commission estimates.

Rothmans stated that:

> In principle, Rothmans will continue to buy Australian leaf. The continued purchase of Australian leaf, however, will be governed by a number of critical parameters:
>
> ... the purchase of various grades of Australian leaf could be at a small premium over world prices, subject to the leaf being of acceptable quality. ...
>
> Rothmans would purchase run-of-crop leaf of acceptable quality from Australian growers, providing the purchase of the range of leaf was consistent with Rothmans' production and marketing strategies. (Sub. 39, p. 6)

In a similar vein, Wills said:

> The Company believes it appropriate to purchase local leaf at a price that is based upon its estimate of the cost of importing similar leaf from overseas including duty, if applied.
>
> ... Due to blending constraints there will be no increase in the Australian leaf inclusion rate. To provide more opportunity for taste differentiation it is more likely that the inclusion rate will reduce. (Sub. 31, p. 8)

The strategic views of buyers indicate that price competitiveness and quality are very important considerations. The run-of-crop system will not necessarily remain for all purchases and all grades, and leaf types currently accepted will not necessarily be purchased in a deregulated system.

Import substitution prices and local price disadvantage

While the run-of-crop system provides assistance to local growers which would be difficult to quantify, a direct measure of the assistance effect of the tobacco industry marketing arrangements can be obtained by making price comparisons between local leaf products and imported leaf prices. Such comparisons provide a measure of the disadvantage local growers would face in the absence of the tobacco industry marketing arrangements and the assistance afforded by those arrangements. However, because these assistance measures do not take into account the full extent of farm support that has been provided through the guaranteed purchase of quota leaf at agreed prices and protection of growers from fluctuations in world prices, the measures understate the full extent of assistance afforded tobacco growing.

Making price comparisons is fraught with difficulty. As discussed above, there are many types and grades of tobacco traded on world markets and the comparison of leaf supplied from overseas countries with Australian leaf is a very subjective process even for industry experts. A comparison of average domestic prices with average import prices, as seen in Australian Bureau of Statistics (ABS) foreign trade statistics might, at face value, appear as a useful starting point. Indeed, this approach was adopted as one option for measuring assistance in the Industries Assistance Commission’s 1987 report on the tobacco industry. The difficulty with this approach is that the run of crop system provides manufacturers with the incentive to complement local production through imports. For this reason, it is believed imported leaf is of a different type to local leaf and therefore a poor basis for price comparisons. Discussions with manufacturers confirm this and indicate that such comparisons would be inappropriate.

ATMAC makes comparisons between local grade prices and the price of imported substitutes. The local grade prices are given by ATMAC’s Grade and Minimum Price Schedule. While that schedule of prices is available before the commencement of the marketing season, market based information on import substitution prices only becomes available after the conclusion of the marketing season. The comparisons between import and domestic prices are made as part of the administration of the TISP. In making its recommendations on the average minimum price applying to the Australian crop, ATMAC is required to recognise the need to bring the Australian price to international price comparability during the term of the current plan.

Negotiations concerning an average price based on the Grade and Minimum Price Schedule are undertaken in ATMAC and are completed around October of each year. The recommendation concerning the average minimum price is then made to the Commonwealth Minister for Primary Industries and Energy. The Minister determines the final national average minimum price in consultation with Ministers responsible for agriculture in New South Wales, Victoria and Queensland. The average minimum price approved by the Ministers is applied to quota leaf sales in the forthcoming selling season. The determination of the national average price complements the determination, also by the Commonwealth Minister for Primary Industries and Energy, of national marketing quota entitlements around March of each year (ie before planting for the next year is commenced).

The determined national average minimum price is distributed through ATMAC's Grade and Minimum Price Schedule using the moving average fall-out (leaf marketed) of the tobacco crop over the previous seven years. The average price actually received varies fractionally from the determined average minimum price because of year-to-year variations in the composition of leaf marketed.

For the negotiations on price, ATMAC uses, amongst other things, the findings of a working party convened by the Secretary of ATMAC and comprising a representative from each manufacturer and each State Tobacco Leaf Marketing Board. The working party considers technical issues such as the grading of leaf, price relativities of grades and the allocation of individual grades to price groups.

The comparison between Australian leaf prices and competing imported leaf prices is based on an indicative import substitution price for each grade of tobacco listed in the Australian Grade and Minimum Price Schedule. Data on the import substitution price are based on the results of international market investigations by each manufacturer. The three manufacturers independently survey world markets to ascertain what, in the judgement of their buyers and agents, the manufacturer would have to pay to obtain leaf comparable to the local products in the volumes required. Typically, the markets surveyed exclude US leaf which is regarded as complementary to Australian leaf. When compiling price data for use by ATMAC, each manufacturer takes into consideration all costs incurred to obtain an equivalent green weight price on the Australian sales floor.

The comparisons are made on individual tobacco leaf products and not on a run-of-crop basis because there is not a uniform production of grades between growers, and there is no single composite benchmark available on a run-of-crop basis. The individual estimates are submitted by each manufacturer on a confidential basis to an independent person who compares the three sets of estimates by grade, queries any significant differences and then averages the three prices to determine an import substitution price for each grade. These prices are translated into a national average import substitution price using information on sales by grade (ie the grade fall-out) over seven years. The average price outcome in any one year varies from the predetermined average due to variations between years in leaf type and quality.

Conceptually, the Commission's measures of the import substitution price used in its analysis should be based on the world price of an item strictly comparable with the domestic product. As buyer decisions will ultimately be based on a consideration of prices and quantities built up from individual grades, the manufacturers' evaluation used by ATMAC is, in principle, the closest to the Commission's requirements. Nevertheless, because of the subjective nature of tobacco leaf grading, manufacturers emphasise that caution needs to be exercised in interpreting the figures. Noting this caution, the Commission has obtained, on a confidential basis, the import substitution prices for over 80 grades of tobacco from each manufacturer and used the average, for each grade, across the three manufacturers as a basis for estimating an overall average import substitution price. The import substitution prices were provided by each manufacturer on a green leaf, Australian sales floor basis. Although prices were provided on an hypothetical Australian sales floor basis, the information was initially collected by manufacturers on a dried/threshed, 'free on board' (fob) basis at a foreign port. Threshing, freight and other charges, and weight differences distinguish the unit value of leaf at the foreign port and the value at the domestic sales floor. The conversion of the foreign fob leaf basis to a local market floor, green leaf basis is set out in Appendix K.

To complete the database needed to make price comparisons, a domestic price by grade is needed. The domestic Grade and Minimum Price Schedule provided by ATMAC provides the domestic price for each of the grades (see Appendix H).

The results in the following analysis are expressed on a financial year basis to encompass the growing season (which in broad terms corresponds to a financial year) and the marketing season (which in broad terms extends over the second half of each financial year). Thus, the 1992–93 year as reported below includes the tobacco crop sold in the 1993 selling season. The analysis of price disadvantage has been undertaken for the four selling seasons, 1990 to 1993. The first season in the series corresponds with the implementation of ATMAC guidelines to obtain indicative import substitution price data for each grade listed in the Grade and Minimum Price Schedule. Although domestic prices are available by grade for the 1994 selling season (having been determined in

November 1993), import substitution prices for that season are not available. All analyses presented below are based on comparisons at the detailed, 80 grade level.

Comparison of the two sets of prices shows that under the current marketing arrangements local tobacco plant products are priced highly in comparison with overseas leaf (see Table 5.1) with the average disadvantage over 1989–90 to 1992–93 generally exceeding 40 per cent of the import substitution price. The disadvantage on individual leaf products has changed during this time as international prices have varied in relation to domestic prices. In particular, the fall in international prices with the recent world oversupply of leaf, but not a corresponding fall in domestic prices, is reflected in the substantial escalation of the price disadvantage in 1992–93. To smooth out short-term fluctuations in price and to take a more ‘typical’ estimate for each leaf type, the average disadvantage over the period 1989–90 to 1992–93 is reported.

Table 5.1: **Price disadvantage (green leaf) by tobacco leaf type[ab], 1989–90 to 1992–93**

Leaf type	*1989–90*	*1990–91*	*1991–92*	*1992–93*	*Average*
			Per cent		
Tips	28	32	36	73	42
Leaf	34	32	34	60	40
Subleaf	45	35	36	57	43
Cutters	59	44	36	65	51
Lugs	97	59	56	86	74
			Price disadvantage ($/kg)		
Tips	1.26	1.47	1.60	2.50	1.71
Leaf	1.47	1.44	1.51	2.25	1.67
Subleaf	1.94	1.67	1.73	2.38	1.93
Cutters	2.27	1.89	1.60	2.30	2.01
Lugs	2.92	2.13	2.07	2.56	2.42

a The price disadvantage is calculated as the difference between the domestic and import substitution price, divided by the import substitution price.

b The four-year average reported is the simple arithmetic average over the period.

Source: Commission estimates.

There are substantial differences in the price disadvantages between leaf types. Appendix K also shows that there are substantial differences between grades within the individual leaf types. The very existence of the different price disadvantages indicates that production and buying outcomes could differ from the current pattern with the removal of tobacco industry marketing arrangements, including the run-of-crop system of marketing.

Although under current marketing arrangements there is a stated objective to bring the Australian average minimum selling price to international price comparability during the term of the TISP, Table 5.1 shows that to 1991–92 substantial price disadvantages remained. Nevertheless, there has been some compression of the differences between grades. This compression has been due to both increases in the price disadvantage (as is the case with tips) and decreases (as is the case with lugs and cutters). Despite the substantial reduction in the price disadvantage of lugs, the disadvantage of lug grades remains well above the average disadvantage.

These changes in price relativities have not affected significant reductions in the disadvantage calculated over the run-of-crop (see Table 5.2). There was a fractional reduction in the price disadvantage for the run-of-crop in the early 1990s as import prices rose ahead of domestic prices. Also from the first to the second year of the series, the dispersion of the price disadvantages between individual grades was substantially reduced. By 1992–93, the situation was reversed with domestic prices continuing to rise while international prices were falling and dispersion of price disadvantage were rising fractionally. The average import substitution price, based on the equivalent run-of-crop fell significantly from \$4.51 per kilogram in 1991–92 to \$3.80 per kilogram in 1992–93. As a result, the price disadvantage facing domestic tobacco producers increased significantly although the deviation of individual values from the average did not increase markedly.

The fall in world prices has been taken into account in the most recent price setting exercise and the average minimum selling price is projected to decline to \$6.04 per kilogram for 1993–94.[1] With this decline in the domestic selling price and assuming no more downward adjustments in world prices, the price disadvantage of local growers could decline for 1993–94 reducing the average price disadvantage fractionally from the 43 per cent reported.

The price disadvantage of local growers against imports is substantial and has not been declining as was intended at the commencement of the current TISP.

1 This estimate differs fractionally from the average minimum price of \$6.03per kilogram as recommended by ATMAC. The difference is due to the adoption of different production weights. The ATMAC estimate is based on production weights averaged over the last seven years, whereas the Commission’s estimate uses the latest year’s (ie 1992–93) weights. The Commission’s estimates give greater weight to the higher priced ‘leaf’ grades of tobacco as compared to the ATMAC estimates (see Figure 5.1).

Table 5.2: **Average minimum selling price, import substitution price and price disadvantage for run-of-crop (green leaf)[abc], 1989–90 to 1992–93**

	1989–90	*1990–91*	*1991–92*	*1992–93*	*Average*
Australian green leaf price ($/kg)	5.96	6.07	6.13	6.15	6.08
Import substitution price ($/kg)	4.23	4.49	4.51	3.80	4.26
Price disadvantage					
Per cent	41	35	36	62	43
Standard deviation	28	15	13	15	18

a The prices shown are nominal prices, that is, the prices prevailing in the year of sale.
b The standard deviation is a measure of dispersion. In this analysis, it measures how widely the percentage price disadvantage for individual leaf grades differs from the average value. The larger the variability amongst individual price disadvantages, the larger the standard deviation.
c The four-year average reported is the simple arithmetic average over the period.
Source: Commission estimates.

5.2.2 Industry assistance implications

The tobacco industry marketing arrangements assist local growers by providing them with a predetermined share of the local leaf market, along with a grade/price schedule which provides a predetermined price for each leaf product that is consistently well above the price of import substitutes.

The additional revenue obtained for the marketed crop over the hypothetical level of revenue obtainable through the sale of leaf at import substitution prices provides a measure of the subsidy value (producer transfer) of the tobacco industry marketing arrangements to growers. The producer transfer expressed as a share of Australian leaf production valued at import substitution prices provides an estimate of the nominal rate of protection to tobacco growing. Because tobacco growers receive little assistance from other support schemes, the nominal rate of assistance is very similar to the price disadvantage of local growers (discussed above).

Table 5.3 shows that the transfer to tobacco growers has exceeded $20 million per year for the last four years which amounts, on average, to a 43 per cent increase in revenue over import parity priced production. To put it another way, around 30 per cent of revenue actually received by growers for selling tobacco leaf products could be due to the benefits of the marketing arrangements.

Table 5.3: **Tobacco quota leaf sales (green leaf) and assistance[a], 1989–90 to 1992–93**

	1989–90	*1990–91*	*1991–92*	*1992–93*	*Average*
Green leaf sold (million kg)	13.33	13.42	13.41	12.73	13.22
Producer transfer ($ million)	23.06	21.23	21.77	29.82	23.97
Nominal rate of assistance (per cent)	41	35	36	62	43
Effective rate of assistance (per cent)	176	118	123	399	204

a The four-year average reported is the simple arithmetic average over the period.
Source: Commission estimates.

The average nominal rate of assistance to tobacco growing of around 40 per cent compares to the average assistance to agriculture of around 4 per cent in 1991–92 (Industry Commission 1993, p. 407).

The nominal rate of assistance takes into account the assistance afforded the output of an activity. However, the tobacco growing industry also faces higher input costs due to tariffs on inputs. It is also supported by government contributions to the tobacco research and development program, income tax averaging and adjustment assistance provided through the Rural Adjustment Scheme. The net subsidising effect of all government interventions (both positive and negative) is estimated by calculating the effective rate of assistance. This measure shows the percentage by which value added from tobacco growing is raised by net subsidies. Table 5.3 reports estimates of the effective rate of assistance to tobacco growing. The reported values are substantially larger than the nominal rates (the average nominal rate of 43 per cent compares to the average effective rate of 204 per cent) because:

- the nominal rate reports gross assistance by reference to the value of output; whereas
- the effective rate reports net assistance by reference to value added (ie the value of output less the cost of goods and services used in production).

Table 5.3 shows that the effective assistance to tobacco growing activity has consistently exceeded 100 per cent. That is, the net subsidy effect of government interventions (principally, the tobacco industry marketing arrangements) exceeds the returns that could be obtained from tobacco growing if growers were to receive import substitution prices for their leaf. This level of assistance represents a substantial transfer of income to tobacco growers from the rest of the community. By comparison, the average effective rate of assistance for the agricultural sector was 12 per cent in 1991–92. Nominal rates for tobacco growing would have to fall 37 percentage points from an average of 43 per cent to 6 per cent to make the industry's effective rate equal to the average for agriculture of 12 per cent.

The assistance estimates indicate that the tobacco industry marketing arrangements have delivered consistently high levels of support for tobacco growing activities. This support has been well above agricultural industry levels. Any downward revision of the average minimum selling price for 1994 may reduce this differential but, to be realistic, is unlikely to significantly change the overall assistance position shown in the above analysis.

The tobacco industry marketing arrangements have delivered consistently high levels of assistance to tobacco growing activities. This assistance has been well above the average for agriculture.

5.2.3 Other considerations impacting on assistance

The above analysis is based on price comparisons and depends very much on the import substitution price analysis undertaken by manufacturers and the notion that, in the absence of the tobacco industry marketing arrangements, local crops would be sold for those prices. Nevertheless, there are other factors not reflected in the basic calculation of assistance estimates based on past years' data that may have an important impact on the competitiveness of the tobacco growing industry. The possible impact of currency movements and the importance manufacturers place on securing a reliable supply of certain types of leaf products over the longer term are discussed below.

Assistance is sensitive to exchange rate variations

The rate of exchange between the Australian dollar and competitor countries' currencies is a major determinant of any domestic industry's ability to compete against imports. The tobacco industry is no exception. For this industry, international trade is generally denominated in US dollars so that all import substitution prices must be converted first from the currency of the exporter to US dollars and then from US dollars to the Australian dollar for comparison with local crop prices.

Factors beyond the control of the tobacco growing industry could alter the rates of exchange between the trading countries and significantly change the competitive position of the local industry. Variations in exchange rates affect the amount of assistance afforded tobacco growing through changes to import substitution prices. For this reason, assistance provided by the quota and local content arrangements is variable. Assistance provided by an *ad valorem* tariff, on the other hand, would not vary with exchange rate changes because Australian producers are not sheltered by quantitative restrictions from the competitive effects of increases (or decreases) in import prices induced by exchange rate changes.

A devaluation increases the world price expressed in Australian dollars. For a given domestic price this will lower the measured level of assistance. (The converse applies with a nominal revaluation.) In practice, there will also be some domestic price adjustments to nominal exchange rate movements. A nominal devaluation would increase import prices (expressed in Australian dollars) which would, in time, feed into domestic costs. Higher domestic costs would eventually provide some offset to the benefits of the devaluation leading to a smaller (or zero) real exchange rate effect.

Table 5.4 shows the sensitivity of nominal assistance rates to different nominal exchange rate regimes ranging from $US0.65 to $US0.80 per Australian dollar. At the lower end of the range and with prevailing US dollar import substitution prices, the average nominal rate of assistance over the four years would have been 26 per cent. On the other hand, had the rate of exchange remained around $US0.80, with the same US dollar import substitution prices, average assistance would have exceeded 50 per cent.

In practice, in the period being discussed, the Australian dollar depreciated against the US dollar, from just below $US0.80 to just above $US0.65 raising the Australian dollar import substitution price of tobacco leaf. Nominal assistance is substantially lower than that which would have prevailed with stable, or rising exchange rates.

Non-price factors influencing competitiveness

Simple price comparisons may not take into account all factors which influence the longer-term competitiveness of the local tobacco growing industry. From the point of view of the buyers of tobacco leaf purchasing from the local industry has advantages which include:

- the capacity to directly influence crop production systems, curing and presentation for sale;
- capacity to directly influence future levels of production and negotiate the relative price of grades;
- protection against currency fluctuations;

Table 5.4: **Sensitivity of the nominal rate of assistance to changes in the nominal foreign currency exchange rate[ab], 1989–90 to 1992–93**
(per cent)

Exchange rate $A/$US	*1989–90*	*1990–91*	*1991–92*	*1992–93*	*Average*
0.65	16	12	20	55	26
0.6806				62	
0.7	26	21	30	67	36
0.7314			36		
0.75	35	30	40	79	46
0.7788		35			
0.7799	41				
0.8	45	39	50	92	57

a The exchange rates shaded are the average rates applying over the tobacco leaf marketing years. The rates adopted are the simple 12 month averages for the first mentioned calender year, ie the rate for the 1989–90 growing year relates to the average over calender year 1990 which corresponds to the marketing year for that crop.

b The four-year average reported is the simple arithmetic average over the period.

Source: Commission estimates.

- avoidance of shipping and wharfage delays in Australia and overseas; and
- taste loyalty of customers, at least in the shorter term, for local leaf flavours.

Each of these factors may lead local producers to pay more than the import parity price suggested by one-to-one comparisons between local and overseas leaf. However, because the TISP has effectively imposed quantitative restrictions on the volume of imports, the premia, if any, that local leaf may command has not yet been tested. In addition, because world trading conditions are changing together with the demand for tobacco products, the premia that may prevail in one period may not be applicable in the next. For example, a change in consumer preferences in favour of foreign grown leaf would reduce any premia local growers could expect to command. On the other hand, the threat of political or exchange rate instability in major exporting countries may add to the premia. At the draft report hearings, manufacturers agreed that there would be a premia for local leaf and Philip Morris suggested a level ‘in the order of 10 per cent’ of the local marketing floor price (Transcript, p. 264).

Because the market for tobacco is untested and any new tobacco leaf prices under market conditions would be negotiated, it is not possible to put an exact value on other than direct price factors. Nevertheless, it is possible to provide a range of values and consider the sensitivity of assistance to such values. Table 5.5 shows the effects on assistance of premia ranging from 5 per cent to 20 per cent.

Table 5.5: **The sensitivity of the nominal rate of assistance to non-price influences[a], average 1989–90 to 1992–93**
(per cent)

	Premium				
	0	*5*	*10*	*15*	*20*
Average nominal assistance	43	37	30	25	20

a The four-year average reported is the simple arithmetic average over the period.
Source: Commission estimates.

To the extent that substantial non-price factors prevail, they can significantly alter the disadvantage faced by domestic growers as against international suppliers and hence the protection that is needed from any marketing arrangements. Table 5.5 shows that as the premium increases, the nominal rate of assistance provided by the tobacco industry marketing arrangements (as opposed to local advantage) would fall. For example, if manufacturers were willing to pay a 10 per cent premium (ie about 43 cents over the average import substitution price of $4.26 per kilogram, see Table 5.2) for Australian tobacco, nominal assistance provided by the marketing arrangements would be lowered by about one third.

Although there may be a number of factors which may encourage manufacturers to pay some premium for local leaf, this premium would be most unlikely to outweigh the price disadvantage of local growers as against the lower priced imported product.

In summary, assistance to tobacco growing is very high and sensitive to economic changes beyond the control of the local industry. The price disadvantage of local growers as against import replacements, and hence assistance, has not been declining within the current tobacco industry marketing arrangements as was intended at the commencement of the current marketing arrangements in November 1988.

5.3 Tariff equivalents to assistance to tobacco growing

The Commission has been asked to report on the appropriate tariff level to apply after 30 September 1995. There are many factors that need to be considered in advising on an appropriate tariff. One of these is the tariff equivalent, if any, of the current system. In this section, the price disadvantage of Australian growers is expressed in terms of an *ad valorem* tariff equivalent framework. Within this same framework, an indication of the average cost of the current arrangements to local manufacturers is also provided.

At the outset, it needs to be recognised that no single tariff rate can be used to precisely replicate the current tobacco industry marketing arrangements. These arrangements have a combination of quantitative restrictions on imports of leaf that insulate growers from foreign competition, including changes in world prices, and concessional entry of a certain predetermined level of imports that reduces the overall cost of the arrangements to domestic cigarette manufacturers.

Because of the 'tailor-made' nature of the tobacco industry marketing arrangements, it is not possible to simultaneously represent both the protection and concession effects with a single *ad valorem* tariff equivalent. Nevertheless, there are some measures which can be referred to when forming a judgement as to an appropriate equivalent level of tariff assistance. Two concepts are discussed below:

- the price disadvantage of Australian leaf expressed on a value for duty basis; and
- the cost of the current arrangements to tobacco product manufacturers.

5.3.1 Price disadvantage of Australian leaf

It is possible to look at the price disadvantage faced by Australian growers and translate that price difference into a value for duty basis — to be termed the 'value for duty price disadvantage' in the following discussion.

To do this, it is necessary to look at the price of Australian leaf as if it applied to the point in the tobacco leaf production and distribution chain at which import duties are levied. In the Australian Customs Tariff, an *ad valorem* tariff is levied with respect to the fob value of imports in the country of origin while actual imports of leaf tend to be semi-processed or threshed, and ready for processing. As the domestic sale price and price disadvantage information is available at first on a green leaf, Australian sales floor basis, it is necessary to translate this initial information to a value for duty basis. This involves taking the green leaf sales floor selling price and:

- first, revaluing Australian leaf from domestic prices as determined in ATMAC's Grade and Minimum Price Schedule to import substitution prices (green leaf basis) to give an import parity price for Australian leaf grades; then
- converting those import prices to a semi-processed, threshed, leaf price in a foreign port (ie the equivalent of the fob value of foreign leaf).

Table 5.6: **Price disadvantage of Australian leaf (value for duty basis)[a], 1989–90 to 1992–93**
(per cent)

	1989–90	*1990–91*	*1991–92*	*1992–93*	*Average*
Protective Component	37	32	33	51	38

a The four-year average reported is the simple arithmetic average over the period.
Source: Commission estimates.

Taking into account these valuation changes, the four-year average price disadvantage of Australian growers of 43 per cent (see Table 5.2) evaluated on a green leaf basis translates into a value for duty price disadvantage of 38 per cent (see Table 5.6). The estimated value for duty price disadvantage differs from the green leaf measure of disadvantage because the measures are taken at different points in the production and distribution chain. As noted, the tariff equivalent calculation is taken with respect to threshed leaf at a foreign port (ie the point of value for duty). The green leaf measure is taken with respect to sales evaluated on the lower valued green leaf basis.

Australian leaf is generally regarded as being substitutable for leaf grown and marketed from developing countries which are eligible for the 5 percentage points developing country (DC) preference applying in the Australian Customs Tariff. The General rate that would be consistent with the average value for duty price disadvantage reported in Table 5.6 would be around 43 per cent (ie 38 per cent plus 5 percentage points).[2] This rate is very high by industry standards.

Such a price disadvantage should not be interpreted as being equivalent to the tariff rate at which tobacco product manufacturers are indifferent between

2 It is purely coincidental that the four-year average prices disadvantage of Australian leaf (ie 43 per cent) has the same value as the general rate equivalent.

sourcing all of their leaf requirements from imports or domestic growers. Rather, it can be seen as an upper bound for an 'equivalent' tariff because there are many factors not taken into account in the above calculations which suggest that a tariff lower than the price disadvantage calculated would be more appropriate. For example, the estimates in Table 5.6 are subject to the following important qualifications:

- they assume no premia for locally grown tobacco leaf. To the extent that local advantage exists, a tariff equivalent lower than the value for duty price disadvantage could afford the local industry the same protective effect as the price disadvantages reported above;
- the average price disadvantages are calculated on the basis of the trading conditions (including exchange rates) prevailing over the last four trading years. Naturally, if the trading conditions were to change, a different value for duty price disadvantage could emerge. For example, the reduction of the average selling price to around $6.04 per kilogram for the 1994 season, with no change in import prices would be reflected in a fractionally lower average value to that reported in Table 5.6;
- the value for duty price disadvantage is based on the average price disadvantage of all growers. Because the price disadvantage faced by individual growers varies substantially with the type and quality of their crop, the rate of assistance afforded by the tobacco industry marketing arrangements also varies between growers. No single tariff equivalent applies to all growers; and
- the value for duty price disadvantage is based on the preservation of existing cost structures and asset (including land) valuations. The adoption of more internationally competitive crop quality standards, lower cost growing techniques or a downward revaluation of land with attendant reductions in the subsidy equivalent of the current arrangements, could flow through to a lower Australian selling prices and a lower value for duty price disadvantage than is reported in Table 5.6.

Due to these qualifications and because of the complexity of the current tobacco leaf marketing arrangements, there remain substantial difficulties in specifying an appropriate tariff based purely on the current average price disadvantage of growers.

5.3.2 Cost to tobacco product manufacturers

Another measure which can be referred to when forming a judgement as to an appropriate level of tariff assistance is the cost of the current arrangements to manufacturers. In order to do this, it is necessary to know the leaf price disadvantage of local growers and the *ad valorem* equivalent of the specific rate concessional duty applying to imported leaf.

The value for duty price disadvantage is discussed above. The *ad valorem* tariff equivalents of duty paid by manufacturers on imports from general entry countries (eg United States) and DC preferential sources (eg Brazil, Malawi, Zimbabwe) are provided in Table 5.7.

Table 5.7: ***Ad valorem* tariff equivalents to the duty paid by manufacturers on imports of tobacco leaf[ab], 1989–90 to 1992–93**
(per cent)

	1989–90	*1990–91*	*1991–92*	*1992–93*	*Average*
General entry imports	7	6	6	6	6
DC preferential entry imports	4	3	2	2	3
Average imports	**5**	**5**	**4**	**4**	**5**

a Duty paid is expressed as an *ad valorem* tariff. This conforms to the general practice of defining duty requirements in the Australian Customs Tariff, but differs from the current arrangements for both tobacco leaf and tobacco products for which duty is defined in terms of specific dollar values per kilogram imported (ie specific rate items).
b The four-year average reported is the simple arithmetic average over the period.
Source: Commission estimates.

Over the four years to 1992–93, the average *ad valorem* equivalent rates were 6 per cent and 3 per cent, respectively. The DC *ad valorem* tariff equivalent is subject to a 5 percentage point DC preference which is taken into account in estimates of the tariff equivalents reported (ie 8 per cent on a general entry basis less 5 percentage points for DC preference).[3] These rates compare with a zero tariff rate already applying to most agricultural commodities and a target maximum tariff of 5 per cent for most general entry (zero for DC preferential) imports, that are not already entering at zero rates, by 1 July 1996.

Upon weighting general entry and DC imports together, the average *ad valorem* tariff equivalent of duty paid is 5 per cent. This average rate applies to all import purchases and contributes to the total leaf purchasing costs in proportion to the purchase of imported leaf in total leaf purchases. Based on leaf purchases

[3] The general rate basis for DC imports is slightly higher than the general entry tariff equivalent (ie 6 per cent) because a specific rate duty applies to imports from both sources. Imports from DC sources have a lower unit value than imports from other sources and the duty is therefore a larger proportion of DC imports than it is for general entry imports.

over the life of the current tobacco industry marketing arrangements, import purchases comprise around 40 per cent total leaf purchases (by volume, inclusive of supplies absorbed into manufacturers stocks') (see Appendix K).

Taking the protected domestic component and the import component of tobacco leaf purchases, and weighting them together to form a composite item, Table 5.8 shows that the average cost to manufacturing over all leaf purchases is around 23 per cent. This represents a measure of the net cost of the tobacco industry marketing arrangements to manufacturers. Therefore, on average, manufacturers paid 23 per cent more for their leaf purchases than if they had imported their total requirements duty free.

Table 5.8: **Cost to tobacco leaf buyers of current assistance arrangements[abc], 1989–90 to 1992–93**
(per cent)

	1989–90	*1990–91*	*1991–92*	*1992–93*	*Average*
Overall Average	23	21	20	29	23

a The protective duty is expressed as an *ad valorem* tariff.
b The total is the weighted average tariff equivalent on all tobacco leaf purchases by the manufacturing industry. All leaf, protected domestic and imported, is valued on a common, threshed, value for duty basis.
c The four-year average reported is the simple arithmetic average over the period.
Source: Commission estimates.

In summary, termination of the current tobacco industry marketing arrangements could bring about substantial tobacco growing industry restructuring because any assistance provided under a deregulated regime could not provide the same protection to all growers of tobacco leaf as currently prevails. Because the distribution of protection will be significantly different in a deregulated environment as compared to that provided by current marketing arrangements, growers and buyers will need to respond by making changes to their production decisions and patterns of purchases.

5.4 Assistance to manufactured tobacco products

Assistance to tobacco product manufacturing is low. Assistance is provided to the domestic manufacture of tobacco products through a specific rate tariff on imports. The tariff is comprised of an excise element equivalent to that applied to domestically produced products and a protective element. For cigarettes, the specific protective rate is $2.44 per kilogram while for cigars, cheroots and cigarillos the rate is $3.81 per kilogram. The average (over the period 1989–90 to 1992–93) *ad valorem* equivalent of these specific rates is around 7 per cent for cigarettes and, depending on size, between 3 and 6 per cent for cigars, cheroots and cigarillos based on average unit values for 1992–93. Snuff and manufactured cut tobacco are subject to an *ad valorem* tariff of 10 per cent. Because the tobacco excise is levied on domestic production and imports, it does not discriminate on the basis of the source of supply and is not regarded as assistance.

Assistance to tobacco product manufacturing (Australian Standard Industrial Classification (ASIC) 219) is not high in absolute terms or in comparison with other manufacturing activities (Table 5.9).

Table 5.9: **Assistance to manufacturing[abc], 1989–90 to 1992–93** (per cent)

	1989–90	*1990–91*	*1991–92*	*1992–93*	*Average*
			Nominal rate of assistance to output		
Tobacco products	8	8	8	7	8
Food, beverages and tobacco	5	5	5	5	5
Manufacturing	9	8	8	7	8
			Effective rate of assistance		
Tobacco products	1	-1	-4	-17	-5
Food, beverages and tobacco	4	4	4	4	4
Manufacturing	15	14	13	12	14

a See Appendix L for definitions of the nominal rate and effective rate of assistance.

b A negative effective rate indicates that any support to tobacco product manufacturing through tariffs on cigarettes is exceeded by additional input costs due to the tobacco leaf marketing arrangements and tariffs on other inputs.

c The four-year average reported is the simple arithmetic average over the period.

Sources: Industry Commission, Annual Report, 1992–93, Australian Government Publishing Service (AGPS), Canberra, 1993, Commission estimates.

While the protective component of the tariff provides some assistance to the tobacco products industry, the benefits of this assistance are more than offset by the higher cost of tobacco leaf inputs due to the operation of the local content scheme. Therefore, while the nominal rate of assistance to the outputs of the tobacco products industry is estimated to average around 8 per cent over the four-year period 1988–89 to 1992–93, the effective rate of assistance to value added is estimated to be negative in recent years. A negative effective rate indicates that any support to tobacco product manufacturing through tariffs on cigarettes is exceeded by additional input costs due to the tobacco leaf marketing arrangements and tariffs on other inputs. The effective assistance to tobacco products is below that provided to the subdivision ‘food, beverages and tobacco’, and ‘manufacturing’ as a whole. With some year-to-year variation, the current level of effective assistance does not vary significantly from long standing levels of assistance for tobacco products (see Appendix K).

Despite the below average level of effective assistance afforded the local tobacco products industry, import penetration of the Australian market is negligible with nearly all local requirements coming from Australian manufacturers. In addition, exports take up a very small share of local industry output. The lack of international trade flows and the concentration of local manufacturing capacity on the Australian market is likely to be heavily influenced by other factors not entering into industry assistance calculations, including:

- the differentiated nature of tobacco products which favours the establishment of a local manufacturing capability, in addition to local wholesale trading and distribution operations. Close proximity to the consumer market would assist in tailoring cigarette products to local tastes and to secure market share;
- the ability of the Australian industry to compete with imports of cigarettes in the Australian market does not extend to the Australian industry competing on export markets. Franchises, transport costs or the practicality of meeting foreign consumer tastes, in competition with suppliers in the target market or other potential exporters could be a limiting factor;
- international business organisation of cigarette manufacturing which has, in Australia’s case, favoured the establishment of manufacturing operations in consumer countries. Such an approach establishes a local identity for branded products and meets local requirements in cigarette taste without necessarily exporting to other markets;
- Australian labelling requirements which favour local manufacturing capabilities that can tailor packaging to satisfy those requirements. Such packaging may not be required or acceptable elsewhere; and
- Australian excise arrangements, being based on cigarette weight, provide an incentive for the production of lighter cigarettes. This favours the development of a specialised capacity in Australian manufacturing to apply processes that minimise cigarette weight.

Strategic links may have developed between Australian manufacturers and growers. The differentiated nature of cigarette products and the need for security of supply of certain types and grades of tobacco leaf would favour, for commercial reasons, the retention of some Australian growing capacity. Such links have been further encouraged in Australia through the operation of the tobacco industry marketing arrangements. However, because tobacco leaf is freely traded internationally, the presence of a local manufacturing capability does not of itself ensure longer-term demand for Australian leaf at historical levels, particularly if lower priced imports can be readily substituted for local leaf. In the medium to longer term, new technologies of mixing and flavouring cigarettes could also lessen the nexus between particular tobacco types and grades and cigarette taste. Such developments could lower the importance of traditional links between growers of particular types and grades of leaf (both in Australia and overseas) and Australian manufacturers.

5.5 Export competitiveness

The tobacco industry marketing arrangements have developed around a culture of protection from import competition for the Australian leaf growing industry. Tariffs on manufactured tobacco products have provided some offset to higher input costs due to the protection afforded leaf and other materials used by manufacturers. International competitiveness in each of these cases has therefore been evaluated in terms of competing with imports.

Tobacco leaf and manufactured tobacco products are internationally traded commodities and therefore the competitiveness of these products can also be evaluated from the point of view of export potential. Because of the contracting domestic market, export competitiveness and the consequent potential to increase international sales could contribute to new, higher levels of demand for Australian leaf.

5.5.1 Export potential of tobacco leaf

A number of submissions noted that there is an export market for Australian leaf but at prices far less favourable than those currently applying in the domestic market. A similar finding was also made in a study by the Tobacco 2000 Steering Committee (1993) in respect to northern Queensland leaf.

While the submissions pointed to the lack of price competitiveness of Australian leaf as an obstacle to the expansion of exports, only the report by the Tobacco 2000: Steering Committee provided an indication of an entry level export price. The indicative price estimated in 1993 for Queensland leaf to gain entry into selected markets is about $US4.00 per kilogram, dry weight basis, fob. In the report, this figure was translated to $A3.10 per kilogram, green weight basis, ex-floor Mareeba, at an exchange rate of \$US0.70 to the \$A. This is well below the ATMAC average minimum selling price of \$6.03 per kilogram for Australian leaf for 1993–94. It is also below the average import parity prices over the 1990–1993 period of \$4.26 per kilogram (see Table 5.2). It is not surprising that the export entry price differs from the import parity price because:

- the local industry gains some 'protection' by the cost of transporting imported leaf to Australia. These transport costs raise the landed price of imported leaf. Exporters must pay in order to transport their leaf products to international destinations; and
- the price given by the Tobacco 2000 Steering Committee is an entry level price which could contain some discounting element to attract the buyers to the Australian product. The final price arrived at once markets are established may be higher (or lower) than the entry level price. For example, discounting the import parity price of \$4.26 per kilogram for international freight and cartage expenses yields a possible longer-run export parity price of around \$3.80 per kilogram.

Each of the buyers indicated that exports of leaf might be developed but emphasised that an export culture based on continuity of supply of a uniform, high quality leaf would be necessary for any substantial export volumes to be achieved on a regular basis. Entry to export marketing may not be easy or quickly achieved. For instance Philip Morris said that:

> Initially, growers would need to discount price in order to gain entry to international markets. This would be essential to obtain customer trial of Australian leaf. It, therefore, must be assumed that in the early stages of establishing demand for exports the price available would be lower than that applicable to the main trading countries, such as Brazil and Zimbabwe. (Sub. 38, p. 19)

and Rothmans observed that:

> Considerable effort would be required, however, to realise the export potential of the Australian tobacco crop. Detailed negotiations would be required between growers in Australia and buyers or their agents in other countries. In some countries, for example, the tobacco market is run as a government monopoly. Moreover, given the volumes of tobacco leaf already available on world markets, any export arrangements probably would take some time to implement. (Sub. 39, p. 5)

In general, border protection in the form of local content schemes, tariff quotas, or tariffs raises prices in the import competing country above international prices and insulates the local tobacco leaf growing industry from international market influences. Protection afforded in these ways would inhibit export market development by leaf growers. The Australian tobacco leaf industry has developed for many years behind substantial border protection barriers. The full extent to which it can lower costs and adjust product mix to enable exports has not been tested. Upon deregulation of the industry, some testing of the longer-term export potential of the local growing industry, possibly within the framework described by the manufacturers, could be expected as local producers explore methods of fully utilising existing tobacco leaf production facilities (land and fixed capital assets), for which a more attractive alternative use is not currently apparent.

The export prospects for tobacco leaf are not good. In the short to medium term, future prospects for tobacco growers will be confined to supplying a share of local tobacco product manufacturers' requirements for tobacco leaf. The size of that share will depend on growers' capacity to meet price and quality requirements.

5.5.2 Export of manufactured tobacco products

There is a low level of trade on both the import and export side for tobacco products in Australia relative to the total market for those products. Some of the reasons for this are discussed in section 5.4 on manufacturing assistance.

Looking ahead, different emphases were placed on the export potential of the Australian cigarette manufacturing industry by the manufacturers.

Some took a fairly cautious view of that potential: Rothmans said:

> The situation concerning the possible export of tobacco products is quite different *(from leaf).* It would appear to be extremely difficult for Australia to develop into a significant exporter of manufactured tobacco products. Australia would be competing against production facilities which are based on substantially lower cost structures prevailing in other countries. In addition, there are other non tariff barriers such as country specific labelling and packaging issues, and differences in consumer tastes. (Sub. 39, p. 5, 6)

Similarly, Wills stated that:

> The weight-based system also precludes Australian cigarette manufacturers from achieving international competitiveness. This has reduced Australia's ability to supply increasing demand for cigarettes from the Asia/Pacific region utilising Australian tobacco. As mentioned above, Australia's efficiency remains below international best practice largely as a result of the excise system. (Sub. 31, p. 21)

Although Wills maintained their concern regarding the weight-based system of excise at the draft report hearings (Transcript, p. 621), they also advised that:

> ... we believe there is considerable scope in the future for Wills to be exporting tobacco products. (Transcript, p. 620)

Philip Morris has also taken an optimistic view:

> Cigarette exports have potential in the Australian trade picture. Cigarettes already represent a positive balance of trade even though the export market is an emerging one, and represent a valuable manufactured export opportunity having the potential to preserve if not create significant employment
>
> ... At least in the short term the best opportunity for Australian tobacco growers to participate in exports is through the inclusion of their leaf in value added manufactured cigarettes and semi-processed leaf. (Sub. 38, p. 11, 16)

The actual outcome cannot be prescribed in the inquiry. The approaches taken by individual manufacturers may differ based on their own commercial assessment of international market opportunities, international franchise obligations and the competitiveness of Australian products. Clearly, local manufacturers currently have divergent views on the potential for export growth. The approaches may also change over time. Any success that manufacturers have in marketing Australian manufactured products would flow through to higher demand for leaf products — possibly sourced to Australian growers.

5.6 Regional implications of assistance to tobacco growing

5.6.1 Introduction

In the previous section an analysis of the current tobacco marketing arrangements was undertaken at the national level. The tobacco growing regions, however, operate under different administrative arrangements with different prospects for growing alternative crops. In this section, in order to consider the implications of changing assistance arrangements on tobacco growing regions, the national results concerning price disadvantages have been disaggregated to the regional and grower levels.

5.6.2 Disparities between regions

Average prices received for leaf

Within the protected environment provided by the tobacco industry marketing arrangements, the main incentive to grow tobacco and transfer production between regions has not been constrained by competition from imports. Rather it has been determined by average prices negotiated with ATMAC and the relative production costs of growing tobacco in the various tobacco growing regions of Australia.

The average prices received for tobacco leaf differ between tobacco growing regions. This is due to differences in leaf types and grades that attract different prices in the market. Table 5.10 shows that the average value of the crop grown in northern Queensland has been consistently higher than crops grown in other areas (with the exception of southern Queensland in the most recent year). New South Wales growers have consistently attracted lower average values for their tobacco crop.

Table 5.10: **Average price obtained for marketed tobacco leaf (green leaf) by region, 1989–90 to 1992–93**
(dollars per kilogram)

	1989–90	*1990–91*	*1991–92*	*1992–93*
Northern Queensland	6.05	6.31	6.36	6.29
Southern Queensland	6.01	6.07	6.08	6.37
New South Wales	5.71	5.57	5.50	5.43
Victoria	5.83	5.76	5.84	6.00

Source: Commission estimates.

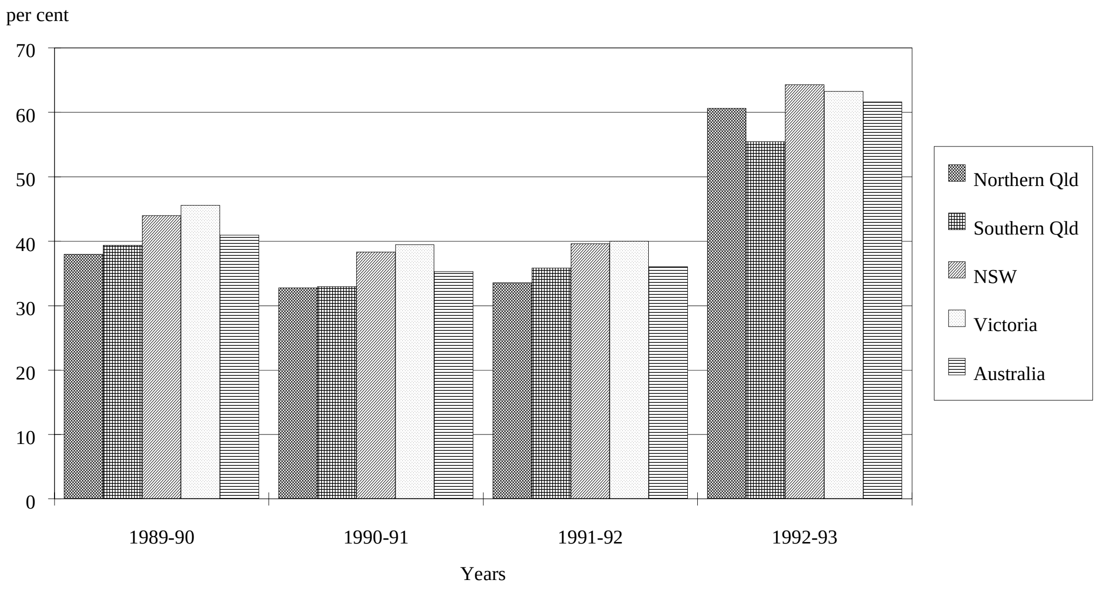
While average prices (in nominal terms) per unit of output have if anything been rising for three of the regions — northern Queensland, southern Queensland and Victoria — they have systematically declined for New South Wales leaf. The reduction in the average selling price in 1993–94 is likely to lower selling prices in all regions including New South Wales.

Behind the changes in average prices, the mix of tobacco types and grades in sales by regions has also been changing. For example, growers in northern Queensland sell significantly more tips (15 per cent by volume of crop) than do tobacco growers in other regions and this proportion is increasing (up from 12 per cent of sales in 1989–90) (see Appendix K). In comparison, tips declined from 8 per cent to 5 per cent of leaf sales by New South Wales growers over 1989–90 to 1992–93. Although subleaf is on average the highest priced leaf marketed, northern Queensland tobacco growers have traditionally marketed the lowest (albeit expanding) share of subleaf in all growing areas.

Regional price disadvantages

As seen from the discussion on national assistance, the price disadvantage of Australian leaf differs between leaf types and grades, and over time. These differences are disaggregated according to region in Figure 5.2. The Grade and Minimum Price Schedule negotiated annually by ATMAC has not provided a systematic reduction in regional disparities over the 1990s. The level of price disadvantage, however, is not uniform between growing regions. Queensland leaf, both from the northern and southern growing regions, is traded at a fractionally lesser price disadvantage than leaf from Victoria and New South Wales. Of the four regions, Victorian leaf is traded, in general, at the greatest price disadvantage.

Figure 5.2: **Average price disadvantage (green leaf) by region, 1989–90 to 1992–93**
(per cent)



Source: Commission estimates.

Lower prices do not indicate lower price disadvantages. Table 5.10 shows that tobacco growers in Victoria market the leaf which attracts the lower than average prices in ATMAC’s Grade and Minimum Price Schedule. At the same time, there is a larger margin between domestic and import substitution prices for those grades than is the case for leaf marketed by growers in other regions. The outcome of these two characteristics of the Victorian crop is that growers in this region both market the lower priced leaf and have the greatest price disadvantage. On the other hand, Queensland growers market the higher priced leaf grades and have the lesser price disadvantage with respect to import substitution prices.

Price disadvantage and competitiveness can be affected by the regulation of quota transfer between regions. To avoid such effects and aid the movement of tobacco growing resources to their best location, the principle of free transfer of quota has been part of the current tobacco industry marketing arrangements. However, there has been a mixed application of the principle and the intent of the scheme has been undermined in a number of ways.

Northern Queensland growers received the benefit of the $10 million Queensland tobacco fund (this is discussed in more detail in Appendix F). In order to receive a grant from the fund, the growers were required to make a commitment to remain in tobacco farming for a further three years and much of the funds were expended on tobacco specific assets. In principle, the grant receipts would have enabled growers to maintain, or even expand, output of leaf without seeking to raise selling prices. In practice, it would be difficult to determine how the allocation of the funds to growers has influenced selling prices negotiated in ATMAC for grades marketed by northern Queensland growers.

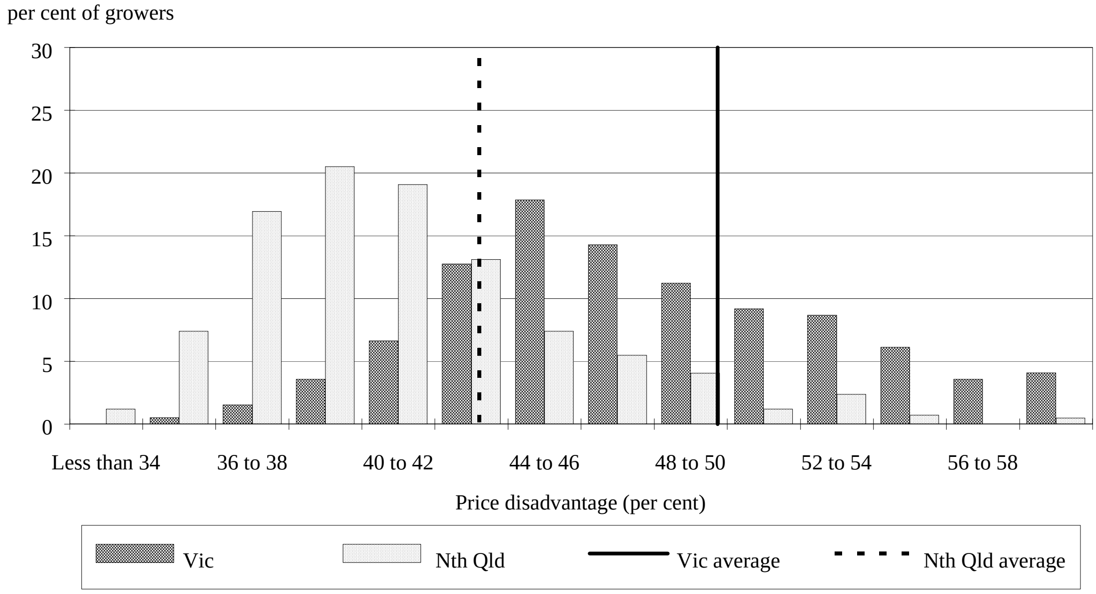
The Victorian Government disallowed the interstate transfer of marketing quota effectively restraining the movement of tobacco growing resources from that State as a defensive action against the support afforded Queensland growers (see Appendix F). In Victoria, average selling prices received by growers have increased. At the same time, growers have had a fractionally higher price disadvantage compared to other States.

New South Wales participated in the transfer of quota between regions as well as within the State. In New South Wales, average prices received by growers have been declining, although, because relative assistance has not been declining, it appears that the small number of growers remaining in that State are generally marketing lower quality tobacco (as indicated by price relativities in the Grade and Minimum Price Schedule) without improving their international competitiveness.

5.6.3 Disparities between growers

The price disadvantage faced by growers within the tobacco growing regions varies substantially. Growers market a wide range of tobacco grades with individual growers marketing as many as 30 or more grades out of the schedule of over 80 grades. Because of the differential price disadvantages across the various leaf types and grades produced, the price disadvantage faced by individual growers also varies substantially. Figure 5.3 indicates the price disadvantages faced by growers in Victoria and northern Queensland. The average price disadvantage of Victorian growers is nearly 50 per cent and for northern Queensland it is over 40 per cent. While there is a significant

Figure 5.3: **Average price disadvantage (green leaf) by grower and region[a], 1989–90 to 1992–93**
(per cent)



a The price disadvantages are reported in steps of three percentage points, that is, the group ‘40 to 42’ refers to ‘40 to less than 42’. The next group refers to 42 to less than 44, and so on.
Source: Commission estimates.

concentration of growers at or below the average in each State, the range of disadvantage faced by individual growers is substantial. In Victoria, where the disadvantage of individual growers is as low as 34 per cent, there are around 30 per cent of growers with a disadvantage exceeding 50 per cent. For northern Queensland, there are a few farms with a price disadvantage in excess of 50 per cent, but this group represents a very small proportion of all growers operating in the region. The lower average selling price in 1994 is likely to lower the average disadvantage of growers, but would not significantly alter the range of disadvantages over growers in the regions examined.

Due to variation between growers, the average disadvantage measures for Australia or indeed for individual regions are not necessarily a good guide to the situation faced by individual growers. The substantial variation between growers illustrates the impossibility of providing tariff, or market based, equivalents to existing assistance arrangements at the individual grower level, as discussed above.

Following termination of the prevailing tobacco industry marketing arrangements, the distribution of assistance between growers will be appreciably different. This is likely to bring about substantial industry adjustments both at the regional and grower level. Individual growers will be operating in quite a different environment once deregulation takes effect.

Ultimately, the level, nature and location of tobacco leaf production after the expiry of the tobacco industry marketing arrangements will depend on the degree of local advantage Australian growers have over imports and the degree growers are able, and willing, to reduce their leaf selling costs or vary the type and grade of leaf grown to meet manufacturers' requirements and competition from imported leaf. It will also depend on trends in the international price of tobacco leaf, as denominated in Australian currency and on the strategic decisions of manufacturers.

There are substantial differences in the price disadvantages attributable to individual growers and regions. The termination of the tobacco industry marketing arrangements will have differential impacts across growers and regions.

5.7 Financial effects of changes in tobacco prices

The analysis of this chapter has focussed on the disparity between domestic and world prices for tobacco leaf. However the future prospects of the tobacco growing industry depend not only on prices received for leaf but also on farm costs. The Commission received limited information regarding future prospects for growers at import parity prices. Lynch Rural, in its submission to the Commission, noted that for growers in northern Victoria a tariff of less than 25 to 30 per cent implies that:

> ... the larger growers will only survive on the basis of:
>
> (i) Less growers, with increased average farm production size.
>
> (ii) An annual production allowance of >80% of owned quota.
>
> (iii) Improved quality. (Sub. 63, p. 7)

Lynch Rural identified a 'larger grower' as one with an annual production in excess of 30 000 kilograms in the Myrtleford area.

The Commission has analysed the potential effects of lower world parity prices on the financial viability of tobacco farms, dealing with the longer-term prospects and short-term carry-on capacity. For the purpose of the analysis, the Commission selected three tobacco farms from the northern Queensland growing area of Mareeba-Dimbulah. The farms selected received better than average prices for tobacco, had a less than average price disadvantage, and included a small (20 000 kilograms), medium (40 000 kilograms) and large (70 000 kilograms) tobacco growing operation.

The analysis illustrates some of the financial effects of changes in tobacco prices from current prices to import parity and export parity prices. However, it does not provide forecasts of the size, structure or product mix of any future tobacco growing industry. Details of the study are presented in Appendix M.

The cash operating surplus of farms provides a measure of the extent by which cash receipts exceed cash payments. In the presence of a cash operating surplus, farmers can maintain the farming operation on a short-term basis without incurring additional long-term debt. However, the measure does not provide an allowance for depreciation of fixed assets or a return to the labour of the owner/operator. The cash operating surplus of the three farms for the scenarios analysed are reported in Table 5.11.

Table 5.11: **Cash operating surplus from tobacco growing, average 1988–89 to 1992–93**
(cents per kilogram)

	Small 20 000 kg	*Medium 40 000 kg*	*Large 70 000 kg*
Current pricing	269	308	283
Import parity with 10% premium for local advantage	145	172	159
Import parity pricing	94	128	113
Export parity pricing	-31	68	31

Source: Commission analysis.

The estimates show that a carry-on capacity exists for all farms at import parity prices and is improved with payment of a premium for local advantage. At export parity prices, a substantially reduced, but positive, cash operating surplus appears possible for larger farms. The current tobacco industry marketing arrangements have inflated the cash operating surplus obtainable from tobacco production to a level well above that which could be obtained in trade at world prices.

To examine the longer-term viability of tobacco growing farms, it is useful to look at the rate of return to resources used in tobacco growing (ie tobacco land and fixed capital, excluding the owner's residence). The rate of return to resources used is measured after an allowance for owner/operator labour and depreciation of fixed assets has been made. Resources used (the denominator in the rate of return calculation) include farm land and fixed assets. A positive rate of return indicates that a farm has met all operating costs and has some surplus available for the payment of taxation liabilities, interest on debt and saving.

Estimates of the return to resources used depend on the valuation of land, and machinery and equipment used in tobacco growing. The data provided for each farm showed fixed assets of very different vintages, some very old (for example, 60 years) and others almost new. In addition, land was valued on the basis of returns available from tobacco growing over earlier years. In order to improve the comparability of fixed asset information between farms, model asset schedules were estimated for each farm. In order to provide an indication of average returns, asset values from the middle years of the standardised age profile were used in the analysis. In addition, to provide a forward looking perspective, land was revalued at opportunity cost using information about recent sale values of ex-tobacco farms for alternative agricultural uses.

Table 5.12 reports the rate of return on resources used for the four scenarios considered. Table 5.12 shows that average returns to tobacco growing have been high under current pricing arrangements. Import parity pricing reduces returns significantly, but does not eliminate positive returns for the larger tobacco growing operations. Under export parity pricing and current costs of production, positive returns from growing only for export do not appear possible, even for the large farm. This outcome, read in conjunction with the much reduced but positive cash operating surplus for exports reported above, is consistent with the Tobacco 2000 Steering Committees' finding that:

> 1.13 At likely overseas prices, not all growers will find it possible or profitable to participate in export sales to any significant degree. (1993, p. 3)

Table 5.12: **Rate of return to resources used in tobacco growing, average 1988–89 to 1992–93**
(per cent)

	Small 20 000 kg	*Medium 40 000 kg*	*Large 70 000 kg*
Current pricing	5.6	14.8	13.3
Import parity with 10% premium for local advantage	-2.6	3.3	4.5
Import parity pricing	-5.8	-0.3	1.3
Export parity pricing	-14.0	-5.3	-4.5

Source: Commission analysis.

For growers remaining in tobacco production, who are able to maintain full production while selling at import substitution prices (and possibly export prices), there is a short-term carry-on capacity within the industry. A longer-term investment capacity for suitably structured larger farms appears to exist.

Returns could be improved as farms become larger and fixed costs are spread over a larger volume of tobacco production, providing an incentive for the consolidation of tobacco properties towards larger growing units. In addition, measures by farmers to spread farm machinery and equipment between tobacco and other farming activities would lower the cost of tobacco growing and raise farming enterprise returns.

6 GOVERNMENT POLICIES AFFECTING THE DOMESTIC CONSUMPTION OF TOBACCO PRODUCTS

Tobacco products are the highest taxed products on Australian markets. They are also subject to some of the most extensive regulations applying to consumer goods.

Tobacco products are taxed for two main purposes: to raise revenue and to reduce consumption. Regulations, on the other hand, are imposed primarily to reduce the consumption of tobacco products.

The evidence suggests that taxation has been an effective revenue raising instrument. Tobacco consumers, in general, do not reduce their cigarette consumption by large amounts in response to price rises. Higher retail prices, however, can affect the level of teenage smoking by discouraging them from starting to smoke.

Higher taxes cannot target particular groups in society — regulations supplement taxes for this purpose. They target adolescents, in particular, and attempt to limit the exposure of non-smokers to tobacco smoke.

Some studies of the demand for tobacco products report that reduced smoking levels in Australia are also linked to a greater health consciousness. That stated, taxation, regulations, and the public provision of information all have a role to play in affecting the consumption of tobacco products.

6.1 Introduction

This chapter provides information on the three main ways in which governments influence the consumption of tobacco products. They are:

- a range of taxes which increase price and reduce demand;
- regulations which restrict the promotion of cigarette products, restrict access to them, and influence the conditions under which the products are consumed; and
- the provision of information on the potential health effects of tobacco consumption.

6.2 Taxation

The following discussion outlines the reasons why tobacco products are so highly taxed, describes the taxation instruments used, and reports the effects on prices, revenue and demand.

6.2.1 Reasons for tobacco taxation

No other Australian product attracts a level of taxation as high as that for tobacco products, and it is this relatively high level of taxation which is of interest here.

In common with all other taxes, the primary purpose for levying taxes on tobacco products is to raise revenue, but high taxes are also seen as a means of pursuing the objective to reduce the level of consumption of tobacco products.

Revenue raising

Tobacco products are among a small group of commodities (which also includes alcohol and petroleum) which attract high rates of taxation. These products have historically been targeted for taxation because their market characteristics are such that following a price rise demand falls less than proportionately to the price increase. Consequently, tax-induced price rises result in increased tax revenue despite reduced consumption in response to the price rise. In economic terms, the demand for these products is price inelastic, and so in an efficiency sense, this makes them a preferable base for higher levels of tax than products whose demand is more sensitive to price changes.

Another reason tobacco products are targeted to raise revenue is because they are easy to identify, the volume of sales is high and there are few substitutes which consumers would find satisfactory. High tobacco taxation is also often accepted because of the detrimental health effects associated with tobacco consumption.

Reducing consumption

The other reason for a high level of taxation of tobacco products is to correct for a failure of the market to take account of the health costs that smoking imposes on smokers and non-smokers from passive smoking (see Chapters B2 and B3 for detailed discussions). These costs (or externalities) are not reflected in the market price of tobacco products and fall on other individuals and the public purse rather than the tobacco consumer.

If smokers are unaware of the potential dangers of tobacco consumption to themselves and the wider community, taxation would provide a signal to consumers that their level of consumption is too high. By increasing the retail prices of tobacco products, taxation could help alleviate tobacco-related health problems by discouraging those intending to take up smoking and reducing the consumption of existing smokers (other than addicted/dependent smokers).

6.2.2 Taxation instruments

There are primarily three taxation instruments used by governments to affect the consumption of tobacco products: Commonwealth excise duties, imposed on domestically produced products; customs duties, levied on imported tobacco products; and State licence fees and taxes.

Excise duties

The excise duty is the main instrument used by the Commonwealth Government to collect revenue from tobacco products. This is a tax imposed on the manufacture, sale or consumption of a domestically produced good, and may be applied at any stage of the production or distribution chain before the good is in the hands of the consumer.[1]

Excise duties may be levied on the basis of the value, volume or weight of a product. In the case of tobacco, the excise duty is levied according to the weight of the manufactured tobacco product. In relation to cigarettes, excise is levied on the total weight of the cigarette (ie including paper and filter) (Australian Customs Service, Sub. 78, p. 1).

A uniform rate of excise applies to all tobacco products except snuff. When introduced in January 1965, the excise rate was $8.18 per kilogram of tobacco. Since February 1984, the excise rate has been indexed to movements in the Consumer Price Index (CPI) on a six monthly basis. However, since 1988 the rate of excise has increased at a faster rate than the CPI.

The current rate of excise tax is $63.56 per kilogram of tobacco (this compares with the $6.13 per kilogram paid to Australian tobacco growers on average). The Commonwealth Government has announced that the excise will rise a further 5 per cent over and above CPI adjustments in August 1994 and again in February 1995 and August 1995. In February 1996, Philip Morris expects the excise rate to be $79.45 per kilogram of tobacco after CPI adjustments are made (Sub. 38, p. 30).

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1 At present, excise is not collected on home grown tobacco.

All three tobacco product manufacturers expressed views on a comment the Commission made in the draft report to the effect that it favoured an *ad valorem* basis, in preference to the existing weight basis, for the Commonwealth excise on tobacco products.

Wills strongly advocated a change from the present weight basis to a sticks basis, whereas Philip Morris and Rothmans preferred there to be no change. All three manufacturers opposed a change to an excise system based on the value of tobacco products. A discussion of the various alternative methods for levying excise on tobacco products is contained in Appendix N.

The Commission has concluded that ***the weight-based excise system has distorted the production decisions of tobacco product manufacturers and has the potential to distort their leaf purchasing decisions. An excise based on the number of cigarettes (sticks) would also distort production and purchasing decisions.***

Changing the method of charging excise to the less distorting value basis should be given consideration. Tobacco product manufacturers should be given about three years' advance notice of any change.

Submissions received since release of the draft report show that an immediate conversion to an *ad valorem* basis would impact differentially on the three domestic manufacturers in terms of the price effects on their existing product ranges. For this reason the Commission does not propose a change at this time.

Customs duties

Customs duties are imposed on imported tobacco products as they enter Australia for domestic consumption.

Customs duties comprise two components: a notional excise component and a protective component.

The excise component is an amount of duty equivalent to the level of excise which would be payable on similar domestically produced tobacco products. This component is primarily used to raise revenue and moves in parallel with the domestic excise rate.

The protectionist component is effectively a tax on imports which protects local producers of manufactured tobacco products and tobacco leaf. That stated, a local content scheme (as outlined in Chapter 4) allows manufacturers of tobacco products to import tobacco leaf at concessional rates of customs duty so long as they use at least 50 per cent local leaf in their manufactured product.

State licence fees and taxes

A business franchise licensing scheme for the sale of tobacco products operates in all Australian States and Territories. All State and Territory Governments levy taxes on the sale of tobacco products and, with the exception of Queensland, charge a fee for a licence to sell tobacco products (see Table 6.1).

Table 6.1: **Comparison of State and Territory taxes for tobacco products, 1994**

State	*Wholesaler*	*Retailer*	*Ad valorem component (per cent)*
New South Wales	$10 per month plus 75% of value of tobacco sold (except to other licensed wholesalers)	$10 pa plus 75% of wholesale value of sales purchased from unlicensed sources or from a licensed wholesaler who was not liable to pay a NSW fee on the tobacco	75
Victoria	$50 pa plus 75% of tobacco sold for resale or consumption in Victoria (except to other licensees)	$50 pa or $10 per month plus 75% of value of tobacco purchases from unlicensed sources	75
Queensland	75% of value of tobacco sold (except to other licensees)	75% of value of tobacco purchases from unlicensed sources	75
Western Australia	$20 per month plus 100% of value of tobacco sold	$20 per month plus 100% of value of tobacco sold	100
South Australia[a]	$2 per month (unrestricted licence) plus 100% of value of tobacco sold to licensed merchants	$2 per month or $10 pa (whichever is the lesser) for a restricted licence on the condition that purchases are only made from licensed sources[b]	100
Tasmania	$12 per month plus 100% of value of tobacco sold	$12 pa or $1 per month plus 100% of value of purchases from unlicensed sources	100
Northern Territory	$10 per month	$10 per month plus 85% of value of tobacco purchased	85
Australian Capital Territory	$10 per month plus 75% of sales (other than to licensed wholesalers)	$50 pa plus 75% of purchases from unlicensed sources	75

a In South Australia licences are not compulsory (a regulatory regime exists for unlicensed merchants), however for consumers who purchase from an unlicensed merchant, a consumption licence is required.

b The licence fee payable by a holder of a restricted licenced may be reassessed (at a rate of 105 per cent of the value of tobacco products purchased) where the condition of the restricted licence is breached.

Sources: NSW Treasury 1994, State legislation, personal communication.

The licence fee is a flat rate charge which is paid by wholesalers and retailers of tobacco products. The level of the fee varies between the States and Territories.

The tax is paid either by the licensed wholesaler or the licensed retailer if the wholesaler is unlicensed. The tax is levied as a percentage of the (wholesale) value of tobacco products sold in the previous period or in the period other than the one for which the current licence is held. Mr Charles Vella (Central Tobacco, Sub. 67, p. 2) alleged that the delayed basis for payment is being exploited and, as a consequence, State taxes are being avoided. The Commission understands that the alleged action is being investigated.

The *ad valorem* rate varies between the States and Territories, even though a majority of State and Territory Governments agreed to adopt uniform rates of taxation on tobacco products in March 1991 at the meeting of the Ministerial Council on Drug Strategy, and again at the Special Premiers Conference in 1992. The rate currently applying in New South Wales, Victoria, Queensland, and the Australian Capital Territory is 75 per cent, in the Northern Territory it is 85 per cent, while in Western Australia, South Australia and Tasmania it is 100 per cent of the value of sales. Mr Vella (Central Tobacco, Sub. 67, p. 2) submitted that operators were transporting tobacco products across borders in order to take advantage of the tax differential between the States and Territories.

The Commission supports moves towards the adoption of uniform tobacco product tax rates by the States and Territories.

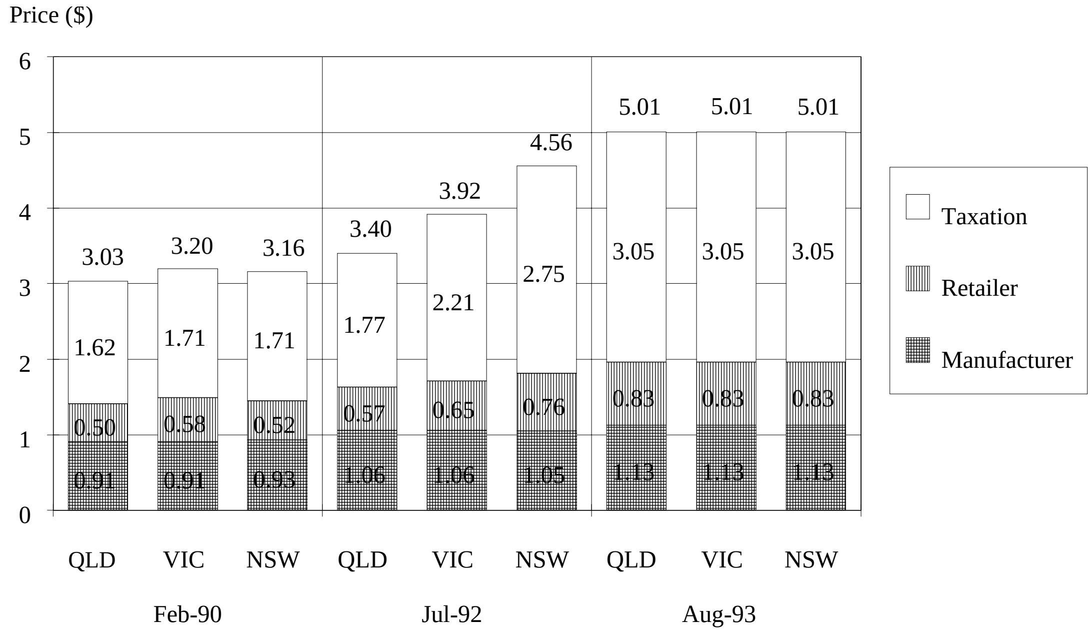
6.2.3 Effects of taxes on prices, revenue and demand

Raising retail prices

Because smokers are generally unresponsive to price changes it is likely that the charges levied on tobacco products are passed on to consumers in the form of higher prices on the finished product. Therefore the incidence, or resting place of the tax burden, is on consumers of cigarettes.

As a result of State and Territory tax increases, and to a lesser extent Commonwealth excise increases, the tax component of the retail price of a packet of cigarettes has risen from 43.7 per cent in 1983 to 61.1 per cent in 1994 (Philip Morris, Sub. 38, p. 28). Figure 6.1 illustrates changes in the components of a packet of thirty cigarettes in Queensland, New South Wales and Victoria between February 1990 and August 1993. The substantial increase in the tax component has led to the higher retail prices for cigarettes, while the value of the shares received by retailers and manufacturers (which includes growers' shares) have remained relatively stable.

Figure 6.1: **Components of price per packet of cigarettes in Queensland, New South Wales and Victoria, 1990–1993**



Sources: Tobacco Institute of Australia 1993, Victorian Smoking and Health Program 1993.

Raising revenue

Table 6.2 shows the total revenue raised from tobacco product taxation by the Commonwealth, State and Territory Governments from 1980–81 to 1992–93. Despite the substantial price increases reported above, and the effects of regulations and public education campaigns reported in the following sections, the table shows an increasing trend, in real terms, in total revenue raised over the period.

Figures 6.2 and 6.3 illustrate Commonwealth, State and Territory revenue collections separately. They show a declining trend, in real terms, in Commonwealth excise receipts and a sharp rise in State and Territory revenue from tobacco licence fees and taxes.

The revenue raised by State and Territory Governments has increased for two reasons. First, there has been a significant increase in the *ad valorem* component of State licence fees and taxes. When Queensland began taxing tobacco products in 1988–89, the other States and Territories had *ad valorem* rates ranging from 30 to 50 per cent. Rates now range from 75 to 100 per cent across the States and Territories.

Table 6.2: **Government revenue from taxes and excise on tobacco products, 1980–1981 to 1992–1993**
($ million in constant 1985 value)

Year	*Cwlth*	*NSW*	*Vic*	*Qld*	*SA*	*WA*	*Tas*	*NT*	*ACT*	*Total*
1980–81	1 053	67	57	na	16	15	3	na	na	1 211
1981–82	984	61	57	na	20	16	7	1	na	1 146
1982–83	971	61	59	na	20	21	6	2	na	1 140
1983–84	950	77	93	na	32	52	11	3	na	1 218
1984–85	949	83	112	na	42	53	15	5	na	1 259
1985–86	961	113	111	na	39	57	19	9	5	1 314
1986–87	923	143	104	na	38	57	17	8	7	1 297
1987–88	923	144	105	na	37	55	22	8	7	1 301
1988–89	903	161	120	39	40	56	21	9	7	1 356
1989–90	925	207	149	92	40	68	24	10	8	1 523
1990–91	870	203	172	93	58	76	23	12	8	1 515
1991–92	879	257	177	105	61	71	23	12	11	1 596
1992–93	898	383	236	178	95	85	27	14	14	1 930

na not available/applicable.

Sources: Australian Bureau of Statistics (ABS), Cat. nos. 5506.0, 5425.0, 5427.0, Commonwealth Budget Papers ATMAC Annual Report 1992-93 Victorian Smoking and Health Program 1993.

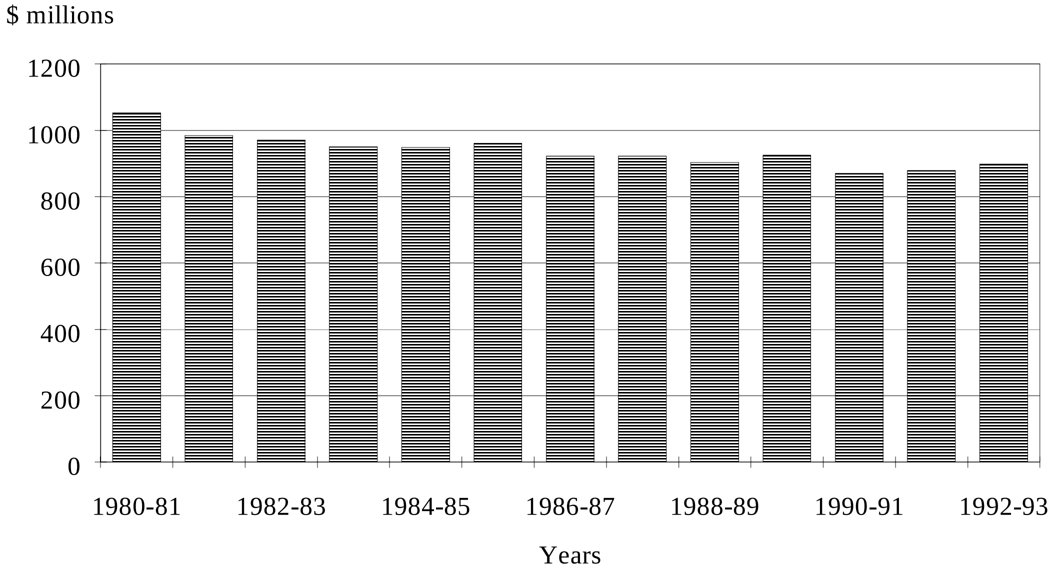
The second reason for the increase in State and Territory revenue is the relationship of their taxes to the Commonwealth excise (though each is applied separately). The Commonwealth excise is imposed on the weight of the manufactured product, and the State and Territory *ad valorem* fee is levied on the value of sales, after the Commonwealth excise is applied. Therefore, the revenue collected by State and Territory Governments increases with each rise in the Commonwealth excise.

Revenue from the taxation of tobacco products now forms a significant part of State and Territory budgets. For example, in New South Wales in 1992–93, receipts from tobacco licence fees and taxes accounted for almost 7 per cent of total tax receipts, and in Queensland, receipts from tobacco taxation are expected to be 10 per cent of total receipts in 1993–94.

Reducing demand

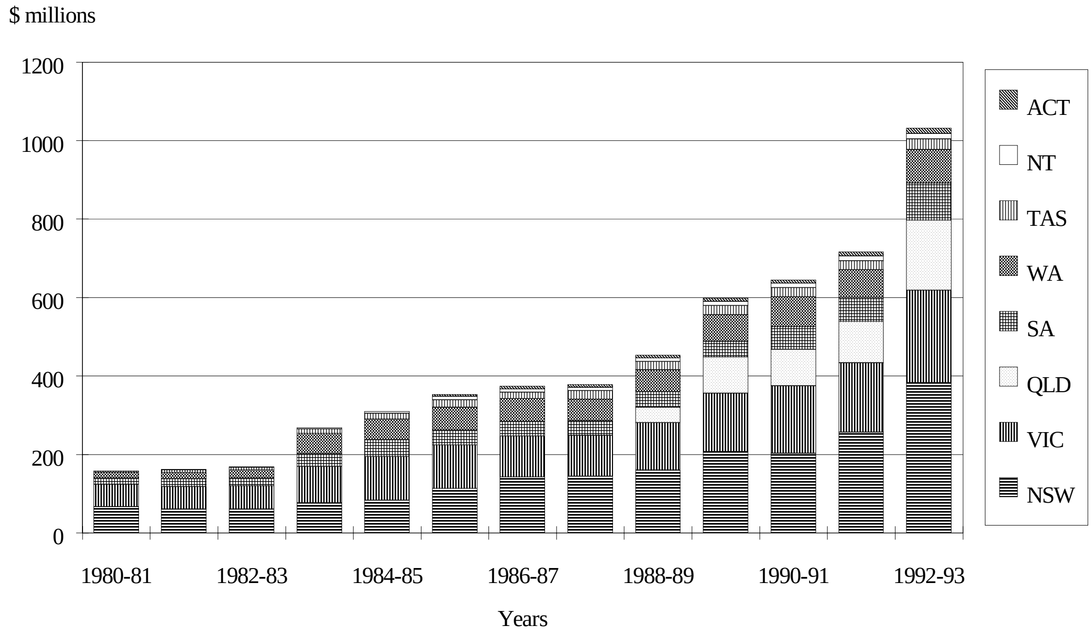
As well as revenue raising, the other reason for high levels of taxation of tobacco products is to reduce consumption. Many studies have provided estimates of the effect increased price has on cigarette consumption. Appendix O reports the findings of some of these studies. In general they find that the demand for tobacco products is not very responsive to price changes over the range of prices which has been observed.

Figure 6.2: **Commonwealth revenue from tobacco excise, 1980–1993**
($ millions in constant 1985 value)



Sources: ABS Cat. no. 5425.0/5427.0, Victorian Smoking and Health Program 1993.

Figure 6.3: **State and Territory revenue from tobacco taxes, 1980–1993**
($ millions in constant 1985 value)



Sources: ABS Cat. nos. 5425.0/5427.0, Victorian Smoking and Health Program 1993.

Recent evidence for Australia (Bewley 1993) suggested that a 1 per cent rise in the price of cigarettes would result in a 0.345 per cent fall in cigarette consumption (Philip Morris, Sub. 38, p. 30). While this is the average outcome across the population, it does not necessarily hold for very large changes in price nor for particular individuals. Several studies have found that the response of a particular individual to price changes depends on age, socio-economic factors (income and/or occupation), gender and addiction/dependence.

The evidence from the United States suggests that for teenagers, for whom cigarettes are less accessible and affordable, price influences both their decision to start smoking and their level of consumption. Some studies report that low income earners are also responsive to price changes.

There is some evidence from Australian studies which suggests that as excise taxes have increased people have reduced their consumption of cigarettes by smoking less or effectively overcoming their addiction/dependence. To the extent that price increases have this effect (excluding the influence of public health warnings and reduced advertising), any further tax-induced price increases can be expected to have a greater effect on consumption in the future. Estimates of the long-run response of individuals to price changes also suggest that the consumption response will be greater in the long run.

Australian data on the consumption of tobacco products suggests that there has been a long-term declining trend in tobacco consumption in terms of weight, but not in terms of the total number of cigarettes consumed.

6.3 Regulations

6.3.1 Reasons for regulations

As discussed earlier, the primary purpose of taxation of tobacco products is to raise revenue, and although taxation is also used as a means of reducing consumption, it cannot be targeted to reduce the consumption of particular groups or smoking in certain locations. In this respect, taxation is a blunt instrument. Consequently, to reduce consumption, regulations are used to reinforce, in a much more targeted way, the general consumption-reducing effects of taxation.

Commonwealth, State and Territory Governments have formally set out their health objectives with regard to smoking (see Chapter B1). Common to all governments are concerns for the level of teenage smoking in Australia and the overall level of tobacco consumption. One objective of regulation is thus to reduce tobacco consumption by smokers. Several measures have been implemented at the Commonwealth, State and Territory level to modify the level of consumption of tobacco products. A brief history is given in Appendix D.

Another objective of regulations is to limit the exposure of non-smokers to tobacco smoke. Smokers impose health costs on themselves and on the wider community through their consumption of tobacco products. The adverse health effects imposed on non-smokers from passive smoking are external costs which are not paid for by smokers (see Chapters B2 and B3).

To reduce the costs faced by non-smokers, and to limit their exposure to tobacco smoke, regulations place some restrictions on the places where smoking can take place.

6.3.2 Regulatory measures

The following provides a discussion of the health and public safety regulations, as they relate to tobacco consumption, which currently operate in Australia. Some measures are designed to regulate the conditions under which smoking takes place, others are designed to reduce the level of consumption or modify the consumption of tobacco consumers for health reasons.

Regulatory measures include:

- prohibitions on smoking in certain locations;
- segregation of smokers from non-smokers;
- prohibitions on the sale of tobacco to minors;
- regulation of advertising; and
- limits on tar, nicotine and carbon monoxide content.

Prohibitions on smoking in certain locations

Bans on smoking were first introduced in Australia in places where there was substantial risk of fire or explosion, such as in theatres and petrol stations, or where the external costs of passive smoking are relatively high, such as in hospitals. These were followed up with bans on smoking on public transport.

Recent actions by the Commonwealth Government have included total bans on smoking in Commonwealth Government offices (1988), total bans on domestic airline flights (1987), total bans on smoking on the domestic leg of all international airline flights (1990) and total bans on smoking within Commonwealth owned/controlled airport terminals (1992).

State and Territory Governments have also reacted to the need to prohibit smoking in certain locations. Bans on smoking in State and Territory

Government offices were introduced recently. Other bans operating in various States and Territories include bans on smoking on public transport and urban rail networks, and in taxis, hire cars and long distance coaches and buses. South Australia has also introduced smoke-free areas to sporting venues which receive sponsorship from Foundation South Australia.

Currently, the Australian Capital Territory Government is looking to prohibit smoking in a wide range of public venues including child care centres, medical facilities, shopping centres, and premises which provide both food and alcohol. A recent report (Tisdall and Smith 1994) indicates that in the United States there is now a proposal to prohibit smoking in all workplaces, including offices, restaurants, cafes and bars.

Segregation of smokers from non-smokers

Many eating places (particularly restaurants) now designate separate areas for smokers and non-smokers. This is an attempt to reduce the discomfort of non-smokers and to reduce the risks non-smokers face from passive smoking. For example, in South Australia, the number of smoke-free dining areas has increased from 40 in 1988 to 400 in 1993 (Commonwealth Department of Human Services and Health, Sub. 51, p. 10).

Prohibitions on the sale of tobacco to minors

Bans on the sale of tobacco products to minors have existed for over 80 years in Australia. Recent changes have been made to the definition of a ‘minor’ which has traditionally referred to a person under the age of 16 years. By the end of the year, in all States except Tasmania, the legal age for the purchase of tobacco products will be 18 years. This move comes as part of a commitment by State Governments to discourage young people from starting to smoke and has the support of the tobacco companies, retailers and anti-smoking campaigners.

In Western Australia, for example, this prohibition forms part of the *Tobacco Control Act 1990*. The Act also increases the penalty for sale to minors from $4 to $1000. In Queensland, proposed legislation will make it an offence for anyone other than a parent to supply cigarettes to individuals under 18 years of age and will also introduce heavier penalties for breaches.

Regulation of advertising

Advertising of tobacco products has been banned on radio and television in Australia since 1976. Although some forms of tobacco advertising still occur, such as billboard and point of sale advertising, and advertising and sponsorship of sporting events, these forms of advertising will soon be prohibited.

The Commonwealth Government's current position on tobacco advertising is governed by the *Tobacco Products (Advertising) Prohibition Act 1992*. The provisions of the Act prohibit advertising in the print media and most other forms of advertising. Although tobacco sponsorship of sporting events and the arts still exists, it will be prohibited under the Act from 1 December 1995.

The Commonwealth Government's approach to advertising and sponsorship has also been adopted by some State Governments.

The Western Australian legislation is representative of the stand that State Governments have taken against cigarette promotion.

The Western Australian legislation prohibits tobacco advertising and sponsorship of sports and the arts (subject to certain exemptions for events deemed to be of national or international significance, such as the Australian Grand Prix). To compensate for the loss of tobacco sponsorship, the legislation allows for funds to be made available from the Health Promotion Fund (established under the Act and funded by tobacco taxation) on the condition that health messages are promoted.

The legislation has also introduced bans on tobacco advertising in other public arenas. These bans will be phased in and include bans on: the display of advertising in public places, cinemas and other places of entertainment; the distribution of leaflets, cinema dockets, lighters and other objects displaying cigarette advertising; and the sale of videos and other objects which contain cigarette advertising. Advertising on billboards and in other public places and print media produced in Western Australia will also eventually be prohibited. As has occurred in Victoria and South Australia, cigarette advertisements on billboards will be replaced by health advertising in Western Australia. Restrictions on outdoor advertising of tobacco products by retailers will also come into force.

Limits on tar, nicotine and carbon monoxide content

Under the provisions of the *Trade Practices (Consumer Product Information Standards) (Tobacco) Act 1994*, from 1 January 1995 the average amounts of tar, nicotine and carbon monoxide produced by a cigarette will be required not to exceed 16 milligrams, 1.5 milligrams and 20 milligrams respectively.

Prior to this regulation coming into force, the tobacco industry will continue to operate under a voluntary code which sets upper limits for tar, nicotine and carbon monoxide content for Australian-made cigarettes. This code was developed with the agreement of the then Commonwealth Department of Health and is monitored by the Australian Government Analytical Laboratory.

6.4 Provision of information

Governments have a variety of ways of providing information to the general public on the potential health risks associated with tobacco consumption. In addition to information directed at educating those who already smoke, there are programs which provide information to non-smokers. Some of the main measures used are:

- packaging and labelling requirements;
- publicly funded anti-smoking campaigns; and
- education programs.

Packaging and labelling requirements

The labelling of cigarette packets to warn of the adverse health effects of smoking has been enforced since 1973. The most recent development in labelling requirements was announced in July 1993 by the Ministerial Council on Drug Strategy (MCDS). The MCDS recognised:

> ... the need for clearer, stronger warnings to discourage people from smoking and especially to stop children taking it up. (Richardson 1993)

The measures advocated by the MCDS were based on a 1992 report by the Centre for Behavioural Research in Cancer (a division of the Anti-Cancer Council of Victoria).

The following labelling requirements for a retail package of tobacco[2] will take effect from 1 January 1995[3] under the provisions of the *Trade Practices (Consumer Product Information Standards) (Tobacco) Act 1994*:

- the front of a package is to display a health warning message which will be rotated between ‘smoking causes lung cancer’; ‘smoking causes heart disease’; ‘smoking kills’; ‘smoking is addictive’; and ‘smoking when pregnant harms your baby’;
- a health warning message and an explanatory message are to cover one third of the back of a package; and
- a package must also display information on tar, nicotine and carbon monoxide levels and provide a description of these substances on one entire side of the package.

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[2] Refers to flip-top packs, soft packs, pouches and irregular packages (with only one flat surface) of tobacco, which includes cigarettes and cigars (other than cigars sold singly) which are manufactured (other than for export) or imported into Australia.

[3] From 1 April 1994 to 31 December 1994, tobacco product labels are to be in accordance with the terms of the Schedule to the Health (Tobacco Warning Labels) Regulations 1986 of Victoria (which have applied since 31 August 1993).

All warnings are to be printed in black on a white background. Such messages may be displayed on an adhesive label affixed to a package — however, this will cease to apply to flip-top and soft packs after 30 June 1996.

Concern has been expressed about the impact the regulations will have on particular brands, namely Benson & Hedges (Wills) and Dunhill (Rothmans) which have distinctive gold packs. Wills said that:

> ... proposals to introduce mandatory black-on-white health warnings to cigarette packs will introduce new threats to industry profitability and employment ... some existing premium brands would be affected by adverse packaging designs and these design changes would not be evenly shared between the cigarette manufacturers ... pack design regulations ... take no account of the registration of trade marks and pack designs, intellectual properties and rights advocated by GATT. (Sub. 31, p. 27)

Similarly, Rothmans said that:

> ... requirements for new labelling are virtually impracticable to incorporate on existing packages without destruction of the trademark property in the pack livery. (Sub. 39, p. 33)

The Western Australian and Australian Capital Territory Governments have introduced legislation to complement the Commonwealth legislation. These regulations will take effect at the same time as the Commonwealth legislation.

Western Australian legislation also requires that cigarette vending machines (which are restricted to licensed liquor premises and staff amenity areas) be clearly labelled with health warnings.

Victoria has adopted the European Community standard for health warnings on cigarette packets and these will be required from July 1994. They involve warnings of a designated size for the front, back and underside of cigarette packets. However, because the standards differ from those required under Commonwealth legislation, the Commission understands that the Commonwealth legislation will override the Victorian legislation.

Publicly funded anti-smoking campaigns

Anti-smoking campaigns are an avenue through which governments publicise the health implications of tobacco consumption. The most well known of these are the ‘Quit for Life’ campaigns. Central to these campaigns is the use of mass media messages to encourage smokers to be aware of the risks of smoking, to consider their options, and to attempt to quit smoking. Materials conveying such messages can also be obtained through telephone hotlines, at shopping centres and at other outlets. These campaigns also helped develop school curricular materials and the material distributed to doctors and community health centres.

In the late 1980s, ‘Quit for Life’ also developed programs to target adolescents and contributed to the sponsorship of anti-smoking rock concerts.

Education programs

Education on the effects of smoking is targeted at both potential smokers, particularly adolescents, and current smokers.

The purpose of targeting school children with information on the potential health effects of tobacco consumption is to make them better informed before they become addicted/dependent smokers.

In line with this objective, teaching materials are made available to schools by various Commonwealth, State and Territory programs. These include the Drug Offensive and the National Heart Foundation.

The Western Australian Government conducts several education campaigns designed to educate a particular audience on the risks of smoking. These programs include Adolescent Drug Education, Young Women and Smoking, Aboriginal Drug Education and the Quit campaign.

Funding of anti-smoking campaigns

The Governments of Western Australia, South Australia and Victoria earmark some tobacco taxation revenue to their respective health promotion foundations. In Western Australia, 7 per cent or $12 million of annual tobacco taxation revenue (whichever is the lesser) is a guaranteed contribution to the Western Australian Health Promotion Fund.

In April 1993, the South Australian Government raised the percentage of tobacco taxation to be used for health promotion purposes from 5 to 5.5 per cent of revenue from tobacco sales. These funds are used for the programs and campaigns of Foundation South Australia, also known as the Sports Promotion, Cultural, and Health Advancement Trust. The functions of this Trust are to promote and advance sports, culture, good health and healthy practices and the prevention and early detection of illness and disease related to tobacco consumption.

The Victorian Government allocates some of the revenue raised from tobacco taxes to the Victorian Health Promotion Foundation (VHPF). Since 1988, the VHPF has received 5 per cent of the value of wholesale tobacco sales each year. In 1992–93, the VHPF received $25 million.

The Health Promotion Foundation of the Australian Capital Territory (ACTHPF) operates under a different arrangement to other State and Territory health promotion funds. A fixed amount of $900 000 is allocated annually to the ACTHPF for any campaigns the organisation undertakes, not only anti-smoking programs. In 1993, the ACTHPF received an extra $200 000 from general Australian Capital Territory revenue to be used specifically for anti-smoking campaigns.

The Queensland, Tasmanian and New South Wales Governments fund their health awareness and promotion programs from consolidated revenues.

6.5 Summary

Taxes, regulations, and the public provision of information affect the domestic consumption of tobacco products. All three instruments are used for the purpose of reducing the level of tobacco product consumption in Australia. Taxes also serve the purpose of raising revenue.

High levels of taxation of tobacco products are an effective means of raising revenue. Studies of the demand for tobacco products show that as the price of tobacco products increases, consumption falls less than proportionately to the price increase. It is this characteristic of demand which has ensured that despite a succession of large tax-induced price rises, government revenue from the taxation of tobacco products has continued to increase. Whether this will continue to be so in the future will depend on the balance between high prices deterring young people and other low income earners from starting to smoke, and the level of addiction/dependence among committed smokers.

For the same reason that high taxes have been an effective revenue raising device, they have not been very effective in reducing the level of consumption. For this objective, governments use a variety of regulations and education campaigns to supplement the effects of high taxes on consumption.

Regulations which prohibit the sale of tobacco products to minors and prohibitions on promotion and advertising can reinforce the effect high prices have on teenagers. Other regulations protect non-smokers from the discomfort and potential detrimental health effects of passive smoking.

As a complement to both high taxes and regulations, governments fund extensive campaigns to inform the young and other non-committed smokers of the long-term adverse health effects of smoking. Information is also provided to addicted/dependent smokers on ways to break the habit.

7 TOBACCO GROWING INDUSTRY ADJUSTMENT

The Tobacco Industry Stabilisation Plans, first introduced in 1965, have had a significant influence on the structure of the Australian tobacco growing industry, and on the nature of adjustment which has occurred over time. They have also indirectly acted as an impediment to adjustment.

The TISP and LLCS have not provided an opportunity for growers to compete with each other on the basis of quality or price and have suppressed competition between tobacco product manufacturers.

Consumption of tobacco leaf declined at a greater rate than was anticipated. However, the Australian Tobacco Marketing Advisory Committee's slow response to an obviously declining market, and its management of adjustment to lower levels of manufacturers' stockholdings of leaf, have exacerbated the industry's adjustment problems. So too did the provision by the Queensland government of $10 million to assist growers to adjust to declining demand – the outcome was the opposite to that which was intended.

The TISP and LLCS have been primarily responsible for the development of an inefficient industry structure in which there are too many growers, and too much capacity, to efficiently satisfy the demand for domestic leaf. There is now a backlog of adjustment which requires urgent attention. The need for such adjustment is substantially independent of the termination of the current marketing arrangements.

Impediments to adjustment are the small size of tobacco farms, regulation relating to subdivision, grower access to finance, lower returns from alternative activities, age and ethnic background of growers, and uncertainty about the prospect of further assistance to remain in, or leave, tobacco production.

The two major tobacco growing districts are already faced with a substantial decline in their regional incomes. When rationalisation inevitably occurs, there is likely to be considerable strain placed on existing social services in these regions.

In the Mareeba region (with the exception of some parts of Dimbulah) and the Myrtleford region, the climate, soil types and the quality of water available are suitable for the production of a wide range of crops. Although none of these crops will directly replace tobacco production and maintain growers' income levels, they have some potential to be grown and marketed profitably.

7.1 History of industry adjustment

The Australian tobacco industry, in common with all agricultural industries, has a long history of adjustment. The nature of adjustment that has taken place in the tobacco growing industry since the early 1970s has largely been structural adjustment occurring within the industry in response to declining real prices and increasing input costs. At the aggregate level it can be seen that very little adjustment has taken place in terms of reducing the overall capacity of the industry. For example, much of the adjustment that has occurred since the early 1970s has been characterised by a continuous reduction in the number of growers while the average size of farms and selling entitlements have increased.

Table 7.1: **Industry structure**

	Area under tobacco (ha)	*Production ('000 kg green)*	*Yield (kg/ha green)*	*Average price (1985 cents/kg)*	*Marketing quota leaf offered for sale ('000 kg green)*	*Total value of marketing quota leaf (1985$'000)*	*Quota holders (No.)*
				1970			
Total Qld	5 366	8 958	1 669	931	8 697	44 209	822
Nthn Qld	4 111	7 266	1 768	907	6 915	34 984	na
Sthn Qld	1 255	1 692	1 348	875	1 782	9 221	na
Vic	4 309	6 866	1 593	879	5 739	44 888	365
NSW	1 117	1 389	1 243	793	1 372	7 610	116
AUSTRALIA	**10 792**	**17 213**	**1 595**	**894**	**15 808**	**96 707**	**1 303**
				1980			
Total Qld	3 268	6 866	2 101	637	7 890	50 295	724
Nthn Qld	2 518	5 889	2 339	650	6 339	41 189	557
Sthn Qld	750	977	1 303	576	1 657	9 548	167
Vic	3 394	7 000	2 062	667	5 517	36 733	352
NSW	692	1 182	1 708	608	1 332	8 097	100
AUSTRALIA	**7 354**	**15 048**	**2 046**	**596**	**14 739**	**95 125**	**1176**
				1993			
Total Qld	2 494	7 625	3 057	406	7 322	29 711	377
Nthn Qld	2 378	7 326	3 081	406	7 104	28 814	na
Sthn Qld	116	299	2 577	410	219	896	na
Vic	1 800	4 506	2 503	387	4 636	17 941	206
NSW	225	541	2 406	350	525	1 839	25
AUSTRALIA	**4 519**	**12 672**	**2 804**	**396**	**12 483**	**49 491**	**608**

na not available

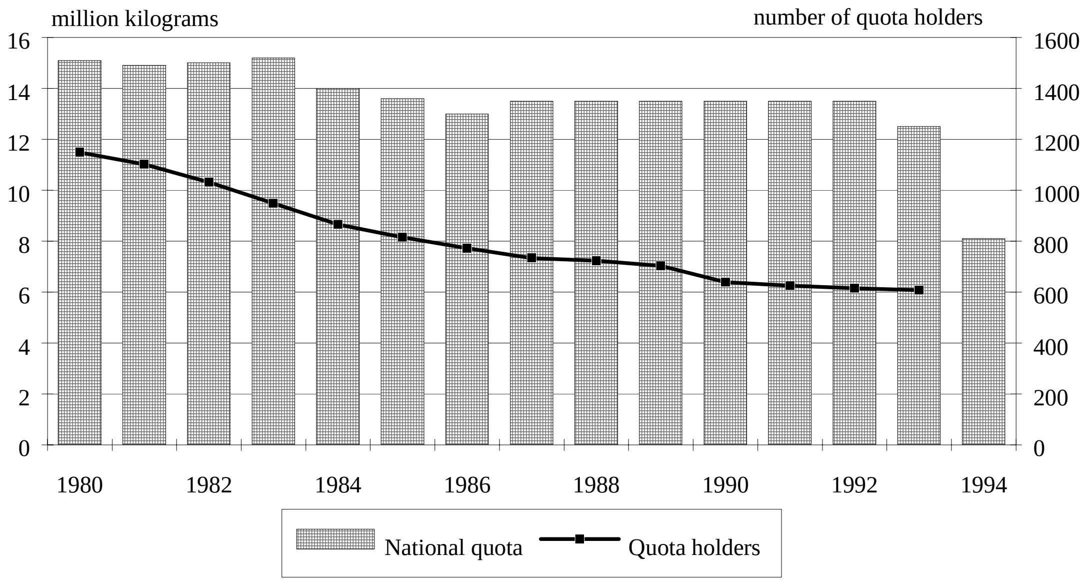
Sources: ATMAC 1983 and 1994.

Against this background, the total quantity of marketing quota leaf offered for sale has gradually declined, from 15.8 million kilograms in 1970 to 12.5 million kilograms in 1993 (see Table 7.1), and the downward trend in demand for tobacco leaf has continued. Increased yields have been largely offset by the transfer of land out of tobacco production.

In Table 7.1, it can be seen that since 1980 the number of quota holders has almost halved while the area of land under tobacco production has fallen by a third. This implies an increase in the average size of tobacco farms suggesting that farm amalgamation has been used as an adjustment strategy in response to falling real prices and a declining market. However, the adjustment that has taken place has not brought about a reduction in the total production capacity of the industry. The production capacity is determined by the amount of basic quota a grower holds, which currently is almost double growers' selling entitlements. For example, there are enough kilns available on farms to cure all of growers' basic quota quantity.

Figure 7.1: **Changes in the national quota and the number of quota holders, 1980 to 1994**

(millions of kilograms and number of quota holders)



Note: an estimate for the total number of quota holders in 1994 is currently not available.

Sources: ATMAC 1994 and State Tobacco Leaf Marketing Boards, personal communication.

The substantial fall in the number of quota holders (see Table 7.1 and Figure 7.1) over the past two decades can be explained by grower retirements, switches to alternative activities, and smaller numbers of new growers coming into the industry. Barson, Evans, Fordham, Walcott and White (1993) estimated that the average age of growers in Mareeba-Dimbulah was 53 and, according to the Savoy Club Myrtleford Welfare Committee (Sub. 13, p. 1), many growers in the Myrtleford region are aged in their fifties and sixties. As the traditional inter-generational shift of farm ownership from parents to their offspring has dwindled, there are fewer new, young growers entering the industry.

The continual transfer of land out of tobacco production since 1980 has been stimulated in part by increases in the productivity of tobacco production. Between 1980 and 1993, the area of land under tobacco production fell by 39 per cent, from 7354 hectares to 4519 hectares (see Table 7.1)[1].

Prior to the 1984 Stabilisation Plan, the adjustment pressures exerted on the industry mainly arose from factors such as declining leaf demand, falling real prices and yield improvements. Domestic growers were protected from import competition by the TISP and LLCS, which provided a guaranteed market for a fixed quantity of leaf at predetermined prices. As a result, there was little incentive to become internationally competitive.

Since 1984, intentions to improve the price competitiveness of the Australian industry have been incorporated into the TISP, and a greater focus has been placed on industry restructuring and adjustment. For example: an international pricing formula aimed at reducing the margin between Australian and world prices has been devised; regulations surrounding the transfer and leasing of tobacco leaf were reduced, and finally abolished in the 1989 TISP; and the target for manufacturers' minimum stockholdings has been progressively reduced over the duration of the final two Stabilisation Plans (see Chapter 4). Despite these changes no mechanism was put in place to ensure the desired adjustment was taking place.

Since 1988, when the termination of the TISP and LLCS was first announced, certain developments have made the adjustment process more difficult than it would otherwise have been. Exchange rate changes relative to major international producers, sharp declines in consumption of tobacco leaf, and reductions in manufacturers' formal stockholding requirements have compounded the adjustment problem.

7.2 Factors influencing adjustment

Changes to the structure of the tobacco growing industry in Australia have been stimulated by various external and internal pressures on the industry. While there are many factors which lead to adjustment (see Stayner and Gow 1992 and

1 In Dimbulah there are some areas of previous tobacco land which as yet have not been converted to an alternative activity and are currently lying fallow.

Musgrave 1990), at any time some will have a greater impact than others. In the immediate future the greatest pressure will come from adjusting to lower levels of demand for tobacco leaf and to increasing competition from imported leaf.

In this section, emphasis is on the major external factors which are influencing adjustment in the tobacco growing industry.

7.2.1 Demand for leaf

Pressure for adjustment in the growing industry will continue to arise from changes in demand for domestic tobacco leaf. The demand for tobacco leaf is determined by several factors:

- demand for cigarettes;
- manufacturers' leaf stockholdings;
- cigarette production technology; and
- price of imported leaf.

These factors are discussed in the following section.

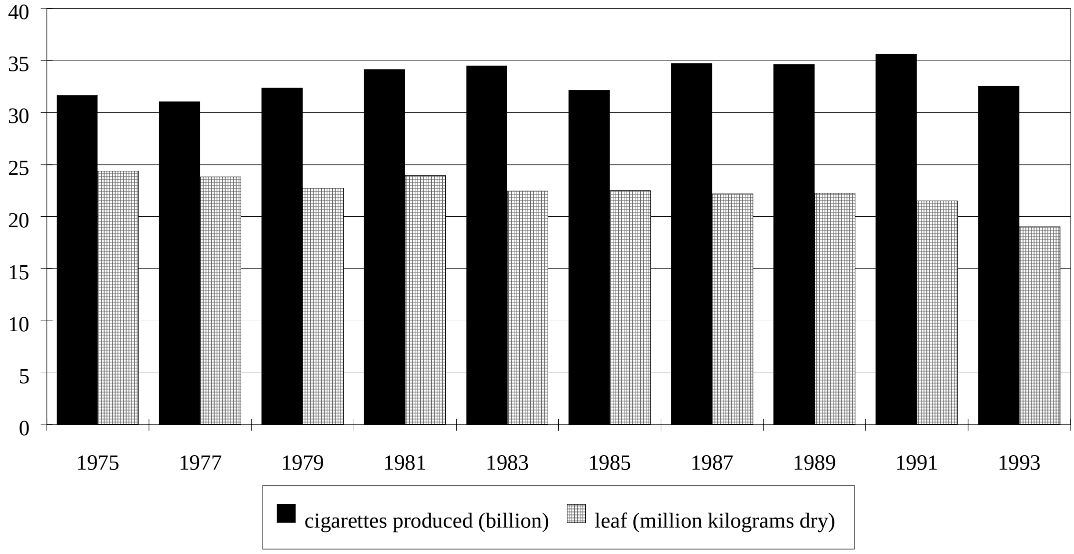
Demand for cigarettes

As outlined in Chapter 3 (Section 3.8), the demand for cigarettes has increased by 17 per cent over the decade to 1990. Since then demand has declined. This trend is reflected in the number of cigarettes produced (see Figure 7.2). As a percentage of the total adult population, the number of smokers has fallen from 35 per cent in the mid-1970s to 26 per cent in 1990 (Victorian Smoking and Health Program 1993).

The fall in the proportion of the adult population consuming cigarettes has been a response by consumers (and potential consumers) to three main factors. First, the availability of information on the health implications of tobacco consumption has increased. Product labelling regulations and government sponsored anti-smoking campaigns in the education system and the media generally have increased awareness of the health risks associated with smoking.

Second, an array of government regulations, including advertising restrictions, prohibitions on the sale of cigarettes to minors and on smoking in certain locations, have been implemented, primarily with the objective of protecting the health of non-smokers. During the 1980s there was a marked increase in such health and public safety regulations.

Figure 7.2: **Annual consumption of tobacco and production of cigarettes, Australia, 1975 to 1993**
(billions of sticks and million kilograms)



Source: ATMAC 1994 and various issues.

Finally, government revenue from tobacco excise duties and State licensing fees and taxes at wholesale and retail levels has increased by 65 per cent in real terms since 1982. From Figure 7.3 it can be seen that while State licence fees and taxes have increased in real terms since 1975, Commonwealth revenue from excise duties has fallen[2]. Appendix O discusses the extent to which price increases affect the demand for tobacco products.

Cigarette production technology

Changes in the demand for cigarettes since the mid-1970s have indicated that a lower proportion of the adult population are smoking, but those who do smoke, are consuming more cigarettes. The result has been a fairly static overall level of cigarette consumption (in terms of sticks). However, due to changes in cigarette production technology, the demand for cigarettes does not reflect the level of demand for tobacco leaf.

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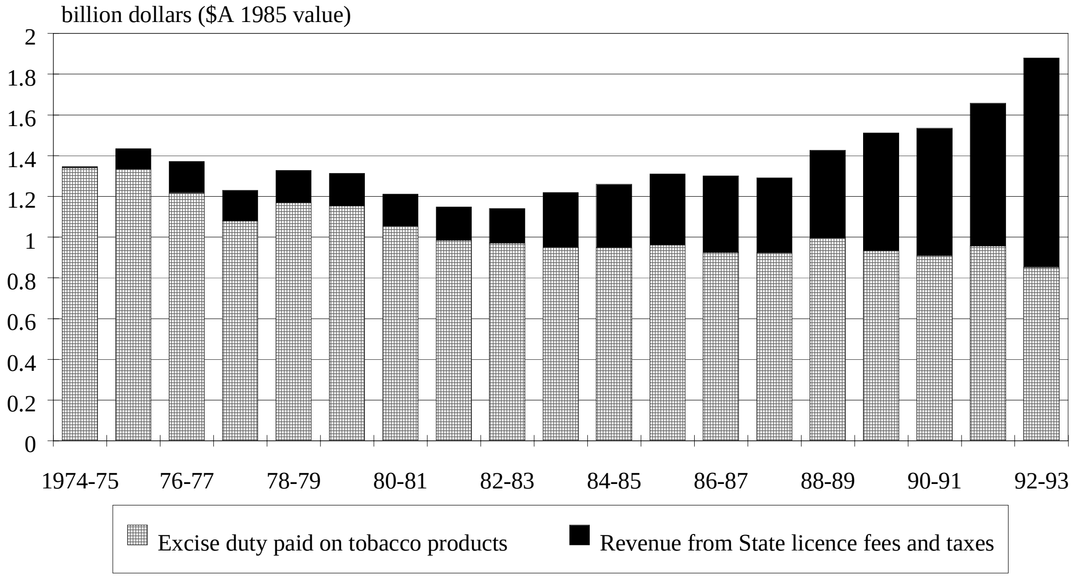
2 The fall in revenue from excise duties may be attributed to the weight-based excise system and the trend towards the production of lighter cigarettes which has taken place over this period.

Figure 7.3: **Revenue from excise duties and State licence fees and taxes, 1974–75 to 1992–93**
($ billion in constant 1985 dollars)



Source: Commission estimates based on ATMAC (1994 and various issues) data.

Over the period since 1975, the total yearly consumption of tobacco in terms of weight has decreased from 24.4 million kilograms in 1975 to 19 million kilograms in 1992, a reduction of 22 per cent (see Figure 7.2). The fall in the consumption of tobacco has stemmed from changes in cigarette production technology, which has permitted an increasing number of cigarettes to be made per kilogram of tobacco leaf. Manufacturers have stated that the weight-based excise system used in Australia has encouraged the use of less tobacco in the production of cigarettes, in that by producing a lighter weight cigarette their excise liability can be reduced. Other factors which have influenced the weight of cigarettes include: tar and nicotine labelling requirements which will record lower levels if less tobacco is used in the cigarette; and consumer responses such as preferences for lighter cigarettes if they cannot give up smoking totally.

The trend towards lower weight cigarettes (which has taken place since at least 1969) has brought about a fall in the demand for tobacco leaf quite separate to changes in the demand for the final product. It is the demand for leaf which is of primary importance to the tobacco growers.

Manufacturers' leaf stockholdings

Since 1992, growers' selling entitlements have declined from 13.5 to 8.1 million kilograms. This reduction has reflected adjustments to manufacturers' stockholdings which were brought about by two main factors. First, over the period of the final TISP, manufacturers' stockholdings were required to be reduced from the equivalent of 13 months' usage to 10 months. Second, as consumption of leaf has fallen (due to cigarette production techniques requiring less tobacco), the amount of leaf required to fill the formal stockholding level has also fallen, hence less leaf is needed to meet the 10 months' usage requirement. This has compounded the impact of the reduction in stockholding levels, and contributed to reduced purchases of leaf by manufacturers in the short term. Appendix G provides a full account of the reasons for the recent reduction in selling entitlements.

Furthermore, growers' selling entitlements were maintained at 13.5 million kilograms from 1987 to 1992 (see Figure 7.1), in the face of clear evidence that the demand for tobacco was on a downward trend (see Figure 7.2 and Chapter 4).

The Commission finds that ATMAC's slow response to an obviously declining demand for tobacco leaf has exacerbated the growing industry's adjustment problems.

Price of imported leaf

After deregulation, the price of imported leaf will be an important factor influencing the demand for Australian leaf. Submissions from the manufacturers indicated that post-1995 they will be looking to source leaf at the most competitive prices. Recently, nominal devaluations in the exchange rates of certain countries (such as Zimbabwe and Malawi) have reduced the competitiveness of Australian leaf prices. If there is a fall in a country's exchange rate, the price competitiveness of exports will improve, while imports will become more expensive giving rise to inflationary pressure within the economy. This pressure will erode the initial benefits (in the form of increased competitiveness) resulting from a lower exchange rate. However, wages in developing nations may not be fully linked to movements in the Consumer Price Index, and as the proportion of imported inputs into tobacco production is likely to be very low, the competitiveness of tobacco leaf exports may not be completely offset by inflationary pressure.

There are certain non-price considerations, such as consistency in flavour of the cigarettes which currently use Australian leaf and its ready availability, which will influence manufacturers' decisions to purchase Australian leaf. For example, Wills commented that:

> The company believes it appropriate to purchase local leaf at a price that is based upon its estimate of the cost of importing similar leaf from overseas including duty, if applied. As with any of its purchases, considerations of security of supply, quality, consumer/supplier relationship and exchange rates will play an important part in determining the supplier and the price the company is prepared to pay. (Sub. 31, p. 10)

Rothmans stated:

> Rothmans believes that there are practical advantages to buying suitable quality leaf, at a small premium to world prices. At the same time the company is in no position to guarantee continuing to buy leaf from each of the four growing regions in Australia which are currently providing tobacco leaf to manufacturers. (Sub. 39, p. 7)

The extent to which non-price factors will offset the lower price of imported tobacco leaf is uncertain.

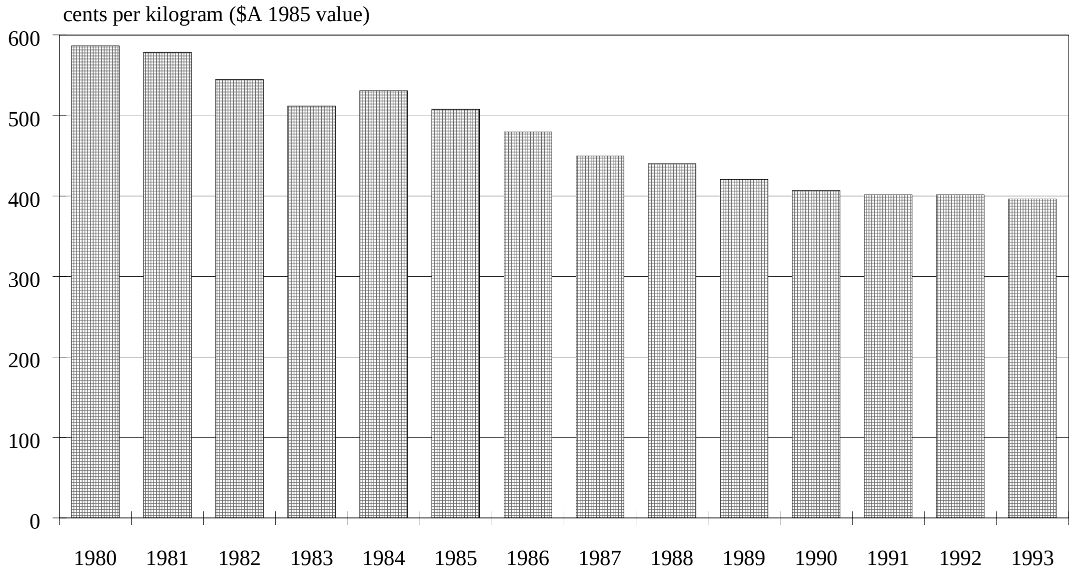
7.2.2 Declining real price of tobacco

In addition to the declining demand for tobacco leaf, Australian tobacco growers have been faced with the pressure of falling real prices, as have most other agricultural industries (see Table 7.1 and Figure 7.4). The impact of a declining market and falling real prices on the income of all tobacco growers has served both as a pressure for adjustment and, in more recent years, an obstruction to it.

From Figure 7.4, it can be seen that under the current TISP (since 1989), the fall in the real price of tobacco has not been as great as in earlier periods. For example, the annual average rates of decline in the real price of tobacco leaf under the 1979–1983 and 1984–1988 TISPs were 4.1 per cent and 5 per cent respectively, compared with an annual average rate of decline of 1.3 per cent under the first five years of the current Plan.

The reduction in growers' real returns has gradually increased their awareness of the need to adjust, but at the same time has diminished their capacity, or ability, to respond by diversifying into alternative crops, particularly given the 40 per cent decline in selling entitlement. Over time growers have been able to offset the pressure of lower returns to a certain extent by various adjustment strategies such as increases in farm size and quota holdings, reductions in household expenditure and, to a certain extent, the uptake of new technologies, such as new kiln drying methods. However, combined with the recent reductions in selling entitlements, it is becoming increasingly evident that the departure of more growers from the industry is inevitable.

Figure 7.4: **Real price of Australian tobacco leaf[a], 1980–1993**
(cents per kilogram in constant 1985 dollars)



a Australian marketing quota leaf average realised price.
Source: Commission estimates based on ATMAC (1994) data.

7.2.3 Marketing arrangements

The TISP and LLCS have provided the industry with a very regimented and structured marketing system, in which both leaf grade prices and the total quantity of leaf to be supplied are determined prior to sale. The high level of assistance received by the industry through these marketing arrangements has sheltered growers from many of the adjustment pressures to which other agricultural industries are exposed, in particular international competition. At the same time, the marketing arrangements have tempered the natural adjustment process and distorted market signals received by growers and tobacco product manufacturers. Given that the LLCS and the TISP will expire in 1995, a primary source of future adjustment pressure will arise from the removal of assistance received by growers under these plans.

It is the Commission's view that, ***the TISP and LLCS have not provided an opportunity for growers to compete with each other on the basis of quality or price and have suppressed competition between tobacco product manufacturers.***

In response to declining demand for tobacco leaf, national marketing quota was reduced in 1993 and 1994 (see Figure 7.1). These reductions in national quota were distributed as pro-rata reductions in selling entitlements of the States and growers. Consequently, all growers have had to accept a reduced selling entitlement, and the pressure of adjustment arising from contracting demand has been distributed evenly across the industry. At first sight, this may seem to be an equitable outcome, but in practice it has delayed the departure of the industry's least efficient growers producing the lowest quality tobacco, and has increased the risk of the more efficient producers becoming non-viable.

The 40 per cent reduction in selling entitlements since 1992 has created problems for all growers in terms of their inability to utilise the capacity available on their farms to grow and cure tobacco leaf. For many small scale growers the decline in their selling entitlement has meant that their production is below viable levels. In addition, growers who have made significant recent investments in equipment and quota are experiencing pressure as reductions in selling entitlements impact on their ability to meet financial obligations, or provide the capital necessary for the establishment of complementary or supplementary alternative crops.

While the reduction in selling entitlements could be offset by purchasing more quota, several factors have mitigated against this course of action. For example, financial intermediaries have indicated they are not willing to lend for the purchase of quota, as the quota will be worthless in 1995 (if not already), and many growers are reluctant to sell in the hope that there will be financial assistance to retire quota.

In a joint submission by the Tobacco Leaf Marketing Board of Victoria (TLMBV) and Tobacco Growers of Victoria (TGV), the comment was made:

> It could be said that given declining demand the quota system has become a millstone around the neck of the industry, an adjustment bottleneck. Of concern to the industry is that it will haemorrhage in such a way that all growers will be at risk. (Sub. 34, p. 8)

Other adverse effects of the TISP on the growing industry were identified by Philip Morris :

> The current marketing system grade and price schedule has not in effect, rewarded those areas that reflect manufacturers' demands, resulting in negative outcomes, for example:
>
> - Few price levels have resulted in “insensitivity” (price gaps too wide).
> - Emphasis on colour has been misleading.
> - Grade/price structure has rewarded production of tonnes/hectare, not quality.
> - There has been no recognition of the importance of maturity/texture/oiliness of leaf.
> - Grower reluctance to accept change has been reinforced by TISP/LLCS.

- Research effort (especially North Queensland) has focussed on exploiting the grade/price schedule, with little attempt to reflect buyer's changing quality requirements. (Sub. 38, p. 21)

With regard to the Grade and Minimum Price Schedule, changes during the final TISP have aimed to improve the quality of Australian leaf by increasing the price differential between high and low grade tobacco and eliminating some of the lower grades. However, Wills observed that while there has been a slight improvement in leaf quality:

> ... rather than this being achieved by increased production of top quality tobacco, it has been brought about by a reduction in the production of lower quality grades. (Sub. 31, p. 10)

Philip Morris also questioned the effectiveness of the current arrangements:

> Tariff protection and industry assistance has meant grower focus has been on quantity and not quality to the overall detriment of returns to the industry, and ultimately to the detriment of the economy. (Sub. 38, p. 18)

Most importantly, the TISP has left growers ill-prepared to cope with a more open market environment. With the removal of the TISP and LLCS, increasing pressure will be placed on growers to improve the quality of their tobacco and their price competitiveness. It is for individual growers to decide whether they can survive in a non-regulated market environment in which it will be their responsibility to make their own production and marketing decisions. Many who are viable under current industry circumstances may not be viable under the pressures of an internationally competitive deregulated environment.

The TISP and LLCS have been primarily responsible for the development of an inefficient industry structure in which there are too many growers, and too much capacity, to efficiently satisfy the demand for domestic leaf. A backlog of adjustment now requires urgent attention. The need for such adjustment is substantially independent of the termination of the current marketing arrangements.

7.3 Impediments to adjustment

Adjustment is a continual process in response to changing market conditions. It involves the constant movement of resources within an industry and also between industries, that is, through changes in the use and allocation of land, labour and capital within the farm unit (including both the farm business and the farm family) and between the farm unit and other investment opportunities. The success of the adjustment process, in terms of minimising social disruption and using resources more efficiently, will largely be determined by the level of adjustment pressures, mobility of resources and available alternative opportunities (including retirement).

Since the commencement of the final TISP, adjustment in the tobacco industry has seen a significant reduction in the number of quota holders. Despite this response to changing industry circumstances, the setting of the marketing quota and manufacturers' stockholding decisions have not reflected the extent of adjustment required. For example, between 1987 and 1991 the number of quota holders fell by 17 per cent, average yearly consumption of tobacco fell from 29.2 million kilograms in 1986 to 26.5 million kilograms in 1991, a 9 per cent reduction (see Table 7.2), yet under the TISP during this period the marketing quota remained at 13.5 million kilograms. Although modifications to the 1989 TISP were made, as an attempt to facilitate adjustment to a deregulated environment, no measures were taken to ensure that adjustment continued at the required pace.

The fact that the pace of adjustment in the tobacco growing industry has been slow may indicate the level of adjustment required was too great and sudden and/or that there was diminishing capacity or willingness to respond positively to adjustment pressures. Certain factors will have contributed to the severity of the adjustment pressure experienced by different individuals, for example, climatic conditions and poor farm management practices.

Various factors affecting the adaptability of the tobacco industry are discussed in this section.

7.3.1 Changing land use

The continual transfer of land out of tobacco production since 1977 (see Figure 7.5) indicates that opportunities to switch tobacco land to alternative uses are available, at least in certain locations. While most tobacco land may be suitable for alternative activities, several factors will influence the ease of transfer and the viability of alternative crops planted on what were previously tobacco farms. The availability of finance, farm size, water availability and markets and returns from alternatives are particularly important in the current situation where considerable adjustment out of the industry is required.

Availability of finance

For many tobacco growers the ability to access finance is a necessary prerequisite for the establishment of alternative enterprises, some of which are likely to require the purchase of more land and new equipment. In the present industry circumstance, financial institutions are reluctant to extend loans beyond their current limits. In this regard, Kiell Tobacco stated:

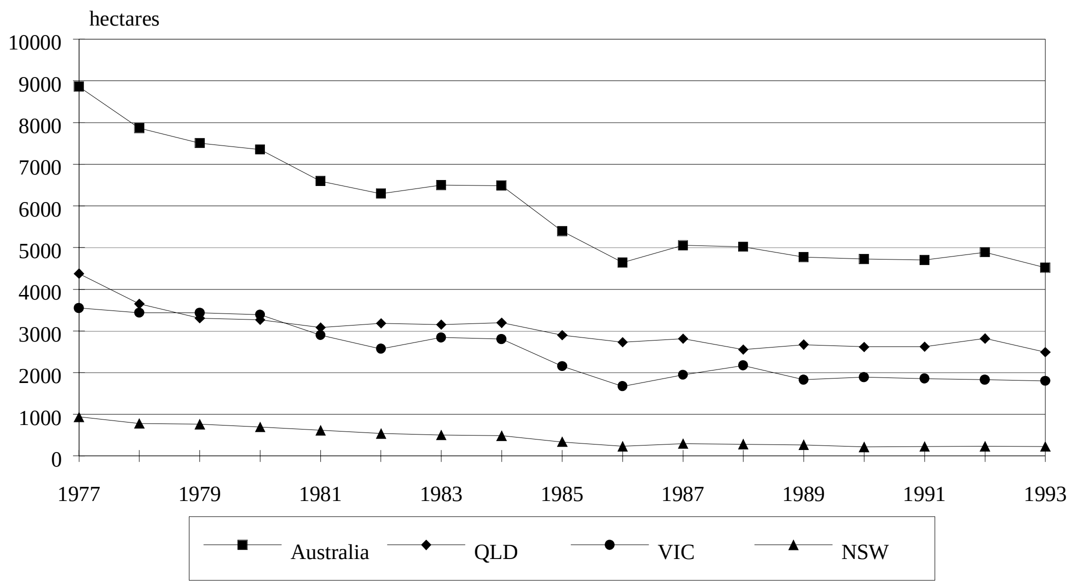
> ... Banks have indicated they will not financially assist tobacco farms post 1995 in an unknown and insecure deregulated market place. (Sub. 3, p. 2)

The Mareeba Shire Council commented:

> ... Given the risks inherent in the diversification process, it is extremely doubtful whether the banks will support this without the guarantee of substantial government assistance. (Sub. 50, p. 28)

The difficulties many growers are having in gaining access to finance through commercial channels has not been relieved by the provisions for financial assistance available through the Rural Adjustment Scheme (see Chapter 8, Section 8.2.1).

Figure 7.5: **Tobacco planted in Australia, 1977 to 1993** (hectares)



Source: ATMAC 1994.

The fall in value of tobacco assets, which is exacerbated by the uncertain outlook for the industry in the post-1995 environment, has had an adverse affect on the availability of finance to tobacco growers. This has consequences for both growers deciding to leave the industry and those choosing to remain in tobacco production. For growers who have decided to leave the tobacco industry, their capacity to establish another enterprise of a viable size, through farm amalgamation, is becoming increasingly difficult as their ability to provide loan security with existing assets diminishes. Growers remaining in the industry are likely to face increased risk margins on loans as uncertainty regarding the future of the industry continues.

The availability of finance is a difficulty facing many small businesses, and cannot be seen as a problem unique to tobacco growers. Although the industry is currently coming to terms with a declining market and deregulation, growers have had high and stable prices with relatively little uncertainty, compared with other industries, for a long period of time. Given these circumstances it could be argued that they should be in a better position to cope with the adjustments they now face. It should be noted that financial difficulties can also be attributed to poor financial management and investment decisions, which may be elements of the financial institutions' caution, in addition to the uncertain future of the tobacco industry.

Farm size and impediments to change

The present size of tobacco farms in both the Myrtleford and Mareeba-Dimbulah regions is an obstacle affecting the transfer of tobacco land to other potential uses. The average tobacco farm in Myrtleford is estimated to be between 25–30 hectares and in Mareeba-Dimbulah it is 30–40 hectares. The relatively small size of tobacco farms means that additional finance is likely to be required in order to establish a scale of operation viable for alternative activities. Mr Cyril Ciavarella, a Rural Ethnic Welfare worker in Myrtleford, commented that:

> ... [tobacco growers'] holdings in many cases are too small for diversification into alternative crops — the alternatives are not high value crops like tobacco is. Small holdings will therefore give supplementary income only. (Sub. 15, p. 2)

In the Mareeba-Dimbulah region current regulations applying to the subdivision of farms may impede the ability of tobacco growers to switch to alternative activities. Existing regulations place restrictions on the subdivision of farms and constrain growers' ability to make incremental additions to their existing landholdings. Given the financial position of some growers, and the price of land, the purchase of a complete farm may not be a financially viable option.

With regard to the issue of planning regulations, the Tobacco Leaf Marketing Board of Queensland (TLMBQ) stated that:

> The Government departments are currently reviewing the planning for the Mareeba-Dimbulah Irrigation Scheme. The review will include rationalisation of farm sizes to allow diversification into broadacre crops. The objective is to provide the most efficient use of water within the Irrigation Scheme. (Sub. 72. p. 4)

This review is being undertaken as a part of a strategy to review the Atherton Tablelands' physical infrastructure (see Chapter 8, Section 8.3).

The Commission understands that in Myrtleford one issue of local council regulations impeding farm amalgamation has been addressed through the modification of Shire planning schemes. Amendments proposed by the TGV and the Victorian Department of Agriculture (DAV) have recently been approved by the Victorian Minister of Planning and Development. Subject to certain conditions, for example, compliance with Victorian building standards, the amendments permit the excising of house blocks from tobacco farms.

In the long term, falling land values and consolidation will result in the appropriate farm sizes for alternative crops and land uses. However, in the short term the transition to farm structures appropriate for alternatives will be difficult.

Availability of water

A particular concern expressed by the Mareeba Shire Council (Sub. 49, p. 8) was the availability of irrigation water ‘in the right places, with the right quantities’. The irrigation water requirements of alternative crops are relatively higher than those for tobacco. For example, tree crops and sugar cane typically require 6 to 7 megalitres and 14 megalitres of water per hectare, respectively, compared to around 5 megalitres for tobacco (Mareeba Shire Council, Sub. 49, p. 9). As diversification takes place, the capacity of the existing channel system may need to be upgraded in order to deliver water to farms. (Water pricing issues are discussed in Section 7.3.6)

Markets and returns from alternative activities

Participants have identified several factors which have contributed to making the expansion of alternative enterprises more difficult and/or acting as disincentives for marginal tobacco growers to leave the tobacco industry by converting to such alternatives. These factors include, the lower rate of return per hectare associated with alternative crops, the lack of identified markets and service infrastructure for alternative crops (such as packaging, storage and cooling facilities), the lack of production knowledge/expertise and the high costs associated with initial crop establishment.

The Tobacco Leaf Marketing Board and the TGV commented that:

> Greater emphasis should thus be placed on programs designed to encourage marginal growers to divert hectares of tobacco to other enterprises. There currently is no incentive for tobacco growers to divert from tobacco production into other enterprises, because the prices of these supplementary crops and enterprises have been well below the prices received from tobacco. (Sub. 34, p. 6)

Despite this many tobacco growers have moved towards diversifying their activities by considering alternative crops, particularly since the final TISP was announced. For example, in northern Queensland a survey commissioned by the Mareeba Shire Council (Sub. 49) revealed that 225 out of a total 296 tobacco farms in the Mareeba-Dimbulah region had diversified into other crops (see Table 7.2). Over 70 per cent of the diversification which has taken place has been into enterprises in which there is a long period before a positive cashflow is recorded. The Mareeba Shire Council (Sub. 76, p. 4) noted that in 1993–94 supplementary crops accounted for only 8 per cent of tobacco farmers' income. While currently this income is low it can be expected to increase over time as the scale of supplementary crops increases and as the crops mature.

Table 7.2: **Extent of diversification, by age of farmer** (North Queensland)

	Age of farmer					
	Under 35	*35 to 44*	*45 to 54*	*55 to 64*	*Over 64*	*Total*
Number of tobacco farms	**47**	**54**	**57**	**97**	**41**	**296**
Farms exclusively tobacco	0	14	19	24	14	71
Diversified tobacco farms	**47**	**40**	**38**	**73**	**27**	**225**
Tobacco farms with:						
Sugar	-	-	-	-	-	-
Mangoes	23	28	20	46	20	137
Lychees	1	-	1	8	-	19
Citrus	-	-	5	9	-	14
Essential Oils	4	-	5	6	-	13
Coffee	-	8	5	-	-	13
Navy beans	16	4	2	7	5	34
Peanuts	13	-	-	3	8	23
Cattle	1	8	5	-	-	14
Veges and/or Melons	14	5	14	13	-	45
Other produce	8	3	5	9	-	25

Source: Cairns Economic Research Unit, 1994.

In the Mareeba region (with the exception of some parts of Dimbulah) and in the Myrtleford region, the climate, soil types and the quality of water available are suitable for the production of a wide range of crops *(see Box 7.1)*. ***Although none of these crops will directly replace tobacco production and maintain growers' past income levels, they have some potential to be grown and marketed profitably.***

As tobacco growers diversify, concerns have arisen from members of other industries relating to the impact of a sudden influx of new entrants into their industries. The Mareeba District Fruit and Vegetable Growers Association (Sub. 19, p. 1) commented that they feared '... [tobacco growers] would not be absorbed evenly throughout the state and across a wide range of commodities'. The Association said:

> To this point in time well meaning government intervention has been disruptive and counter productive. While the Queensland Government is to be commended for continuing the search for alternatives the reality is that the decision has been taken, the die cast, and most tobacco farmers have plunged into mango growing. (Sub. 19, p. 2)

Box 7.1: Examples of products currently being commercially grown and trialed in Myrtleford and Mareeba-Dimbulah

Myrtleford		*Mareeba-Dimbulah*	
	Current commercially grown products		
tobacco	wine grapes	tobacco	citrus
walnuts	asparagus	coffee	vegetables/melons
chestnuts		mangoes	essential oils
hops		sugar cane	lychees
apples		peanuts	
berries		navy beans	
	Demonstration products		
peppermint		sugar beet	lady finger bananas
cauliflower		grapes	Tableland coffee
broccoli		stonefruit	red flesh grapefruit
radicchio		mandarins	green eating mangoes
		tea tree	red claw crayfish
		field crops - navy beans, peanuts, sugar cane, hay.	

The importance of expanding existing markets and developing new markets for alternative crops cannot be understated, especially if market disruption for other major commodities grown in the tobacco regions is to be minimised. However, an increase in the supply of a particular commodity, given appropriate quality assurance standards and marketing, may provide an opportunity for the industry to access export markets by enabling them to develop the necessary critical mass.

In summary, the impediments to adjustment associated with transferring tobacco land to alternative uses are quite varied. As described above these include: the availability of finance; the current size of tobacco farms; subdivision regulations and lower returns on alternative activities. It is evident that the task of transferring tobacco land into other uses is complex and will not be achieved smoothly. While obstacles such as subdivision regulations can be negotiated, others such as the per hectare return on alternative crops cannot be changed.

7.3.2 Reduction in the value of assets

According to Barson *et al.* (1993, p. 8) capital investment in specialised tobacco equipment, buildings and quota represents approximately one third of farm assets, while inclusion of the farm dwellings brings this to 40 per cent. The value of these specialised tobacco assets has fallen in recent years, resulting in a lower level of farm equity. Some growers may find that as a result of the fall in value of their assets, they will owe more than their property is worth. For all growers, the reduction in asset values has reduced the security they can offer in return for additional finance.

The absence of a market for certain assets of tobacco growers has hampered some growers' efforts to move away from tobacco production in recent years. With lower equity levels, and a limited ability to generate income from the sale of quota and equipment, access to finance to fund the establishment of a new enterprise or retirement is severely constrained. In addition, factors which restrict off-farm employment prospects, such as lack of the necessary skills, age and high unemployment levels economy-wide, all combine to make the opportunity cost of remaining on the farm very low for some growers. Particularly in recent years, this has been a factor which has constrained the rate of adjustment.

7.3.3 Grower characteristics

The tobacco growing industry has a high proportion of migrants, many of whom do not have strong English language abilities. Barson *et al.* (1993) have estimated that the average age of growers in Mareeba-Dimbulah is 53. The average age of the Myrtleford growers is similar. For many, their skills are limited to tobacco production. In addition, there are strong family and social ties in the tobacco growing regions which act as an impediment to movement into areas where there might be other business or work opportunities. These characteristics have served, and will continue to serve, as an obstacle to adjustment and relocation for many growers.

7.3.4 Uncertainty and producer expectations

From discussions with growers during the Commission's visits it became evident that there is a great deal of uncertainty surrounding the future of the tobacco growing industry. Since 1988, concern regarding the marketing of leaf and the level of Australian leaf to be purchased by manufacturers after 1995 has made it more difficult for growers to perceive the long-term benefits of adjustment. Due to the uncertain long-term future of the industry, and given the past profitable nature of tobacco production, growers are less likely to accept the short-term costs associated with adjustment.

Expectations of growers have also contributed to a relatively slow rate of adjustment over recent years. Expectations that the TISP will be continued or that there will be some kind of a compensation package or quota buy-out has encouraged some growers to continue in the industry despite every indication that they would be better off leaving. During the Commission’s visits to the various tobacco growing regions in late 1993, a number of growers anticipated a compensation package for those wishing to leave the industry or expressed a belief that the TISP would be continued beyond 1995. In the past, industry groups have successfully pressured for a continuation of the stabilisation plans. For example, LD and LM Smith stated (Sub. 20, p. 1) that: ‘... Since the first period of Stabilisation ended the industry has always followed on with another period. I think many still believe or hope that this will happen again’.

7.3.5 Climatic conditions and management practices

Against a background of the above sources of adjustment pressure, adverse climatic conditions and individuals’ management practices may intensify the level of adjustment stress experienced (as will occur in any agricultural industry). Poor management practices resulting in a low quality crop exacerbates the impact of declining tobacco prices and high production costs. Adverse climatic conditions can hasten the adjustment process by forcing marginal growers out of the industry, however it can also delay the process through setting back attempts to build up an alternative enterprise.

7.3.6 State water pricing policies

One of the important inputs in tobacco growing in the major production regions is water. As explained earlier, the expansion of northern Queensland tobacco growing was facilitated with the provision of the Tinaroo Dam and the associated irrigation system. Changes to the water pricing policies are, therefore, a potential influence on adjustment in tobacco growing and effective land use.

In the past both the Victorian and Queensland industries have not been charged the real cost of irrigation water. With the implementation of full cost-recovery pricing policies, tobacco growers, and other irrigation water users, may be faced with higher production costs. It is likely that such policies would be phased in over a period of time and hence would not impact immediately.

A review of water pricing has recently been initiated by the Queensland Government and it is expected that within the next year or so water allocations will be separated from land, and be freely transferable. When this occurs, there will be one less impediment to land use changes.

In Victoria, the Rural Water Corporation (RWC) anticipates that within eight years the State's water charges will have moved to full cost recovery. The RWC is currently auctioning 'new' allocations of irrigation water available from the Dartmouth Dam at the full economic cost. The trading of water rights is expected to lead to farmers switching to other activities which have a higher return per unit of water. The transferable water rights will also enable retiring tobacco growers to benefit from the sale of their water right.

It is not possible to assess the impact of any changes to the water pricing policies of the States on tobacco growing or adjustment to other rural activities other than to say that if the true economic cost of water is charged better use will be made of the land. In the present industry circumstance however, an increase in water charges in the short term is likely to further exacerbate the problems growers are currently experiencing in terms of adjustment.

Impediments to adjustment are the small size of tobacco farms, regulation relating to subdivision, grower access to finance, lower returns from alternative activities, age and ethnic background of growers, factors restricting off-farm employment prospects, and uncertainty about the prospect of further assistance to remain in, or leave, tobacco production.

7.4 Dimensions of the current adjustment task

7.4.1 Individual growers

As stated previously, the reduction in the demand for tobacco leaf has reduced national selling entitlements from 13.5 million kilograms in 1992 to 8.1 million kilograms in 1994. As the reduction was distributed evenly across the industry, all growers are now producing at well below capacity levels. There has been a severe reduction in grower incomes and there is no prospect of the demand for leaf recovering sufficiently for all growers to be able to efficiently use their installed capacity. Consequently, unless there is a rapid and substantial reduction in the number of growers, and in the amount of land and equipment devoted to tobacco production, all growers will be faced with difficult financial circumstances. The current level of demand for Australian leaf indicates that without any further investment in land and equipment, the market could be supplied by half the number of growers in the industry today. An immediate priority is to reduce the number of growers so that those who remain in the industry to service a smaller market can do so efficiently. This suggests that all existing growers need to adjust.

In the post-1995 environment, growers remaining in the industry will be exposed to new marketing arrangements and pressure to deliver a high quality product at a more competitive price. In addition, the growers will have to contend with the competitive pressures (imposed by a declining market) by collectively reducing output.

Growers intending to continue in the tobacco growing industry will need to ensure that the return from tobacco growing will be sufficient to service their financial obligations and provide a reasonable return on capital and labour. Therefore, when deciding to remain in the tobacco industry, individual growers must give careful consideration to the financial viability of their operations, given circumstances where the return on tobacco may be significantly lower than current levels.

For the growers deciding to leave the industry, some of the factors which have impeded adjustment (such as lack of skills, age, the availability of finance and alternative uses for land) will cause hardship when adjustment eventually occurs. Unless there is an alternative employment opportunity within the region capable of absorbing growers leaving the industry, and requiring skills the growers have or can easily acquire, these individuals will be faced with the option of either long periods of under- or unemployment, relocation to another region, or retirement. In order to adjust out of tobacco, such growers will require financial advice, additional information on alternative activities and access to facilities through which they can retrain.

Adjustment strategies

In order to understand the types of adjustment assistance which may be required by individual growers, it is important to be aware of the ways in which growers previously have responded to adjustment pressures. Typical adjustment strategies are (Stayner and Gow 1992):

- increased productive capacity by the purchase of more land;
- reduced farm expenditure on maintenance and machinery replacement;
- diversification into new or other farm enterprises;
- sale of farm and alternative employment; or
- retirement, with or without the sale of the farm.

While these adjustment strategies primarily focus on the adjustment response of the farm business, both short term and long term, there are also numerous adjustment responses made within the farm family unit which can ease financial pressure. These actions are often the first to be implemented. A comprehensive list of family related adjustment actions is presented in Box 7.2.

Until recently, a characteristic of tobacco farms has been that there was very little diversification of farm enterprises. That is, their income was almost entirely derived from tobacco production. As a result, a significant amount of pressure has fallen on the family unit through the reduction of household expenditure and savings as an adjustment strategy. Stayner (1994) observed that most farm families appear willing to accommodate quite large temporary fluctuations in household income in order to preserve the continuity of the farm business.

Box 7.2: **Summary of family or household related possible adjustment actions in response to financial stress**

1. Postpone major household purchases, eg consumer durables, home improvements or maintenance.
2. Use savings to meet living expenses.
3. Reduce or cease contributions to savings plans (eg private superannuation, life insurance, etc).
4. Reduce expenditure on food and clothing, eg increase home-grown or home-made component.
5. Change transportation patterns, eg shop closer to home.
6. Off-farm employment of owner, spouse, or family members.
7. Decrease/postpone medical or dental care or insurance.
8. Sell private or household possessions, eg ‘trade-down’ private vehicle.
9. Increased use of credit.
10. Late or non-payment of bills.
11. Reduction of education expenses.
12. Invest in non-farm education/training for owner, spouse, or other family members.
13. Borrow money from friends or relatives.
14. Liquidate off-farm assets, such as property, shares, or other financial assets.
15. Reduce other private expenditure, eg utilities, vacations, entertainment, charitable contributions.
16. Obtain government or non-government assistance (income, counselling, etc).

The response of farm families to favourable financial conditions is likely to be the reverse of those listed above.

Source: Lasley & Fellows 1990, cited in Stayner and Gow 1992, p. 22.

Many of the farm and family adjustment strategies may only be effective as short-term measures. If the adjustment pressure is substantial and continues over a prolonged period, as will be the case with a declining industry, such strategies can lead to entrenched economic and social problems. In the tobacco growing industry, various events and perceptions led growers to implement adjustment strategies some of which in hindsight can be seen as inappropriate (for example, the distribution of the $10 million provided by the Queensland Government for industry restructuring — see Appendix F). As a result, the extent of decline occurring in the industry now requires more dramatic adjustment action and has led to quite critical economic and social problems affecting both growers and local communities.

Until recently, there was a ready market for the quota, land, machinery and equipment of growers deciding to leave the industry. With the level of uncertainty associated with the future of the tobacco growing industry, it is becoming increasingly difficult for them to access finance and resale markets for their assets, many of which only have uses specific to tobacco production[3].

There is some concern within the growing industry that if the adjustment process is prolonged, some growers with reasonable long term prospects will soon be forced out of the industry, while others with little prospect of surviving in the long run may now be in a better position to withstand a long period of low income. In general terms, the former group of growers are young and have taken advice to upgrade their facilities as a means of improving their efficiency. In doing so many incurred a high level of debt which they now have difficulty servicing with lower incomes from reduced selling entitlements. Financial institutions will not extend their credit and have started to recover their loans. These growers may not be able to afford to stay in the growing industry in the short term.

The others belong to an older age group who have persevered with old equipment and have little or no debt. Some have abandoned plans to retire because the expected proceeds from sale of their farms declined dramatically with the fall in selling entitlements and quota values.

7.4.2 Regional perspective

The tobacco industry is a declining industry in which the majority of production is concentrated in the Mareeba-Dimbulah and Myrtleford regions. This industry concentration is the source of major adjustment pressure for both individual growers and their communities, particularly if there are no other industries capable of offsetting the increase in unemployment and reduction in income from tobacco growing.

The gross income from tobacco production flowing into the local communities of the major growing regions represents a substantial input into their economies. The recent reductions in grower selling entitlements, in addition to the declining

3 At the draft report hearings in Myrtleford, Hei-Tana Management questioned the inflexibility of equipment used in tobacco production. It is interesting to note the alternative uses suggested, such as the capacity to use curing barns as cool stores or dehydration units for produce other than tobacco and the potential for cultivation equipment to be used for other row crops (Transcript, pp. 446–47).

level of real prices over time, have led to increasing pressure on businesses and families outside the tobacco growing industry. As the Savoy Club Myrtleford Welfare Sub-committee said:

> ... With the unremitting uncertainty in the tobacco growing industry and uncertainty about alternatives, the tobacco growers are able to afford only the barest essentials, and the whole community is suffering. Stress and anxiety are taking their toll and financial problems and hardships are already evident leading to family problems and excessive drinking within the community. (Sub. 13, p. 2)

It is evident that as the tobacco growing industry is regionally concentrated, both the community and individual growers will incur the economic and social costs associated with adjustment as the industry declines. The extent of these costs will be determined by the rate of industry decline, the relative dependence of the region on the industry and the availability of alternative opportunities.

In general, regional adjustment to such factors as significant variations in prices, production conditions or changes in government policies, will tend to be quite slow due to the nature of mechanisms through which the region can respond. Such mechanisms include movements of capital and labour, changes in the region's output mix and improving regional competitiveness by lowering costs or raising productivity.

There are several factors which suggest that there will be a significant lag in the ability to adjust labour and capital at the rate dictated by the industry change currently taking place. The mobility of labour is impeded by the high average age of tobacco growers and strong ethnic ties in the major production regions, in addition to more general constraints such as transactions costs including stamp duty. The mobility of physical capital will vary depending on the nature of the asset. For example, land and buildings are obviously fixed, and much of the machinery and equipment is specifically designed for tobacco growing and therefore considered to be of little or no use in other pursuits. Overall, the lack of alternative opportunities in both regions, for labour in particular, suggests that there will be a prolonged period of structural adjustment.

8 ADJUSTMENT ASSISTANCE AND REGIONAL PROGRAMS

There are two dimensions to the adjustment task facing the major tobacco growing regions. The immediate task is to reduce the productive capacity of the industry. The medium to long term task is for the regions to adjust to their new circumstances. As for any adjustment process, it is inevitable that employment and production losses will occur.

A rapid reduction in the number of growers will provide a better and earlier opportunity for those who remain in the growing industry to adjust to a market requiring a higher grade of leaf at a lower price. If this adjustment task is delayed until natural attrition through market forces takes its course, the social and economic cost of the process, on both those who remain and those who leave, will be high.

The Victorian quota retirement scheme has acted as a useful circuit-breaker in that it has injected a degree of certainty into the local community, and has provided growers remaining in the industry with an improved prospect for survival in the immediate future.

Many tobacco growers are unable to obtain assistance under the Rural Adjustment Scheme because they either fail to meet the assets test or cannot demonstrate long term viability. This does not provide a basis to change the RAS eligibility criteria specifically for tobacco growers.

The impediments to adjustment identified in Chapter 7 do not warrant the provision of assistance beyond that which is already available for adjustment purposes. Commonwealth and State Government programs currently available, together with the phased tariff reduction proposed by the Commission, have the capacity to address the adjustment needs of tobacco growers.

The regional dimension of the adjustment task requires, and is receiving, immediate attention. In the Myrtleford region, local community based initiatives have been prominent, whereas in the Mareeba-Dimbulah region, the Queensland Government has been responsible for the development of a co-ordinated program to facilitate regional adjustment.

A combination of declining demand for tobacco leaf, the rigidities of the Tobacco Industry Stabilisation Plan (TISP) framework, grower uncertainty, and impediments to adjustment (discussed in Chapter 7, Sections 7.2.3 and 7.3) has resulted in an inappropriate growing industry structure. For the 1994 season, with a national marketing quota of 8.1 million kilograms, many growers are operating at less than 60 per cent of their capacity.

This situation has been caused by a backlog of adjustment to a declining market and manufacturers reducing their excess stocks of tobacco leaf. It is an abnormal situation which would improve if manufacturers' consumption of domestic leaf stabilised at somewhere near the 11.6 million kilograms consumed in 1994. But even at that level of consumption there would be a need to reduce the productive capacity of the growing industry — primarily by reducing the number of growers so that those who remain can make better use of their land and equipment.

Furthermore, in a deregulated environment, it is possible that manufacturers' demand for domestic leaf will fall below the current level — Philip Morris has indicated that a medium term expectation of 10 million kilograms would not be unreasonable (Sub. 38, p. 19).

Manufacturers have also advised that they will be seeking better quality tobacco at prices lower than the average of $6.03 per kilogram agreed for the 1994 season. There is thus some urgency in seeking to take some resources out of tobacco growing and for the remaining resources to be used more efficiently.

Since this inquiry began, the Commission has observed a change in growers' attitude and understanding of the industry's circumstances. The mood has changed from one which demanded a return to the 'good times' when demand and price were high, to a realisation that change is inevitable with positive action required to achieve such change. Governments at all levels, local communities, and growers have responded positively to this challenge.

This chapter outlines the approaches which are being taken to the immediate task of reducing industry capacity and to the longer term task of regional adjustment to a smaller tobacco growing industry.

8.1 Quota retirement schemes

Growers from each of the growing States have approached their respective governments for assistance to restructure their industry in preparation for the deregulated market they will soon face. An important element of each of these proposals is a quota retirement, or quota buy-out, scheme as a means of achieving a rapid realignment of growing capacity and demand for Australian leaf.

A rapid reduction in the number of growers will provide a better and earlier opportunity for those who remain in the growing industry to adjust to a market requiring a higher grade of leaf at a lower price. If this adjustment task is delayed until natural attrition through market forces takes its course, the social and economic costs of the process, on both those who leave and those who remain, will be high.

In the absence of quota retirement schemes, adjustment to a smaller number of growers could be a slow and difficult process. Marginal growers may decide to continue in tobacco production even though they have no prospect of a return to long term viability. Such decisions would impose costs on those growers who would otherwise be capable of continued operation in the long run.

Growers have also requested assistance for diversification into other activities. The various buy-out schemes and other requests are outlined below.

Victoria

In view of the structural adjustment difficulties facing the tobacco growing industry, the Victorian Government announced, in December 1993, a $3 million package to fund a voluntary quota retirement scheme, referred to as the Tobacco Industry Restructuring Scheme. The Victorian scheme, administered through the Rural Finance Corporation (RFC), was devised to achieve an improved level of capacity utilisation for those growers choosing to remain in the industry, by encouraging a more rapid movement of labour and capital out of tobacco production:

> The whole purpose of the plan is to recognise that the industry is scaling down and that not everyone will be able to continue growing tobacco. Those that feel they cannot meet the high quality standards and lower prices will be given financial assistance through the retirement (buy back) of their quota and those remaining will have the benefit of an improved share in a decreasing market. (McNamara, Stockdale and McGrath 1993)

The scheme aimed to retire up to 1.5 million kilograms of basic quota involving a payment of $2.00 per kilogram. In a statement released by the RFC in March 1994 the conditions of the scheme were outlined:

> Participating growers will be required to —
>
> [i] surrender their full quota to the TLMB [Tobacco Leaf Marketing Board];
>
> [ii] produce to the RFC a certificate from the TLMB that their interest in delivered tobacco has been relinquished to the TLMB;
>
> [iii] sign an undertaking to the RFC not to plant tobacco for a period of 5 years from the date they receive payment under the scheme. The undertaking is to be executed by all parties involved in the operation and ownership of the land and tobacco quota.

Payments made under the scheme will be in the form of a loan from the RFC, which will be converted to a grant at the end of the five-year period as long as the grower has complied with the conditions of the scheme. The loan will be secured by a mortgage over the grower's property in favour of the RFC, above which existing mortgages will be given priority. Sale or leasing of the property can take place provided appropriate security to replace those assets is provided.

The general characteristics of growers who had expressed interest in the quota retirement scheme (at the time of the draft report hearings) have been reported by Lynch Rural and are set out in Table 8.1. Additional growers expressed interest in the scheme before the cut-off date. Lynch Rural is a financial consultant contracted by North East Agcare, with funding from the Department of Primary Industries and Energy (DPIE), to assist growers in determining whether they should participate in the quota retirement scheme and to advise growers of their financial and agricultural options. Their services were provided for a three week period, after which follow-up service is being provided through the rural counsellors available at North East Agcare. It is evident from the information provided by Lynch Rural that the scheme has provided an incentive for marginal growers and others (due to poor health or age) to leave the industry. Many of these growers have little or no debt and 44 per cent have off-farm assets greater than $50 000. While participating growers had a lower average basic quota level than the industry overall, their farm size is above average, suggesting that many are likely to be involved in alternative activities. The scheme appears to have injected a degree of certainty into the local community, and has provided growers of higher priced leaf with an improved prospect for survival in the immediate future.

Table 8.1: **Tobacco grower profile**

	Quota Retirement Scheme	*Victorian tobacco growing industry*
Number interviewed/ total number of growers	36	206
Average age	57	mid-fifties
Average farm size (hectares)	56	25–30
Average sale price 1993 (cents per kilogram)	576	600
Average selling entitlement (kilograms)	16 961	22 549

Source: Lynch Rural (Sub. 63, p. 2), Barson *et al.* 1993 and ATMAC 1993.

The Victorian scheme also provides for removal of legislation which supports the Tobacco Leaf Marketing Board (TLMB) and for the establishment of a new grower-owned marketing organisation in preparation for the deregulated environment post September 1995.

The Commission understands that these new arrangements are now in place.

Queensland

The Tobacco Leaf Marketing Board of Queensland (TLMBQ) advised the Commission that an approach had been made to the Queensland Government for funding to either buy out the entire State leaf quota at a cost of approximately $55 million ($6.00 per kilogram) or, alternatively, to buy out the unutilised portion of basic quota (48 per cent) at a cost of $26 million, with a further $9 million for those growers continuing in the industry for diversification. Details of the requests are as follows:

> The Queensland Tobacco Industry requests the establishment of an Industry Reconstruction Package, including a State Diversification Scheme and/or a Commonwealth RAS [Rural Adjustment Scheme] Scheme, with funding levels up to $35 million to assist in the reconstruction of the industry. The funds would be available to growers under two limbs:
>
> a) Growers exiting the industry for diversification into other crops or exiting agriculture; and
>
> b) Tobacco growers for diversification into other crops.
>
> Funding restrictions would apply to each limb of the package. For those growers exiting the industry, any assistance should be limited to an amount equivalent to $6.00 per kilogram of basic quota level which equates to a total package amount of $26.3 million. The remainder of the package ($8.7 million) would be available to tobacco growers continuing in the industry for diversification.
>
> Each grower would have to prepare a submission for their funding requests, based on their individual situations, to justify how the money would be spent to benefit themselves and the region. It is anticipated that the package would be available to all growers. (TLMBQ, Sub. 72, p. 5)

The Queensland Government recently considered and rejected the growers' proposals. However, in recognition of the importance of the tobacco growing industry, and with a commitment to assisting growers address the economic, social and structural adjustment problems facing them, the Queensland Government has decided to facilitate the presentation of a case by the tobacco industry to the Commonwealth Government for financial assistance to restructure the industry.

The Commission notes that less than four years ago $1.37 million of the $10 million Queensland tobacco fund was used to purchase more than 450 000 kilograms of quota at $3.00 per kilogram and that the Queensland Government was being asked, in the most recent industry request, to provide a further $6.00 per kilogram to buy out quota.

In a separate initiative, the Queensland Treasurer, the Honourable KE De Lacy, MLA, has proposed that the Australian Tobacco Marketing Advisory Committee (ATMAC) develop a restructuring package which could be taken forward by Queensland to the Commonwealth Government. The Treasurer envisaged that the package would include:

> rationalisation of the number of growers by up to fifty per cent to allow remaining growers to produce to a greater percentage of their capacity and thereby more effectively utilise their investment in tobacco-specific farm equipment; and
>
> negotiation of short to medium-term (ie 3–5 year) supply contracts between grower marketing organisations and manufacturers to give some security to remaining growers following deregulation of the industry in September 1995. (Sub. 80, p. 4)

It is understood that ATMAC has agreed to develop a proposal along the above lines.

New South Wales

New South Wales growers have argued that at least 60 per cent of them must leave the industry so that the remaining growers can achieve a viable growing area and selling entitlement. They have asked their State Government for a one-off financial package to provide the vehicle for growers to leave the industry if they so decide. According to their calculations, if all 25 growers choose the option to retire, the cost of the package would be $7.02 million ($13.36 per kilogram).

The New South Wales Government has advised the Commission that it is currently (June 27) at ‘an advanced stage in negotiating possible compensation for growers for income lost over the past two years due to recent changes in government policy’ (Sub. 84, p. 3).

8.1.1 Objectives of quota retirement schemes

The objective of the Victorian quota retirement scheme is to reduce the productive capacity of the growing industry by 1.5 million kilograms and to distribute the remaining capacity over a smaller number of growers. This would be achieved by offering an incentive for some growers to leave the industry so that the remaining growers would be better placed to survive in a deregulated market.

The partial buy-out scheme proposed by Queensland growers differs from the Victorian scheme in that in addition to reducing State growing capacity and the number of growers (by a much larger amount than Victoria), it has an objective to assist the remaining growers to diversify into other activities.

The objective of the New South Wales proposal is to encourage growers to cease production of tobacco leaf. Although there is reference to 60 per cent of growers leaving the industry, the request provides for all growers to cease tobacco production if they so decide.

The Commission has identified the excess capacity of the growing industry as a major impediment to production efficiency and acknowledges that a quota retirement scheme such as that implemented in Victoria is an effective means of reducing the productive capacity of the growing industry in the short term. However, it cautions against attempting to remove more growers and capacity than would have retired in a more competitive market environment. As explained above, the 8.1 million kilogram selling entitlement which gave rise to nearly 45 per cent excess capacity was an abnormal circumstance. If entitlement had been at the same level as consumption of domestic leaf in that year (11.6 million kilograms) the growing industry would have used nearly 80 per cent of its capacity. A target of 20 per cent capacity reduction would thus seem to be appropriate.

The Victorian quota retirement scheme has acted as a useful circuit-breaker in that it has injected a degree of certainty into the local community, and has provided growers remaining in the industry with an improved prospect for survival in the immediate future.

While an immediate reduction in the number of farmers growing tobacco is likely to benefit those remaining in the industry, the Commission does not believe that it is necessary to provide additional assistance (to that which is available through various government schemes) for those remaining in tobacco growing to diversify. Experience shows that when funds are provided on the condition that they are used for a particular purpose, they will be used for that purpose almost regardless of the consequences. In the case of the current Queensland growers' proposal, the option to remain as a specialist tobacco grower will be less attractive if funds are available on the condition that they are used to diversify into another activity.

8.1.2 Quota price and amount of quota retired

For a partial quota retirement, as achieved by Victorian growers and sought by the Queensland industry, a balance has to be struck between providing sufficient incentive for some growers to leave the industry and providing others with an incentive to remain.

The incentive to leave is provided by the sum of money offered to growers to cease production, while the incentive to stay takes the form of the prospect of a greater share of the available market. The higher the quota retirement price offered, the greater will be the incentive to leave, and the larger the number of growers choosing to leave, the greater the incentive to stay in the industry. There is thus a positive correlation between the desired reduction in capacity and the price per kilogram offered to achieve that reduction. If a small reduction is required, a low offer will probably suffice, but if a large reduction, say 50 per cent of capacity, is the target, a much higher price will be needed to induce growers to forego the potential benefits of a greater market share.

The successful Victorian scheme provides a useful benchmark in terms of the relationship between quota price and quota retirement. The objective was to retire up to 1.5 million kilograms of basic quota. Growers were offered $2.00 per kilogram which, when converted to selling entitlement (about 55 per cent of basic quota), represents about $3.60 per kilogram. More than one-third of Victorian growers expressed interest in the scheme and the Commission understands that the objective to retire 1.5 million kilograms of basic quota will be achieved. Those growers remaining in the Victorian industry will benefit by having a market share of about 20 per cent higher than it otherwise would have been. A grower leaving the industry and retiring the equivalent of 15 000 kilograms of selling entitlement will receive about $54 000.

Another buy-out price indicator is the market value of the quota. At this time it is not possible to observe such a value. The quota market has effectively ceased to operate due to uncertainty and expectations about a quota buy-out. But earlier quota sales, suitably discounted, can provide some guide. For example, prior to distribution of the $10 million Queensland tobacco fund, basic quota was being traded at about $2.50 per kilogram. The Queensland fund boosted that price to $3.00 per kilogram. At that time a reasonable expectation would have been for quota to have a positive value for a further three or four years.

The price at which quota is leased also gives an indication of its current market value, given that there is only one more selling season for which quota will have any value at all. The Commission understands that prior to the 1994 growing season, selling entitlement was being leased for the season at a price of $1.20 to $1.30 per kilogram, which translates to about 70 cents per kilogram of basic quota.

From the above indicators it could be deduced that an offer in the vicinity of $1.00 per kilogram of basic quota would be accepted only by those growers who had already decided to quit tobacco production but who were delaying their departure from the industry until uncertainty about whether there would be a buy-out was dispelled. Even at $2.00 per kilogram, the Victorian scheme may have attracted only those growers with poor prospects of operating profitably in the longer term, notwithstanding the prospect of achieving better capacity utilisation.

At the other end of the price scale, the New South Wales and Queensland proposals for basic quota retirement prices of $7.35 and $6.00 per kilogram respectively would attract more growers. However, in Queensland's case, the prospect of doubling market share for the growers who remain, together with a further $2.00 per kilogram for diversification, would provide a strong incentive for many marginal growers to remain. In effect, growers would have to choose between either:

- accepting $6.00 per kilogram and leaving the growing industry; or
- accepting $2.00 per kilogram for diversification and doubling tobacco output.

In the Commission's view, there are too many uncertainties associated with the Queensland proposal for there to be any confidence in such a scheme achieving the objective of retiring half of the State's basic quota. A more modest objective, as adopted in Victoria, which provided an incentive only for growers with poor long-term prospects to leave the industry, would provide growers with a clearer choice, would be less directive in terms of the industry structure which eventually emerges, would have a greater chance of success, and would be less expensive.

8.1.3 Non-uniformity between States

The following discussion relates to non-uniformity between the major tobacco leaf growing States of Queensland and Victoria. New South Wales has been excluded because of the different circumstances of the tobacco leaf growing industry in that State and its small size relative to the leaf growing industries of the other two States.

Non-uniformity between States can occur in a number of ways. There may be a quota retirement scheme in only one State — Victoria — or if the Queensland Government offers its growers a quota retirement option the price of quota, or the share retired, may be different to the price and share retired in Victoria.

There are several possible outcomes if only one State effectively reduces the number of tobacco farmers. In the event that market shares between the States initially remain unchanged, Victorian growers will have an advantage over their Queensland counterparts if better utilisation of capacity reduces their production costs as expected. They will be better equipped to bargain with manufacturers for a greater market share in a deregulated environment.

An alternative scenario is for an immediate reallocation of market shares by ATMAC between States according to their growing capacity. In that event, the benefits of the Victorian quota retirement scheme will not be confined to the remaining Victorian growers but will be shared by all growers remaining in the Australian industry.

Conversely, if 50 per cent of Queensland quota were to be retired, Queensland growers would be better placed if market shares remained unchanged, but would be disadvantaged if market shares were reallocated according to growing capacity.

8.1.4 Future marketing arrangements

The benefits of any quota retirement scheme will accrue mainly in the short run. In the longer term, the growing industry will need to respond to changing market circumstances, which will be influenced by the marketing arrangements which develop in a deregulated environment. As alliances are formed between the individual buyers and grower organisations, and as the major growing regions respond differentially to buyer requirements, a change of market shares from those which prevailed in the regulated (TISP) environment is inevitable. If the structure of grower and marketing organisations is such that reduced demand for leaf is shared evenly between a region's growers, there is likely to be a recurrence of the current crisis, with a whole region's growers producing below capacity and a further call for assistance.

Similarly, at a national level, ***unless new marketing structures which replace the TISP have provision for competition between growers for market share, especially in a declining market, a repeat of the growing industry's current circumstances is a distinct possibility at some time in the future. In that event, responsibility for any further restructuring would rest squarely with growers.***

8.2 Existing adjustment programs

8.2.1 Rural Adjustment Scheme

The Rural Adjustment Scheme (RAS) was established by the Commonwealth Government to assist the process of structural adjustment within rural industries. Although the operation of the scheme has been modified considerably since its inception in 1977, the basic objective has remained the same. In particular, the scheme is intended to help farmers with prospects for long-term viability to overcome short-term financial difficulties, and to assist farmers in extreme financial difficulties to re-establish elsewhere.

In 1992 a review of the RAS was conducted to investigate its objectives, suitability to fulfilling these objectives and the overall efficiency and effectiveness of RAS. The main change to the scheme arising from the review was an increase in emphasis on improving the farm productivity to facilitate adjustment rather than providing financial assistance to encourage adjustment. Although the target groups of the scheme have essentially remained the same, the structure of RAS has been modified to reflect the change in emphasis of the scheme.

Discussions with tobacco growers and industry representatives revealed a number of concerns about the effectiveness of the RAS as a means of facilitating short-term adjustment in the tobacco growing industry. Many participants argued that the RAS framework did not meet the needs of growers in an industry facing a permanent decline.

Demonstration of long-term viability is a primary criteria for assistance under the scheme. Tobacco growers intending to continue in tobacco and/or diversify have stated that they are unable to access RAS. This is due to their limited ability to provide evidence of future viability given the current uncertainty surrounding deregulation of the tobacco industry and the uncertain market prospects of new enterprises. Growers must be able to access commercial finance to be eligible for RAS interest subsidies.

From information available to the Commission, it appears that those growers intending to leave agriculture completely are precluded from receiving assistance via a re-establishment grant because they fail to meet the RAS assets test.

In the past, tobacco growers have not been regular users of the scheme (stemming primarily from the security offered under the TISP). Between 1988 and 1993, a total of 40 tobacco growers received assistance through the RAS, totalling just over $300 000; that is approximately $7500 on average. All the assistance approved was for interest rate subsidies. However, the current industry circumstances have led many growers to expect the RAS to provide an incentive to leave the industry through grants for re-establishment, and interest rate subsidies to assist them to diversify into alternative activities.

It should be noted that the re-establishment grant provides support for farmers in severe financial difficulties. It is not intended to provide encouragement for other growers to leave the industry. A more appropriate instrument for that purpose would be a quota retirement scheme as provided in Victoria.

An industry specific RAS was called for by several participants throughout the draft report hearings and in submissions. The TLMBQ outlined their proposal for an industry specific RAS:

> In relation to the tobacco industry, the Commission may consider the recommendation of the establishment of an Industry Specific RAS, which will assist the industry restructuring by allowing a combination of grants and interest subsidised loans to farmers. The scheme would provide the necessary funding to allow farmers exiting the tobacco industry to re-establish themselves in agriculture via alternate crops. (Sub. 29, p. 19)

As interest rate subsidies and grants are available under the existing RAS, the implication is that there is a request by growers for an easing of the eligibility criteria to improve their ability to access assistance available under the RAS. Apart from the above, no information was provided as to the precise form or nature an industry specific RAS would need to take in order to address the adjustment needs of the industry, nor were convincing grounds presented as to why special consideration should be given to tobacco growers above members of other industries facing adjustment pressures.

The case for an easing of the RAS eligibility criteria specifically for tobacco growers to overcome factors impeding adjustment is weak. While several impediments to adjustment have been identified many of these arose as indirect results of the TISP and the Local Leaf Content Scheme (LLCS) rather than as a result of market failure. In the long term the removal of the marketing arrangements will remove the circumstances which previously discouraged the development of larger farm size, marketing skills and competitiveness. The tobacco growing industry has benefited from a highly protected and regulated market for 30 years, whilst other agricultural and manufacturing industries have been exposed to diminishing levels of assistance, market shocks and international competition. Given the support which the tobacco industry has received relative to other industries, and the advance notification that the TISP would not be renewed, additional concessions for tobacco growers are difficult to justify.

Essentially, access to finance for tobacco growers should continue to be based on the assessment of commercial lending institutions. While tobacco growers may have difficulty accessing finance for diversification, the same situation applies to any investor seeking finance who has limited security to offer and/or a limited ability to demonstrate long term viability. However, as certainty in the tobacco industry is restored (with the removal of expectations on buyouts, the establishment of new marketing procedures and improved capacity utilisation) the ability of growers to access commercial finance, and hence interest rate subsidies through RAS, should also improve.

Many tobacco growers are unable to obtain assistance under the RAS because they either fail to meet the assets test or cannot demonstrate long-term viability. This does not provide a basis to change the RAS eligibility criteria specifically for tobacco growers.

Currently a Senate Standing Committee is reviewing the adequacy of the RAS and is due to report in October 1994. The recently released White Paper (Keating 1994, p. 171) announced that the RAS was being reviewed to 'ensure better linkages to other Commonwealth, State and Territory farm improvement programs including the agribusiness and Landcare programs'. In addition to this a tailored RAS will be considered, as required, to address structural adjustment in specific regions (see Section 8.2.4).

8.2.2 Tobacco specific assistance

In December 1993, a Tobacco Working Group was established in response to calls from the industry for State and Commonwealth Government co-operation to consider ways to assist the industry during its transition to a deregulated market. The Group, comprising Commonwealth and State Government representatives and grower representatives from each tobacco growing State, was established to:

> ... report on the immediate adjustment needs of the industry, primarily into alternative crops but also including remaining tobacco growers. This required an examination of the adequacy of existing assistance measures, such as RAS and Commonwealth and State Government agribusiness programs, to assist growers adjust to the changing economic conditions facing the industry. (Tobacco Working Group 1994, p. 4)

The Group's report, entitled 'Adjustment Options for Tobacco Growers', was released in March 1994. The main recommendations arising from the report included:

- Commonwealth support for a targeted program of research and development and market analysis — suggesting funding of $9 million over five years;
- RAS Advisory Council investigation of the applicability of RAS to industries in decline; and
- modifications to RAS to:
  - enhance interest rate subsidies to tobacco growers who will remain viable in the future; and
  - give special consideration for tobacco growers trying to access productivity improvement interest rate subsidies to help meet establishment costs of alternative crops.

The Working Group's Report was presented at the Agricultural and Resource Management Council of Australia and New Zealand (ARMCANZ) meeting in April 1994, at which the Council recommended that the Commonwealth and relevant State Governments 'give detailed consideration to the report' and inform the Council of actions taken in response to the report's recommendations.

8.2.3 Business assistance and marketing programs

The Department of Primary Industries and Energy (in conjunction with relevant State Government agencies) manages a series of Commonwealth and State Government Business Assistance and Marketing Programs targeted at enterprises or groups involved in the production, processing, marketing and/or distribution of Australia's agricultural, timber and fishing industries. The programs fall into four sections:

- marketing and export assistance;
- financial support for business planning and development;
- sources of business advice, information and referral; and
- other programs relevant to rural business and industry.

The range of programs available primarily focuses on off-farm industry development and marketing, rather than RAS-type programs which focus on on-farm support and assistance. Examples include the Business Advice for Rural Areas Program which provides grants to community groups to facilitate business development and diversification in rural areas, and the Agribusiness Programs which assist agribusiness enterprises and producer groups to access professional and consultancy services.

8.2.4 General support and adjustment programs

There is a range of general State and Commonwealth Government programs directed towards facilitating adjustment through the provision of assistance. While most focus on labour market adjustment, some programs are specifically directed towards rural industries and regional development. Appendix P provides a brief summary of these programs.

General labour market programs undertaken by the Commonwealth Government are administered through the Department of Employment, Education and Training (DEET) as part of its Employment Program. Components of the program include Employment Access, Labour Adjustment Assistance, Aboriginal Training and Employment Assistance and Employment Services. These programs provide wage subsidies, training assistance and community-based initiatives, which may often be supplemented with income support available through the Department of Social Security (DSS), for example, the Job Search and Newstart Allowances.

While the majority of programs are targeted at individuals experiencing hardship, the regional concentration of such individuals, as is the case with tobacco growers, will have a significant impact on assisting the regional economy through the adjustment period. In addition to the impact of programs targeting individuals, various Commonwealth programs specifically incorporate a regional focus, for example, the Business Advice for Rural Areas program and the regionally-based assistance and industry labour adjustment packages available through the Office of Labour Market Adjustment (OLMA). Both Mareeba-Dimbulah and Myrtleford are located within regions currently designated for regional assistance available through OLMA (within DEET). The OLMA programs are targeted towards regions with above-average unemployment and job losses. In the future further Commonwealth and State funding for regional development may be facilitated through a regional RAS, an example of which is provided in Box 8.1.

Box 8.1: **Regional RAS**

‘The Sunraysia involves 3400 properties on 35 000 hectares of irrigated land currently producing horticultural products worth $200m per year. By means of an integrated strategy involving water supply and drainage infrastructure, land consolidation and rural adjustment, the Sunraysia has the potential to repair major salinity damage, raise productivity to the extent of doubling its current contribution to gross domestic product in the next fifteen years, and invigorate its community.

Rural adjustment in the Sunraysia will involve the Commonwealth in tailoring RAS funds to the specific needs of the region - *a precedent the Commonwealth is prepared to extend to other regions with plans of equal calibre*. The Commonwealth will also contribute $850 000 to capital works in 1994–95, 1995–96 and 1996–97, and has approached the Victorian Government to make a matching contribution for the proposal.’

Source: Keating 1994, p. 175.

The impediments to adjustment identified in Chapter 7 do not warrant the provision of assistance beyond that which is already available for adjustment purposes. Commonwealth and State Government programs currently available and/or already in place, together with the phased tariff reduction proposed by the Commission, have the capacity to address the long-term adjustment needs of tobacco growers.

Replacing the TISP and LLCS with tariff-only assistance will allow growers and tobacco product manufacturers to respond more appropriately to the requirements of the market. It will also facilitate more timely adjustment to changing circumstances.

8.3 Regional initiatives

The Mareeba-Dimbulah tobacco growing industry comprised 344 tobacco quota holders in early 1994, representing 296 farming enterprises (Mareeba Shire Council, Sub. 49, p. 22). In recent years, the closure of the local meat works and rainforest timber-milling industry (in addition to the recessed economy) have been important factors in giving rise to the current official regional unemployment level of approximately 13 per cent[1]. These events have placed considerable stress on the community and available welfare services.

The Victorian tobacco growing industry, concentrated in the Myrtleford region, was made up of 212 quota holders in 1993. They crop an area of just over 1800 hectares and are mostly specialist tobacco growers.

For both regions, the fall in revenue from the sale of tobacco leaf in 1994 is substantial. However, reference to sales revenue data as an indicator of the potential long-term regional effects of the decline in tobacco output overstates the situation and can be misleading. As explained above, 1994 was an abnormal year in that demand for leaf was depressed primarily by adjustment of manufacturers' stockholdings, rather than reduced consumption in that year. In effect, the additional revenue received in earlier years, when sales exceeded consumption and manufacturers built up their stockholdings, has over-emphasised the size of the decline and to some extent should be offset against that decline.

Furthermore, the decline in revenue from tobacco growing is not fully translated into an equal decline in regional income. Much of the revenue from tobacco sales leaves the regions in the form of payments for insurance, fuel, chemicals, fertilisers and other inputs.

In New South Wales, the growing industry is geographically dispersed and comprised only 25 growers in 1993. As such, while these growers will experience a proportional decline in income equivalent to growers in the major production regions, the adjustment in New South Wales will mainly impact at the individual grower level, rather than at the regional level.

The New South Wales Government is not optimistic about the future for New South Wales growers. They stated:

> The poor quality of NSW-grown tobacco relative to other states and the significant transfers of quota out of NSW since 1985 (when restricted quota trade was first allowed) reflect the comparative disadvantage NSW has in tobacco production. It is

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1 The Mareeba Shire Council (Sub. 49, p. 5) reported that prior to a recent redefinition of the Mareeba Shire statistical area (by DEET), the Shire's official unemployment rate was over 20 per cent — one of the highest unemployment rates in Queensland.

> unlikely that tobacco leaf production in NSW will continue to any significant extent, irrespective of the number of growers in the Australian industry. (Sub. 84, p. 3)

The Commission understands that at a recent Brisbane tobacco leaf sale (24 May), the average price paid for New South Wales leaf was less than $5.00 per kilogram. This compares with an average of around $6.00 per kilogram for leaf sold in other centres by Queensland and Victorian growers and tends to reinforce a pessimistic outlook for most New South Wales growers.

8.3.1 Myrtleford

In addition to advisory services associated with the quota retirement scheme, there are other services available to advise tobacco growers in the Myrtleford region and assist them in coping with the adjustment challenge they face.

The Savoy Club (a community-based organisation in Myrtleford) obtained a grant from the Department of Immigration and Ethnic Affairs for the appointment of two Ethnic Welfare Workers — one based at the Community Health Centre and one (Rural Ethnic Access Worker) based at the Savoy Club. The function of the Ethnic Welfare Workers is to provide assistance to rural producers disadvantaged by language difficulties by liaising between these growers, government agencies and community providers. Increasingly the services of these workers have been directed towards assisting tobacco growers to understand the nature of the industry adjustment required and options for their future. Many have been referred to the services of the DSS and various health professionals. Essentially, the extensive work undertaken by the Ethnic Welfare Workers is helping to improve information flows for addressing the social and financial needs of tobacco growers in the region.

In May 1993, a community seminar entitled ‘Coping with Crisis’ was held. The objective of the seminar was to discuss how to manage and minimise the impact of the decline in the tobacco industry by bringing together representatives from relevant business and service industries, government agencies and concerned community groups. The seminar was organised by the Department of Agriculture of Victoria (DAV), North East Agcare and Myrtleford Shire Council, and included discussion of:

- the background to the industry problems;
- a case study on rural adjustment in the dairy industry;
- the services offered by lead agencies (including RFC, DSS, North East Agcare, Rural Ethnic Access programs); and
- stress management in rural communities.

Box 8.2: **Developments in alternative crops, Myrtleford**

Asparagus

A series of meetings discussing the potential for asparagus production was organised by a working group comprising the Victorian Department of Agriculture, Tobacco Growers of Victoria and the Savoy Ethnic Access worker. The discussions covered asparagus production requirements, future opportunities for SPC [Shepparton Preserving Company] to source asparagus from NE river valleys, an address by a successful asparagus producer from Lindenow and the opportunities for financing (discussed by the Rural Finance Corporation). Arising from these meetings, supply contracts form SPC were offered and the Asparagus Steering Committee was formed. In the 1993–94 season, 20 hectares of asparagus were planted — planted are expected to increase in the 1994-95 season..

Wine grapes

As a result of interest by major wine producers, a series of seminars and planning meetings to discuss the potential to produce high value cool climate wines in the NE river valleys was organised by a working group consisting of the original asparagus working group and the Wangaratta Regional Development Corporation (WRDC) and Bright REV facilitator. The seminar agenda included discussions on the production requirements and opportunities for financing (as with the asparagus seminars), Penfold representatives discussing market opportunities and an analysis of costs and returns by a representative of Steven Lynch and Associates.

As a result of the seminars more than fifty potential growers sought follow up advice from DAV and the Ovens Valley Wine Grape Growers Association, comprising 45 members, was formed. Plantings in the 1993–94 season were limited by availability of root stock and only 20 hectares was planted. However, over the next two years an additional 100 hectares of wine grape plantings are expected.

High value annual row crops

In late 1993 a workshop to discuss and evaluate potential high value crops suited to the region was organised by the DAV, TGV and the WRDC. In particular the WRDC has provided funding for a marketing consultant. Following on from the workshop, a group of 12 growers established various demonstration plots of high value row crops chosen in consultation the consultant, based on suitability to the area, seasonal supply and potential market opportunities.

The five crops initially selected were broccoli, cauliflower, leek, radicchio and rockmelon. Harvesting and marketing of initial plantings of broccoli, cauliflower and radicchio have been completed with the results above expectation. In relation to broccoli and cauliflower, potential producers were able to produce and harvest high quality produce at a time when market supply was scarce and demand and price high. This success has created enthusiasm on the part of participating growers and increased interest from others wishing to become involved.

Participating growers have been meeting on a monthly basis and have formed the Ovens Region Produce Group (ORPG). They have developed a mission statement and a set of goals and objectives which emphasise development through a cooperative regional approach. Through the consultant, the ORPG has been exposed to a major wholesaler (Costa’s) and major retailer (Coles) who visited the area in May and addressed an expanded group of potential growers.

In addition to the above developments, the Ovens Region Horticulture Network was formed in early 1994. This organisation aims to establish and maintain an information network between all agencies (primarily the DAV, TGV, the rural ethnic access worker and the WRDC) and grower groups to pursue a collateral approach towards regional horticultural development.

Source: Ovens Research Station (Sub. 68, p. 14).

The establishment of the Women in Tobacco Farming group was one outcome of the ‘Coping with Crisis’ seminar. This group has drawn attention to the social impact and hardships associated with the adjustment currently taking place in the tobacco industry.

In addition to the abovementioned initiatives, several organisations representing growers from alternative activities have been established with the assistance of the DAV, the Wangaratta Regional Development Corporation (WRDC) and the TGV (see Box 8.2).

In 1991, the North East Agcare Committee was formed by members of local community organisations in response to the rural downturn and the growing need for a rural counselling service for the communities in North East Victoria. Funding for the counselling service was obtained from several sources: DPIE, DAV, local shires (Violet Town, Benalla, Wangaratta, Yarrawonga and Rutherglen) and community groups and businesses across the region. Through arrangements made by the TLMB, growers were able to access free financial advice from North East Agcare (as described earlier) or alternatively be reimbursed up to $200 if advice was sought from other farm financial advisers. Funding for this was obtained through DPIE.

8.3.2 Mareeba-Dimbulah

In contrast to the Myrtleford region experience where efforts from the local community have led to increased co-ordination between bodies such as DAV, WRDC, the Savoy Club and TGV, in north Queensland the main action being taken to assist adjustment has been instigated by the Queensland Government.

In 1993, the Queensland Government initiated a program focusing on structural adjustment and development of the Atherton Tablelands region, which includes the Mareeba Shire. The program has been given priority consideration by the Queensland Government due to three main factors:

- the decline in the tobacco industry ... ;
- the opportunities which exist to develop the resources on the Atherton Tablelands; and
- the opportunities which exist to improve water utilisation. (Queensland Government, Sub. 47, p. 23)

The program, referred to as the Atherton Tablelands Structural Adjustment and Development Project, comprises three strategies:

- Primary Industry Development Strategy:
  - (i) facilitate the establishment of a Primary Industry Development Council (PIDC) for the Atherton Tablelands;

(ii) co-ordinate, implement and monitor actions relevant for the industry strategic plans and regional strategic plans;

(iii) appoint a departmental Agtrade Officer to assist producers and industries to identify market opportunities;

(iv) seek financial contributions from industry to augment the research and operating costs of identifying market opportunities; and

(v) identify, research and promote commodities and products that are viable alternatives for replacing tobacco on the Tablelands.

- Strategy to review the Tablelands' physical infrastructure:

  (i) implement the priorities resulting from the state-wide review of water charges which is currently being undertaken. This review includes the Mareeba-Dimbulah Irrigation Area (MDIA). A review of allocations for producers in the MDIA is also currently in progress;

  (ii) assist producers in the MDIA to utilise existing schemes to restructure farm sizes and increase their capacity to expand into other forms of cropping; and

  (iii) complete the feasibility study on the potential for expansion of utilised areas of the MDIA.

- Social Support Strategy:

  (i) establish a Reference Group in Mareeba to advise on social issues and training needs of the communities affected by the restructure of the industry;

  (ii) employ a community based worker to implement the responses developed by the Reference Group and report to that Reference Group; and

  (iii) improve the effectiveness of the delivery of social support services by more effectively utilising existing resources. (Queensland Government, Sub. 47, pp. 24–26)

Elements of the three strategies of the Atherton Tablelands Structural Adjustment and Development Project are discussed below.

Primary Industry Development Strategy

Implementation of the Primary Industry Development Strategy is underway with the appointment of an Agtrade Officer, 'responsible for the market research to establish potential market opportunities for existing industries, such as mangoes and avocados and identification of new product opportunities (Queensland Government, Sub. 47, p. 24), and the provision of funding for secretarial services, for the first year, to assist the establishment of the Primary Industry Development Council.

In pursuit of objective (v) of the Primary Industry Development Strategy, the 'Choices' project has been developed. 'Choices' is a four-year project which aims to overcome the barriers to product development and diversification.

Instead of investigating alternative crops which can be grown in the region, emphasis is placed on identifying those crops which can be economically marketed from the region. Therefore, both new and traditional crops are to be considered with specific regard to expanding existing markets and seeking new ones, particularly overseas.

The 'Choices' program comprises a series of fourteen seminars presenting agronomic and technical information as well as detailed financial and marketing research on new product opportunities. In co-ordination with the seminars, demonstration sites have been established on various farms with assistance from the Queensland Department of Primary Industries (QDPI), and a communication strategy has been developed to ensure the continued provision of information to growers and potential growers (see Box 8.3).

Review of the Tablelands' physical infrastructure

The strategy to review the Tablelands' physical infrastructure, in particular objective (ii), is being addressed by a committee whose function is to identify farms suitable for amalgamation for the production of sugar cane and crops such as peanuts and navy beans (Queensland Government, Sub. 47, p. 27). The financial viability of amalgamation is also a consideration of the committee.

In association with the issue of farm amalgamation in the Mareeba-Dimbulah Irrigation Area (MDIA), the Queensland Government stated that:

> DPI [Queensland Department of Primary Industries] is currently undertaking a statewide review of water charges which will consider the needs of producers in the MDIA. In addition, a review of water allocation in the MDIA is underway. This will become an important issue as some farms are likely to amalgamate and allocations will need to be flexible enough to accommodate the new crops and reduce numbers of producers. (Sub. 47, p. 25)

The QDPI recognises the need for restructuring of farm sizes within the MDIA in order to expand the options available for broadacre cropping, and appears to be considering the opportunity for this with respect to the current review of water pricing and allocation methods. It is unclear as to whether this will include modification to planning regulations within the MDIA which relate to farm subdivision. The Commission understands that Shire Councils are obliged to incorporate State policies in their local planning schemes.

Social support strategy

In a submission to this inquiry the Queensland Government (Sub. 47) commented that the social support services available in the Tableland communities are under-resourced and inadequately co-ordinated, a problem which is likely to increase as adjustment towards a deregulated market takes place. The objectives of the social support strategy (described previously), as a component of the Atherton Tablelands Structural Adjustment and Development Project, were devised to address this problem.

A further initiative undertaken by the Queensland Government, but separate to the Atherton Tablelands Structural Adjustment and Development Project, was the establishment of a Steering Committee in 1992 to investigate the feasibility of establishing an export market for Queensland tobacco leaf.

Box 8.3: **Developments in alternative crops, Mareeba**

'The "Choices" program is the main initiative currently being undertaken to assist with the development of alternative crops in the Mareeba-Dimbulah region. The framework of the program, which is applied to alternative crops considered to have a production or marketing advantage in the region, is outlined below. To date the alternatives presented within the "Choices' program are table grapes, stonefruit, field crops (such as navy beans, peanuts, sugarcane, hay) and redclaw crayfish.

Community Consultation
Community consultation will be completed in March 1994.
Community consultation will be undertaken to identify individual clients needs for assistance with the process of evaluating and exploiting new product opportunities. The consultation will target existing growers, potential growers, agribusiness and financial backers.

Community consultation will be used to improve project delivery to clients who with diverse ethnic and educational backgrounds have unique information and information delivery requirements. Individual clients also have extensive experience in crop diversification and detailing their strategies to evaluate alternate products will assist the implementation of the project. Community consultation, in particular a Strengths, Weaknesses, Opportunities, Threats (SWOT) analysis and search workshop, will directly influence strategies for market research. The process will also identify client's future training needs in the marketing, business and financial skills areas.

Seminar Series
Six seminars will be held by June 1994 and a further eight during the project as new opportunities are recognised.
To meet the immediate needs and expectations of clients, a seminar series on potential products will be held during the first six months of the project. Six potential products have been identified and one-day seminars on each product will detail likely production systems, market requirements and systems, economics and crop requirements. The results of initial market studies and economic feasibility will be presented and crop specialists from Queensland and interstate will detail likely production, handling and marketing systems.

Market Research
Initial market research will be completed March 1994
Market opportunities and directions for new products and market development for the Atherton Tablelands will be established in two stages. Initially existing market opportunity data will be assembled and presented at the Choices seminar series. Detailed market research will be assembled using Strengths, Weaknesses, Opportunities, Threats (SWOT) analysis, the use of expert panels, desk studies and field marketing research.'

continued

The basic finding of the Tobacco 2000: Steering Committee (1993), was that although there is a market for Queensland leaf overseas, leaf prices would have to be comparable with international prices. Despite the findings of the report, the Queensland Government observed that:

> At the time the report was presented, it was envisaged that at least a trial shipment of leaf to a target market in South East Asia might eventuate and the TLMB appointed a recognised international leaf brokerage firm as an agent in that regard. Unfortunately, to date, no export sales have eventuated. (Sub. 47, p. 28)

Box 8.3: continued

'In the second stage, initiatives to develop new opportunities and products will be supported by facilitation of producer and industry groups to exploit opportunities identified. Test marketing and development of quality management systems will be undertaken. The focus of marketing research will be export.

Demonstration Sites
Six sites will be established by June 1994 and all sites by December 1994.
Preferred production, handling and marketing systems for potential products will be tested and demonstrated at a series of demonstration sites. The project will provide some financial support for the establishment of demonstration sites on cooperators properties. It will provide on-going technical support for crop management and continuing agronomic, market and economic assessment of product viability. Diversifying tobacco growers with a high degree of management expertise and community support will be targeted for support.

Demonstration sites/farms have proved to be the most successful techniques for crop evaluation and information dissemination in this region. Demonstration sites have been used as part of the development of rice, tobacco and coffee industries.

The products chosen for demonstration have been selected because of an established production or marketing advantage. Products used in demonstration sites will include grapes (2 sites), stonefruit (2 sites), mandarins (2 sites), lady finger bananas (2 sites), green eating mangoes (2 sites), red claw crayfish (1 site), Tableland coffee (2 sites), red flesh grapefruit (1 site), and tea tree (1 site). Some sites will also have research and development components where some of the assumptions of the production systems will be tested. Sugar beet will be tested on three sites to determine likely profitability.

Communication Strategies
The seminar series and market research will be supported by an active communication strategy. seminar notes and background material will be further developed into information packages to be available from district centres and agribusiness. A project newsletter (3 editions each year) will target existing growers and potential clients with timely information about the project, new crop information and results of marketing studies. Press releases will advertise project activities and highlights. Crop discussion groups will be formed around demonstration sites to disseminate strategic agronomic information.

Project Evaluation
The client consultation group will be used in project evaluation. Changes in crop diversification and farm profitability will be detailed. In particular changes to client needs and knowledge of product alternative will be determined. This analysis will be undertaken in December 1994 and at the project's completion.'

Source: Queensland Government, Sub. 47, Appendix E.

In summary, programs directed towards regional development, organised by both the local communities, industry organisations and governments, will play an important part in restoring a positive level of economic growth to the major tobacco growing regions.

The issue of regional adjustment appears to be more of a problem in Mareeba-Dimbulah than Myrtleford. In Victoria, the wine grape industry is growing, interest has been expressed by Shepparton Preserving Company (SPC) to supply vegetables for canning from the region and market opportunities for various row crops are developing. In the Mareeba region, particularly around Dimbulah, soil types and the nature of resources available appear not to be as flexible as in the Myrtleford region, although considerable diversification by tobacco growers appears to have taken place.

The regional dimension of the adjustment task requires, and is receiving, immediate attention. In the Myrtleford region, local community-based initiatives have been prominent, whereas in the Mareeba-Dimbulah region, the Queensland Government has been responsible for the development of a co-ordinated program to facilitate regional adjustment.

In both regions there is a need for emphasis to be placed on the co-ordination of existing programs and schemes by local councils, the community generally, and regional development boards and other government organisations to ensure that such programs are effectively accessed and utilised.

9 FUTURE ASSISTANCE ARRANGEMENTS

9.1 Introduction

The inquiry occurs at a time when the environment in which tobacco products are marketed and consumed is changing significantly, as is the nature of government involvement in the tobacco growing and manufacturing industries. Central to this involvement is the complex regulatory regime relating to the growing and marketing of tobacco leaf. The future assistance arrangements for cigarettes and other tobacco products are also highly relevant, as are the impacts of taxation and health policies pertaining to smoking.

For much of the past 30 years, tobacco growing has been a highly assisted domestic-oriented industry. In each of the last four years, the effective rate of assistance afforded growing was greater than 100 per cent. This compares to average effective rates of assistance in 1991–92 of 12 per cent for all agricultural industries and 8 per cent for the manufacturing sector.

Tobacco growing is now in decline, with domestic consumption of local leaf down some 13 per cent since 1990–91. Further, the industry has little export potential, at least in the foreseeable future. Government support for the leaf growing industry has not only been maintained at a time when domestic demand has declined, but it has also been maintained against the general flow of industry policy, which has reduced levels of assistance to Australian industry generally. Assistance to leaf production has distorted tobacco consumption patterns somewhat but this has been overshadowed by the taxes imposed on tobacco products. However, some minor production distortions remain due to governments' past encouragement of resources into tobacco growing.

Given this background, this chapter initially considers the future of the industry and reviews the form of future assistance. It then examines the question of what constitutes appropriate initial (ie 'changeover') tariffs for these industries on termination of the Tobacco Industry Stabilisation Plan (TISP) and the Local Leaf Content Scheme (LLCS). Finally, the target long-term rates and how to get to those rates are discussed.

9.2 Future of the industry

Much tobacco growing is labour intensive and as such, leaf production is generally more suited to low labour cost countries. In Australia, tobacco growing is one of the last highly-assisted labour intensive industries still operating.

Many growers wanted governments to clearly indicate whether or not they want a tobacco industry in Australia, so as to remove any further uncertainty and encourage appropriate adjustment. Whether the industry survives, or how much it reduces in size, is not for governments to determine. Total annual tobacco consumption, which has fallen by about 17 per cent since 1980, is expected to continue to decline in Australia for some time yet. However, once the reduction in smoking participation rates begins to ease — and eventually settles at some as yet unknown lower limit of smokers who will continue to smoke regardless of price or health considerations — population growth is expected to have a countervailing impact on consumption trends. Therefore, demand for tobacco products will continue in Australia, albeit at a lower level than at present. The tobacco growing industry needs to adjust to this situation.

At least for the foreseeable future, export prospects for tobacco leaf are recognised as being very poor — that is, unless world supply changes dramatically. Further, there is no strong evidence that significant new markets exist for the export of manufactured products.

9.3 Form of future assistance

While the terms of reference specifically asked the Commission to recommend an appropriate tariff(s) for imported tobacco leaf and products, a number of growers and manufacturers sought implementation of alternative forms of assistance, such as: continuation of the stabilisation arrangements and local content schemes; bounty assistance; and contractual arrangements under either a zero tariff or a tariff-quota. These proposals are discussed below.

9.3.1 Continuation of stabilisation arrangements

A number of participants argued that the stabilisation and local content schemes, which have provided growers (each year) with a guaranteed market for their quota leaf at a pre-sale determined price, have served the tobacco growing industry well and given it the certainty that did not exist prior to the 1965 TISP. They therefore sought continuation of the schemes. Some even argued for an increase in the existing percentage usage requirement on the grounds that the local growing industry should not be asked to compete against the low wage conditions and currency devaluations of the tobacco producing developing countries, such as Zimbabwe, Malawi and Brazil. Others argued that if manufacture continues in Australia then, on ‘Buy Australian’ grounds, 100 per cent Australian leaf should be used.

The Commission has identified many inefficient aspects of the Tobacco Industry Stabilisation Plans and the Local Leaf Content Schemes. In particular, these schemes have, over the years, provided tobacco growers with high levels of assistance and have effectively insulated them from international competition.

With Australia being a signatory to the recent General Agreement on Tariffs and Trade (GATT) on the ‘tariffication’ of all non-tariff barriers (see Chapter 10), a local content scheme is not a future option. Besides, the Commonwealth Government had already announced its intention to withdraw its support for the existing LLCS and TISP schemes on 30 September 1995 and the State Governments are progressively dismantling or changing the nature of their respective Tobacco Leaf Marketing Boards. Continuation of something akin to the current arrangements would not, in any case, avoid the adjustment problems currently facing the industry. Moreover, there is a wide consensus among grower organisations that any further delay in necessary restructuring would be detrimental to the industry’s future.

9.3.2 Bounty assistance

In its initial submission, Rothmans (Sub. 39, p. 27) argued that if the Commission decided to recommend a ‘changeover’ tariff greater than zero for the tobacco growing industry, then the quantum recommended should be provided by way of a bounty. Bounties are the preferred form of assistance when there is a concern that a tariff would place too great a burden on the users of the product. However, the Commission considers that this is unlikely to be the case with tobacco leaf or products as users have been paying a penalty on their tobacco consumption for many years and despite the high cost of leaf, manufacturers have supplied virtually all of the local market. As the level of assistance provided to tobacco growing declines, there is even less justification for a bounty on domestic leaf.

9.3.3 Zero tariff combined with long-term contracts

At the draft report hearing, Philip Morris proposed a zero tariff for all tobacco leaf and products, coupled with long-term commercial contracts intended to provide some effective changeover protection to growers. The company indicated that these contracts would specify the extent of premium (over the previous year's import substitution prices) to be paid for the value of local supply to manufacturers. This value, it said, might be negotiated at around 10 per cent.

Philip Morris claimed that its strategic alliance proposal would 'deliver roughly the same answer ... [as] ... the proposal for a 25 per cent tariff'. With respect to this proposal, the Queensland Government said:

> Since release of the draft report, the tobacco manufacturers have sought support from the tobacco growers for a 'zero tariff', coupled with some form of short to medium-term contractual commitment for a 'premium' to be paid for Australian leaf over and above import parity. The Queensland Government could not support such an approach, or indeed any other arrangements in lieu of a tariff, unless it was fully compatible with the Commonwealth's *Trade Practices Act* and made all relevant parties subject to the normal rights, obligations and remedies provided for under contract law. (Sub. 80, p. 1)

The Commission shares the Queensland Government's concerns over the efficacy of any arrangement which would require a commercial consensus between growers and manufacturers about the quantity of leaf to be purchased, and the price premium to be paid for local leaf, in return for concessional entry (duty free) for imports. In concept, the proposal differs little from the discredited TISP and LLCS.

Rothmans also proposed a scheme which would involve contractual arrangements with growers, would require Commonwealth Government collaboration, and which would virtually replicate the TISP and LLCS. At the draft report hearings and in a subsequent submission, Rothmans requested (Sub. 79, p. 5) that a tariff-quota arrangement be implemented along the lines of the GATT proposal (see Chapter 10) and, at the same time, that appropriate contractual arrangements be negotiated which circumvent the immediate substantial increase in imports implied under the GATT scheme. The company proposed that:

> ... the three manufacturers, in collaboration with the Federal Government, take up all the quota ...[ie 11.184 mkg]... but use only enough of the quota such that a specified proportion of manufacturer's leaf requirements (say 50 per cent) are sourced from overseas. (Sub. 79, p 5)

While it would mean that no cost impost would be placed on the manufacturers, the Rothmans proposal effectively asks the Commission to endorse an arrangement which requires: collaboration between the three manufacturers; collaboration between manufacturers and growers; agreement for a 50 per cent local content scheme; and collaboration between manufacturers and the Commonwealth Government in order to circumvent the GATT tariff-quota agreement.

The Commission could not support such a proposal.

9.3.4 Tariffs

The terms of reference for this inquiry specifically ask the Commission to report on the appropriate tariff level(s) that should apply to imports of tobacco leaf and manufactured tobacco products following deregulation of the growing industry. The major grower organisations and the TLMBs all indicated broad acceptance of a tariff as the appropriate form for future assistance. All three local manufacturers agreed that the tariff is the appropriate long-term instrument for both industries, but they did not support (unlike at previous inquiries) the level of assistance being sought by growers (see Section 9.4) nor, in some instances, the form of short-term assistance. Organisations promoting health objectives also concurred with the tariff approach, although there was no consensus as to the level at which the tariff should be set in order to achieve their objectives.

Compared to the incentives and distortions apparent under the existing assistance arrangements (as discussed in Chapter 4), a phased tariff for leaf will encourage growers to:

- restructure efficiently in a more market-oriented environment;
- produce leaf that meets buyers’ leaf type and grade/quality requirements;
- produce leaf which has the least local price disadvantage;
- seek higher returns for quality leaf;
- seek the formation of contractual/strategic alliances with one or more of the local manufacturers; and
- compete to a greater extent with each other.

In light of the above, the main question for resolve in this inquiry is: what constitutes an ‘appropriate’ tariff?

9.4 Appropriate tariffs

The Commission has interpreted its main task as to recommend the appropriate ‘changeover’ tariffs to apply to imported tobacco leaf and manufactured tobacco products on deregulation of the tobacco growing industry, and then to consider the pace at which to phase these tariffs, where necessary, down to the appropriate long-term rate.

9.4.1 ‘Changeover’ tariffs

Participants’ views differed as to what might constitute an appropriate ‘changeover’ tariff to be applied to tobacco leaf imports. At one extreme, growers favoured the maximum level of 30 per cent which, at the time, they understood had been effectively set by the GATT undertaking. This figure, which is the maximum penalty tariff that can be applied to above-quota leaf imports, was calculated by the Department of Foreign Affairs and Trade (DFAT) to be the average (of the average) price gap between domestic and imported leaf over the years, 1986 to 1989 (see Chapter 10, Section 10.4). At the other extreme, the three local manufacturers sought a zero tariff immediately as their preferred option. They were interested principally in having the freedom to source their tobacco leaf on a price/quality competitive basis as soon as possible.

At the draft report hearings the three manufacturers confirmed their preference for a zero changeover tariff, and growers reiterated their 30 per cent changeover tariff request. Nevertheless, a wide range of alternatives was also canvassed at the hearings and in subsequent submissions.

Between the above extremes lies a number of other interpretations of what might broadly constitute ‘appropriate’ tariff assistance for leaf.

For instance, a tariff that adequately accounts for all efficiency concerns was considered by some to be most appropriate. Such a tariff would balance productive as well as allocative efficiency factors, and thus encourage efficient growers to stay in the industry, yet not overly prolong the subsequent removal of any preferential treatment afforded this industry. For example, Wills (Sub. 61, p. i) argued that, if a non-zero tariff was deemed appropriate by the Commission, then any rate above 15 per cent may encourage growers who should depart the industry to continue growing. However, the Commission considers that any efficiency concerns associated with future tobacco assistance are likely to be relatively minor. For example, any productivity gains are unlikely to be passed on to consumers in the form of lower prices due to the overriding health/revenue-raising concerns of governments. In terms of allocative efficiency, resource allocation distortions in a declining industry are unlikely to be significant. For instance, conversion to a high tariff is unlikely to attract resources into tobacco growing due to the existence, at present, of significant excess capacity in the industry. Further, it is the Commission’s understanding that efficient growers of good quality leaf would continue to generate a reasonable return on funds employed under an initial tariff as low as 15 per cent.

The Commission’s preferred measure in this instance is to seek implementation of a tariff which is based on an appropriately adjusted average price disadvantage for domestic leaf, as calculated for the four-year period, 1989–90 to 1992–93.

On the basis of detailed information obtained from each manufacturer on import substitution prices across all grades, the Commission has calculated the average price disadvantage for domestic leaf to be about 38 per cent for the years, 1990 to 1993. Theoretically, this figure implies that if the tariff were to be set at 39 per cent, then all leaf purchased would be of domestic origin, while if set at 37 per cent then manufacturers would seek to import all their supplies. Of course, such a literal interpretation can be quite misleading, as not only does this figure reflect a range of averages across growers, leaf categories and by grade fall-out, but many countervailing factors must also be given due weight.

The estimate takes no account of any premium local manufacturers might give to the purchase of local leaf — at the draft report hearings, Philip Morris suggested that the value of the local leaf industry to them might be ‘negotiated’ at around 10 per cent — nor of any potential on-farm productivity gains. Furthermore, the figure was calculated using peak land values and thus, in the absence of appropriate on-farm asset revaluations, it is not truly reflective of growers’ current competitiveness. Rothmans (Sub. 64, p. 5) claimed that if a tariff approach is used, a rate of 20 per cent, which more closely reflects the price disadvantage likely to exist in 1995, would be more appropriate.

Most importantly, the impacts of higher or lower leaf tariffs on manufacturers’ costs and thus on their future corporate strategies need to be considered. At present, manufacturers can, of course, choose not to use the local content scheme and thus bring in any part or all their leaf requirements under a tariff of 15 per cent (or $1.42 per kilogram, whichever is lower). However, the average cost (in tariff equivalent terms) to tobacco leaf buyers of all current assistance arrangements over the four-year period to 1992–93, was estimated to be about 23 per cent.

All three local manufacturers are subsidiaries of large multinationals which are able to purchase leaf from anywhere in the world and site their manufacturing plants wherever it is conducive for economic or political reasons to do so. Furthermore, local growers are not competitive at current world prices for much of their leaf — nor are they likely to be in the foreseeable future, which effectively limits their market opportunities. Clearly, without the continuing presence of at least one of the existing local tobacco products manufacturers there will be little, if any, prospect of sustaining a local growing industry. Therefore, growers’ immediate and long-term well-being are both firmly in the hands of the manufacturers.

While all local manufacturers gave a long-term commitment (in their submissions) to making cigarettes in Australia, nothing is certain. Dependent on the nature and extent of future assistance arrangements, in a more market-oriented environment the manufacturers have a number of options open to them. They are to:

(a) continue manufacturing in Australia using some local leaf, possibly at a level less than the current 57 per cent;

(b) continue manufacturing in Australia using all imported leaf; or to

(c) import cigarettes (that is, move their manufacturing operations offshore and merely distribute tobacco products).

The exact impact a particular level of tariff on leaf will have on manufacturers' costs, and thus on their future corporate strategies, is difficult to assess. However, the higher the tariff, the higher is the cost impact. Manufacturers were previously paying a very low average tariff of about 4 per cent on their imported leaf inputs. Conversion to a tariff on leaf, of say 30 per cent, could mean an estimated increase in manufacturers' input costs of some $20 million per annum in additional duty payments (this compares to their ex-factory value of output in 1991–92 of about $950 million). At this high level of tariff assistance, it may be that the cost impact would be sufficient to tip the balance in favour of manufacturers importing cigarettes.

All local manufacturers argued that the higher the leaf tariff the more growers' prices will ultimately be squeezed by them, as they seek to at least maintain their average leaf input costs. For instance, Philip Morris claimed that:

> A tariff ... will not support domestic prices. Any tariff over the level applied to the existing level of imports of 43 per cent will be netted against the price paid for the domestic component, as manufacturers seek to at least maintain the input cost of total leaf in aggregate. (Sub. 38, p. 25)

Similarly, Rothmans said that:

> Ultimately, it will be out of domestic leaf prices that manufacturers will seek to compensate for the additional cost on imports. (Sub. 64, p. i)

However, while a more market-oriented (ie tariff-only) environment could be expected to generate the need for productivity gains by all parties, a tariff broadly equivalent to the level of assistance provided by the current arrangements would provide growers with a significant degree of bargaining power — and particularly given manufacturers' claims regarding their inability to change blends (and thus consumers' tastes) for at least two years following deregulation.

Some participants suggested that exchange rate fluctuations should be taken into account when choosing an appropriate leaf tariff. The existence of volatile exchange rate fluctuations in competitor developing countries, at the same time that Australian exchange rates are also changing, means that when converting to a tariff-only regime it would be impossible to be precise in setting a tariff to achieve a particular market outcome. Besides, as exchange rate devaluations are sometimes implemented in developing countries to counter the adverse impacts of high inflation, it is the changes in real exchange rates (that is, inflation adjusted nominal exchange rates) that are, over time, the most relevant to competitiveness.

In conclusion, after appropriately discounting the 38 per cent price disadvantage currently faced (on average) by domestic growers and acknowledging that a higher tariff on leaf will mean that manufacturers will either import cigarettes and/or reduce their prices paid for local leaf, it is the Commission's judgement that, with the exception of unmanufactured leaf imported for use in the manufacture of cigars, cheroots and cigarillos, the 'changeover' tariff on imported tobacco leaf should be set at an *ad valorem* General rate of 25 per cent.

Recommendation 9.1

The Commission recommends that, on termination of the TISP and/or the LLCS, all imported tobacco leaf, with the exception of leaf falling to Tariff items 2401.10.11 and 2401.20.11, be dutiable at an *ad valorem* General tariff rate of 25 per cent.

Recommendation 9.2

The Commission recommends that unmanufactured leaf used in the manufacture of cigars, cheroots or cigarillos (Tariff items 2401.10.11 and 2401.20.11) continue to be dutiable at 'free'.

In regard to tobacco products, Philip Morris argued that if interim assistance is provided to growing, then manufacturing should be provided with an equivalent level of interim assistance as compensation for the increased price of leaf. Increasing tariff assistance, as this request would imply, is not in keeping with the Commonwealth Government's preferred 'tops down' approach to assistance reductions, and besides, the current tariff rates for all tobacco products are now bound under GATT.

On the basis of average unit values for 1992–93, the *ad valorem* equivalent of the specific tariff rate on cigarettes is around 7 per cent and on cigars, cheroots and cigarillos, 3 to 6 per cent, depending on size. Snuff and manufactured cut tobacco are currently subject to an *ad valorem* tariff of 10 per cent. Across all tobacco products, the average *ad valorem* equivalent of this assistance is about 5 per cent. The Commission therefore will recommend that, with the exception of cigars, cheroots and cigarillos falling to Tariff item 2402.10.00 — and without altering in any way the excise component of the Customs duties for these products — the ‘changeover’ General tariff rate for all tobacco product imports be set at an *ad valorem* rate of 5 per cent.

At the draft report hearings, both Stuart Alexander and Philip Morris sought the removal of duty on all cigar products on the grounds that they have not been produced in Australia since 1985 and there is no close substitution between these products and other tobacco products, especially cigarettes. For these reasons and given that the tariff equivalent of current assistance for these products is less than 5 per cent, the Commission will recommend that all cigar products be free of protective duty.

Recommendation 9.3

The Commission recommends that, on termination of the TISP and/or the LLCS, all imported manufactured tobacco products, with the exception of products falling to Tariff item 2402.10.00, be dutiable at an *ad valorem* General tariff rate of 5 per cent.

Recommendation 9.4

The Commission recommends that, on termination of the TISP and/or the LLCS, all cigars, cheroots and cigarillos falling to Tariff item 2402.10.00 be dutiable at ‘free’.

The Commission notes that the Government’s recent decision to phase out the developing country (DC) margin of preference for all but the least developed countries, specifically excluded unmanufactured tobacco due to it being the subject of this inquiry. Accordingly, the Commission makes the following recommendation on this matter.

Recommendation 9.5

The Commission recommends that, where applicable, the DC margin of preference for all tobacco leaf and tobacco products be set 5 percentage points below the General tariff rates recommended to apply on termination of the TISP and/or the LLCS, and that these goods be then included in the general phasing out of DC preference margins.

9.4.2 Long-term assistance

The major grower organisations did not attempt to specify what might be considered an appropriate long-term tariff rate for their industry — they instead sought the deferral of this decision by requesting at the draft report hearings that a further review be undertaken in 1998. Nor did they, or the local manufacturers, seek to make any special case that would warrant the production of either tobacco leaf or products to be treated any differently to most other activities. In this regard, the New South Wales Government said that:

> ... [it saw] ... no reason why the tobacco industry should, in the long term, be afforded any greater protection than any other industry. The tobacco industry has been subject to adjustment in terms of consumption trends and levels of assistance for a number of years. It has also been given a number of years notice of the elimination of assistance. Competition without quota restrictions would ensure that growers could compete against world prices. Local growers would have the additional advantages of meeting local tastes and lower transport costs. (Sub. 45, p. 6)

In the draft report, the Commission proposed that long-term tariff assistance of 5 per cent be targeted now for tobacco leaf. At the draft report hearings, both Wills and the Mareeba Shire Council expressed concern about the proposed tariff end point, but for different reasons. Wills argued that the target rate should be ‘free’, as a 5 per cent tariff would not provide any protection to local growers given that the operative rate for competitive leaf imports, ie the less developed country (LDC) rate, would be zero. Of course, this would depend somewhat on any changes likely in the product mix of both local and imported leaf as a result of the move to a tariff-only assistance regime. For instance, a phased tariff would progressively encourage the importation of leaf having the highest local price disadvantage (ie lower quality filler grade leaf sourced cheapest from LDC sources), which would in turn force the remaining local growers to produce higher quality leaf grades (ie where the least local price disadvantages are apparent). From a different perspective, the Mareeba Shire Council claimed that a long-term rate of 5 per cent was insufficient to encourage continued tobacco growing in the region. It is difficult to predict with any accuracy either growers’ or manufacturers’ ultimate responses, or the industry’s ultimate structure, to the incentives provided under the recommended tariff-only assistance environment.

The vast majority of manufacturing and agricultural industries will have long-term tariff assistance of 5 per cent by 1996. While there are some exceptions — such as the textile, clothing and footwear and passenger motor vehicle industries in manufacturing, and the sugar, dried vine fruits and citrus industries in agriculture — assistance to these industries is either being phased down to an interim rate on the way to eventual equivalence with other sectors of the economy, and/or will be the subject of further review. The Commission can see no reason why it should not recommend that, with the exception of cigar, cheroot and cigarillo leaf and products, a long-term rate of 5 per cent be targeted now for both imported tobacco leaf and manufactured tobacco products.

Recommendation 9.6

The Commission recommends that, with the exception of leaf falling to Tariff items 2401.10.11 and 2401.20.11 and products falling to Tariff item 2402.10.00, the target long-term *ad valorem* General tariff rate for imported tobacco leaf and manufactured tobacco products be 5 per cent.

9.5 Phasing arrangements

In the absence of any compelling short-term efficiency concerns, the time allowed for the industry to adjust to the changing requirements of its market (ie prior to implementation of the long-term rate) will have a significant bearing on the extent of future social pressures and disruption in the growing sector.

Grower organisations argued in their initial submissions that phasing should generally only proceed on the basis of efficiency improvements. In this regard, the Commission believes that there is scope for further improvements, such as through the size economies to be derived during the industry's restructuring process. It could be expected that the more efficient growers will be able to respond positively to market signals as they are increasingly exposed to international competition.

In deciding on the pace of adjustment, there is a clear trade-off to be considered between: first, giving the tobacco growing industry a clear signal that necessary change cannot be delayed any longer; second, the need to guard against the possibility that too quick a reduction in tariffs could force out some growers who would otherwise have been viable; and third, the need to ensure that the recommended rate of tariff change does not cause unmanageable social pressures. The Commission received no compelling evidence that would warrant any change to the phasing arrangement it proposed in the draft report.

Recommendation 9.7

The Commission recommends that the target long-term tariff rate of 5 per cent on imported leaf be phased in, from the initial tariff of 25 per cent, over a period of seven years at a rate of 5 percentage points at the end of year one and 2.5 percentage points at the end of each of years two to seven.

10 THE URUGUAY ROUND OF TRADE NEGOTIATIONS

A key objective of the Uruguay Round of trade negotiations was to achieve a fundamental reform of the mechanisms used by governments to extend protection to their agricultural sectors and, over time, to achieve more transparent, liberal, and less distorted policy settings for agriculture.

For tobacco leaf, implementation of the Uruguay Round agreement would entail the replacement of the Local Leaf Content Scheme (LLCS) with a tariff-quota. In the context of reforming assistance to the industry, the Commission regards this as an undesirable course of action. The tariff-quota, as formulated, would immediately provide more liberal market access for imported leaf to the Australian market — this would be contrary to the intent of the agreement. The tariff-quota would not be transparent and would provide variable levels of support to the Australian leaf growing industry.

The Commission's proposal is for direct conversion to a tariff, with a manageable adjustment path to a lower level of long-term assistance than would be achieved under the Uruguay Round.

The Commission has identified two options for consideration. Each would terminate the LLCS prior to 30 September 1995.

10.1 Reform of non-tariff trade barriers

A key objective of the Uruguay Round of trade negotiations was to achieve a fundamental reform of the mechanisms used by governments to extend protection to their agricultural sectors and, over time, to achieve more transparent, liberal, and less distorted policy settings for agriculture and agricultural trade.

Under the terms of the Uruguay Round agricultural package, all participants are required to convert all non-tariff trade barriers to tariff-only support. The process is referred to as 'tariffication' and is one of the important elements of the agricultural outcomes which Australia pursued in the negotiations. Tariffication requires the European Community to replace its variable levy system and the United States to remove its quantitative restrictions on agricultural trade.

Initially, non-tariff mechanisms are to be converted to tariff-only support of similar protective effect at the date of implementation of the Uruguay Round agreement (between January and July 1995).

In parallel with the Uruguay Round of Trade Negotiations, and independent of their outcome, Australia has continued with its own program of reform of non-tariff trade barriers. This inquiry is part of that program.

From the outset it has been clear that Australia's reform objectives for assistance to the tobacco growing industry are more ambitious than those pursued under the Uruguay Round. For instance, notice was given in 1988 that the local content scheme for tobacco leaf would be terminated. Further, the terms of reference for this inquiry, in asking the Commission to advise on an appropriate tariff to replace the existing assistance arrangements, and in asking for advice on ways to minimise the cost of adjusting to lower levels of support, clearly indicate an intention to move to a low tariff assistance regime.

10.2 The mechanism for local content schemes

For local content schemes, the agreed mechanism under the Uruguay Round requires the replacement of existing arrangements with tariff-quotas.

Under a tariff-quota, an agreed level of imports (the quota) attracts a tariff equivalent to the concessional rate which applied under the local content scheme, with imports above that level entering at a higher tariff rate. There are thus three variables to be agreed on:

- the level of quota;
- the tariff to be applied to within-quota imports; and
- the tariff for over-quota imports.

Participating countries agreed that the level of quota should be set at a level no less than the average of annual imports for the three years 1986–87 to 1988–89.

For within-quota imports it was agreed that existing concessional tariff rates should apply.

For over-quota imports, the tariff rate will be the average difference between domestic and world prices calculated for the base period 1986–87 to 1988–89, reducing by 15 per cent over six years.

All agricultural commodity tariffs will be bound under the agreement at the negotiated levels. The bound rates and access terms and conditions represent an 'obligation' under the General Agreement on Tariffs and Trade (GATT).

10.3 The outcome

In its broadest sense, the outcome of the Uruguay Round, especially as it relates to agriculture, has been heralded as a success. However some qualification to that success would seem to apply to the tariffication arrangements.

Local content schemes are not transparent and provide variable levels of support for domestic industries. Similarly, tariff-quota arrangements are not transparent and also provide variable levels of support. If one is a candidate for 'tariffication' then so too is the other. Replacing local content schemes with tariff-quotas would at best seem to be one small step in the process of reforming trade barriers when compared with the Commission's proposal to move directly to a tariff-only assistance regime.

Furthermore, for an expanding industry, the setting of a fixed quota for imports implies an increasing level of protection over time. This would be offset to some extent by the requirement to reduce the tariff applying to over-quota imports, but the pace of that reduction (15 per cent over six years) may be outweighed by market growth.

Conversely, for an industry supplying a declining market, a fixed quota for imports under a concessional tariff implies a reduction in protection over time.

It can be seen then that the objective to convert non-tariff mechanisms to an equivalent tariff-only support at the time of implementation can only be achieved for industries with stagnant markets. Since quotas are based on market conditions which prevailed in 1986–87 to 1988–89, and implementation will not occur until 1995, expanding industries will convert to more restrictive, and declining industries to more liberal, trade barriers.

Similarly, since the tariff for over-quota imports is based on price differences which prevailed in the late 1980s, it is unlikely that the rate calculated will provide a similar protective effect to that which it replaces when the Uruguay Round provisions are implemented in 1995.

10.4 Tobacco leaf

In relation to tobacco leaf, the agreement means that the LLCS will be replaced by a tariff-quota arrangement effective from the date of implementation of the Uruguay Round. The earliest implementation date is 1 January 1995 (possibly extending to 1 July 1995 at the latest) which predates the announced termination of the tobacco industry marketing arrangements on 30 September 1995.

Prior to release of the draft report on this inquiry the Commonwealth Department of Foreign Affairs and Trade (DFAT) had advised the tobacco industry, and the Commission, that the tariff-quota arrangements for tobacco are:

- the first 11 184 tonnes of imports will enter at current concessional rates (ie 47 cents per kilogram for leaf used in cigarettes and 33 cents per kilogram for other leaf) — this compares with concessional leaf imports of 9270 tonnes in 1990–91, 9060 tonnes in 1991–92, and 8072 tonnes in 1992–93;
- any imports above the 11 184 quota will attract a penalty duty based on the difference between domestic and world prices for the period 1986–87 to 1988–89 (calculated to be 30 per cent for general entry imports). For imports from countries eligible for the developing country (DC) preference, the rate will be 25 per cent (ie 30 per cent less 5 percentage points DC preference) at the commencement of the scheme; and
- the penalty duty will be reduced over six years to 25 per cent (20 per cent DC preferential rate).

Since release of the draft report, DFAT made a submission to the Commission which suggests that although the Uruguay Round formula sets an above quota penalty duty of 30 per cent, the tariff which will apply to any imports above the tariff-quota level will be 15 per cent (and 10 per cent for countries with DC preferences). This interpretation of the outcome assumes that the existing non-concessional general rate, which is currently bound at 15 per cent, would override the penalty tariff set under the Uruguay Round agreement.

DFAT also made reference to an announcement by the Commonwealth Government on 4 May that it would reduce or phase out most DC preferences. The Commission understands that unmanufactured tobacco (together with some other commodities currently subject to Industry Commission inquiries) was specifically excluded from such phase out proposals.

The GATT outcome provides much more liberal access for imported leaf to the Australian market than is available under the existing tobacco industry marketing arrangements. This is a consequence of:

- the determination of the level of imports eligible for concessional entry through a base quota arrangement using as a reference average 1986–87 to 1988–89 import levels;
- the declining demand for tobacco products that has reduced the total requirement for leaf from late 1980s levels; and

- the substantial price disadvantage of Australian leaf compared with imported leaf, and the encouragement that this gives to importers to substitute concessional entry imported leaf for locally grown leaf.

Import access is further improved over the Uruguay Round outcome by citation in the agreement of general entry rates and the added provision for DC preferential entry of imports from eligible countries. This is significant in the case of tobacco due to the predominance of developing countries amongst the exporters of tobacco leaf. The DC preference lowers the applicable tariff from a general entry rate of 15 per cent to a preferential rate of 10 per cent for imports of leaf from developing countries.

Measures that can be referred to when forming a judgement about the *ad valorem* tariff equivalent of the current tobacco leaf marketing arrangements are reported in Tables 5.6 to 5.8 of Chapter 5. As pointed out in that chapter, due to the tailor-made nature of the tobacco industry marketing arrangements, it is not possible to represent both the protection and concessional effects with a single tariff. This caveat applies equally to the outcome of the GATT negotiations.

If manufacturers:

- fully utilise their imported leaf quota entitlements of around 11 million kilograms, provided for under the 1994 GATT;
- purchase lower priced leaf from developing countries at the concessional rate under that entitlement; and
- source the remainder of their leaf requirements either from imports at the above quota tariff of 10 per cent (ie 15 per cent GATT bound rate less 5 percentage points DC preference), or from domestic growers at a price 10 per cent above import parity;

the average cost penalty to manufacturers for their total leaf purchases is estimated to be 7 per cent.

As shown in Table 10.1 this represents a 16 percentage points reduction from the estimated 23 per cent prevailing under current arrangements. In the Commission's view, a reduction of this magnitude would place an intolerable burden on growers who are already faced with a major adjustment task and who will be expected to cope with further industry restructuring following termination of the Tobacco Industry Stabilisation Plan (TISP) and LLCS.

Any contraction in the domestic demand for leaf from the 20 million kilograms used as a base in this analysis would further reduce the protective effect of the GATT arrangements (from the 7 per cent reported). On the other hand, an increase in demand above those levels would increase the protective effect of the arrangements which would flow through to higher manufacturer costs.

10.5 Comparison with the Commission's recommendation

The Uruguay Round of trade negotiations was constrained by the requirement to reach agreement between the many nations affected by the outcome. Consequently, small gains and slow progress, so long as it is in the right direction, are the best that could be expected. For local content schemes, an intermediate step towards tariff-only support was chosen. The schemes are initially to be converted to tariff-quota arrangements, with slow reduction of the over-quota penalty tariff as the means of reducing assistance.

In contrast, the Commission's recommendation for tobacco leaf is for conversion directly to tariff-only assistance. In addition, the Commission's recommendation goes much further than the Uruguay Round in that by the end of 2001 the tariff would be reduced to five per cent. Under the Uruguay Round agreement, at that time quantitative restrictions would still apply to imports, with out-of-quota imports attracting a tariff of about 12.5 per cent.

In the short term, that is on implementation, the Uruguay Round proposals would make the adjustment task of domestic tobacco growers more difficult because there would be an abrupt reduction from the current level of assistance. This outcome would be contrary to the intent of the agreement which was to convert non-tariff mechanisms to tariff-only support of similar protective effect. The Commission's recommendation, while also providing, on implementation, a lower level of support than the current arrangements, provides a much smoother and more manageable path of adjustment to a lower level of assistance.

The cost of adjustment to lower levels of assistance would be reduced by avoiding conversion of assistance to a tariff-quota regime.

10.6 Manufactured tobacco products

The tariff bindings for manufactured tobacco products have already been implemented in Australia. Ignoring the excise elements of the tariff, the specific rates to be bound under the GATT are set out in Table 10.2.

The rates are applied uniformly across imports with a 5 per cent concession for eligible imports from DC sources. The tariff equivalents of the specific rates range between 3 and 7 per cent.

Table 10.1: **Comparison between cost to manufacturers of the current arrangements and the Uruguay Round package of tariff-only support for tobacco leaf [a,b,c,d]**

	Unit	*Average 1988–89 to 1992–93*	*Uruguay Round*	*Difference*
Overall average	%	23	7	-16
	kg	20 033 426	20 033 426	0

a The unit values of domestic production and imports are assumed to be unchanged from the average levels prevailing over 1988–89 to 1992–93.
b It is assumed that Australian importers of leaf would take full advantage of the concession and import up to the limit set by the quota concession. Thus, the full quota of 11 184 000 kilograms would be exactly exhausted. It is also assumed that manufacturers do not increase imports above the quota level, by the substitution of imported leaf plus penalty duty for local leaf.
c It is assumed that imports from general entry countries would be unchanged by GATT. These imports mainly comprise the highly differentiated United States tobacco leaf.
d The protective component of the tariff is assumed to be 10 per cent reflecting the view that imports competing with local growers come from developing countries and therefore will be eligible for the DC preference of 5 percentage points.
Sources: DFAT, Commission estimates.

Table 10.2: **Most Favoured Nation Tariff for manufactured tobacco products — Schedule for Australia (main items)**

Code	*Item*	*Bound and current rate of duty*
2402.10.00	Cigars, cheroots and cigarillos, containing tobacco	$3.81/kg
2402.20.00	Cigarettes containing tobacco	$2.44/kg
2402.90.00	Other	10%

Source: DFAT.

10.7 Implications for future assistance to tobacco growing

Implementation of the proposed tariff-quota arrangement for imports of tobacco leaf will make it more difficult to ease the path of adjustment from the current level of assistance to a level more in accordance with assistance provided to other Australian industries.

The Industry Commission was asked to report on the appropriate tariff to apply after the TISP and LLCS expire on 30 September 1995. Given the adjustment task already facing tobacco growers, that tariff might well initially provide a level of support commensurate with current assistance arrangements. However, although the intention of the Uruguay Round agreement for local content schemes was to provide equivalent levels of assistance, in practice, implementation of the 1994 GATT will immediately result in substantially lower levels of support for tobacco growing.

In the Commission's view, there are two options to be considered in the context of implementing the Commissions recommendations. Each would terminate the existing LLCS prior to 30 September 1995.

10.7.1 Uruguay Round option

One option is to conform with the Uruguay Round agreement and convert to a tariff-quota arrangement for the import of tobacco leaf on implementation of the Uruguay Round agreement (some time between January and July 1995). A concessional tariff of 47 cents per kilogram would apply to the first 11 184 tonnes of leaf imported, with imports above that level attracting an *ad valorem* tariff of 15 per cent (10 per cent from DC sources). Conversion to tariff-only assistance would occur at a later time.

As the TISP is a voluntary agreement between growers and manufacturers, it could continue until the expiry date of 30 September 1995. In that event, under this option, manufacturers would voluntarily restrict their imports of leaf to 43 per cent of their requirements until that date.

Following the expiry of the TISP, and in the absence of collusion between the three cigarette product manufacturers, the only constraint on imports of leaf at the concessional rate would be the 11 184 tonne limit of the tariff-quota. The Commission estimates that this would provide tobacco product manufacturers with an incentive to import leaf at least up to the concessional entry limit, the cost of the assistance arrangements to them being reduced from 23 per cent to 7 per cent. But these arrangements would have a limited life given the commitment to a tariff-only assistance regime following consideration of this report.

The Commission estimates that the tariff-only equivalent of the Uruguay Round proposal is about 10 per cent *ad valorem,* compared to a level in excess of 25 per cent for the current TISP and LLCS.

For as long as tariff-quota arrangements were in place, tobacco product manufacturers would have an incentive to import the higher grade, more expensive, leaf under the concessional tariff. As this is the leaf type for which Australian growers have the least disadvantage relative to world prices, it would be at odds with the development of an appropriate growing industry structure.

Under a tariff-only regime, leaf types with the least price disadvantage would be locally sourced and those with the greatest price disadvantage would be imported.

10.7.2 Tariff-only option

Under the other option, the form of assistance would be converted to a tariff prior to the due date for implementation of the Uruguay Round agreement. At that time, the Commission's proposed 25 per cent starting tariff would be no more restrictive than the TISP and LLCS — it would be less restrictive. As the local content scheme would no longer apply, the tariffication proposals agreed to in the Uruguay Round for Australian tobacco leaf would be redundant. There would be no need to take the disruptive intermediate step of conversion to a tariff-quota mechanism.

This is the Commission's preferred approach.

Recommendation 10.1
The Commission recommends that assistance for tobacco leaf and tobacco products be converted to tariff-only support, in accordance with its other recommendations, prior to implementation of the agreement reached for the conversion of local content schemes under the Uruguay Round of trade negotiations.

In common with the Uruguay Round option discussed above, the TISP could still run its course to 30 September 1995, but that would require tobacco product manufacturers voluntarily agreeing to use 57 per cent Australian leaf until that time.

10.8 International trade obligations

DFAT has advised the Commission of Australia's international obligations regarding the restriction of imports of tobacco leaf and of the procedures which would apply when implementing the Commission's tariff recommendations. The following information is provided so that Australia's negotiators can ensure that the adoption of the Commission's proposals will not compromise the nation's trading credentials or jeopardise trade in other products.

- The overriding objective of the Commission's proposals is to reduce the level of assistance to 5 per cent *ad valorem* by the end of the year 2001. This represents a greater reduction than would occur under the Uruguay Round tariff-quota option.
- The initial 25 per cent tariff is a lower level of import restriction than applies under the existing TISP and LLCS.
- The initial 25 per cent is a temporary level of tariff which reduces to 20 per cent after one year, to 17.5 per cent after two years, to 15 per cent after three years, and so on until at the end of the seventh year the only restraint on imports would be a 5 per cent tariff.
- Conversion of the current assistance arrangements to the proposed reducing tariff will not increase protection of tobacco leaf or tobacco products and so will not provide a case for 'compensation' for exporters of leaf to Australia.
- Throughout the course of this inquiry tobacco product manufacturers have consistently argued that leaf from Australia's largest import source, the United States, has unique characteristics for which there is no substitute. For this reason American leaf has for many years been excluded from the ATMAC (Australian Tobacco Marketing Advisory Committee) reference basket of import prices. Manufacturers have also argued that they cannot readily change their blends, a period of two years being a minimum in which this could be achieved, by which time the operative tariff would be 17.5 per cent.
- The Commission expects there to be no short-term reduction in imports, or switching of sources, as a consequence of implementing its proposals. In the longer term, when a low tariff-only assistance regime prevails, access to the Australian market for these products will be much more liberal than under the Uruguay Round proposals.

B1 GOVERNMENT HEALTH OBJECTIVES AND POLICIES

B1.1 Introduction

The terms of reference require the Commission, in making its recommendations, to have regard to the health objectives of governments. To assist in this matter, the Commission sought advice from all Governments (Commonwealth, State and Territory) as to their health objectives. The most important elements of the advice provided to the Commission are presented below.

The Commission has another reason to ascertain the health objectives of governments. It is that the long term future of the tobacco industries is going to be determined by the public's attitude to smoking. The Commission is not in a position to forecast the long term demand for tobacco products but it does note that the percentage of the Australian population who smoke is declining (as is the case in other comparable developed countries). The decline can be attributed to a number of factors but overwhelmingly the cause has been the array of health promotion programs and activities undertaken in recent years. Box B1.1 illustrates the increasing attention governments are giving to health matters (see also Chapter 6, Sections 6.3 and 6.4).

Box B1.1: **Examples of government health initiatives**

Examples of increasing attention to health issues by governments include the restrictions on advertising. In 1973, health warnings appeared on cigarette packets and accompanied television and radio advertisements; in 1974, health warnings were required on billboards and posters; in 1976, television and radio advertisements were banned; in 1986, the concept of rotational, different messages on cigarette packets was introduced; over the period 1983–1990, advertisements on public transport were phased out; in 1990, advertisements in the print media were banned.

The banning of smoking on public transport is another example of increasing attention to health matters. In 1976, smoking was prohibited on buses, trams, etc. In 1987, smoking was prohibited on all domestic flights in Australia; in 1990, smoking was prohibited on the domestic leg of all international flights and in 1992, smoking was banned in airport terminals.

Sources: Tobacco Institute of Australia (Sub. 41), Commonwealth Department of Human Services and Health (Sub. 51).

In summary, the health policies of all governments include the view that smoking is a potentially harmful activity, not only to the individual smoker but to the wider community as a consequence of exposure to environmental tobacco smoke (passive smoking). In all cases governments have stated that their health objectives are to reduce the overall level of tobacco consumption. They aim to achieve this goal by instituting programs which encourage current smokers to stop smoking and discourage young people from experimenting with smoking and consequently running the risk of addiction.

B1.2 Health objectives

B1.2.1 International objectives

As a member of the World Health Organisation (WHO), Australia's policies on tobacco and health should be consistent with the resolutions agreed to by the World Health Assembly (WHA). At the thirty-ninth World Health Assembly in 1986 on 'Tobacco or Health', all Member States were encouraged to implement smoking control strategies 'for the sake of human health' and to achieve a previous WHA resolution of 'health for all' by the year 2000. It recommended that governments create and develop specific programs to control and prevent tobacco use. The programs suggested to achieve such an objective included:

- measures to ensure that non-smokers receive effective protection from tobacco smoke in enclosed public places, restaurants, transport, and places of work and entertainment;
- measures to protect children and young people from becoming addicted;
- measures to ensure that a good example is set in all health-related premises and by all health personnel;
- measures leading to the progressive elimination of the socio-economic, behavioural and other incentives which maintain and promote the use of tobacco;
- prominent health warnings on cigarette packets and other containers of tobacco;
- monitoring the trends in smoking and other forms of tobacco use, related diseases and effectiveness of national smoking control action;
- the promotion of viable economic alternatives to tobacco production, trade and taxation; and
- the establishment of a national focal point to stimulate, support and co-ordinate the above activities.

So far, Australia has implemented legislation prohibiting tobacco advertising and promotion, provided smoke-free areas in public places, strengthened health warnings and limited the access of young persons to tobacco products. Educational campaigns have been introduced to warn smokers and potential smokers of the risks of smoking, to encourage smokers to quit smoking and to discourage potential smokers from taking up the habit (see Chapter 6, Sections 6.3 and 6.4 for a detailed outline of these initiatives).

However, in so far as Australia continues to promote export trade in tobacco or attempts to increase its tobacco markets offshore (particularly in developing countries where tobacco consumption is increasing), this is inconsistent with the WHA resolutions and could jeopardise our reputation as an international leader in this area. The WHA has urged its members to develop economic alternatives to tobacco production.

B1.2.2 National objectives

The Australian Government's response to tobacco and health has been developed within the framework of the National Drug Strategy (NDS) (formerly the National Campaign Against Drug Abuse). The Strategy is endorsed by the Ministerial Council on Drug Strategy (MCDS) which was formed in 1985. The Council comprises all State Health and Police Ministers, Commonwealth Ministers for Health, Customs and the Attorney-General.

The goals and objectives of the National Drug Strategy are set out in the National Drug Strategic Plan 1993–1997. The Plan sets out the broad policy goals with respect to tobacco. The priority areas identified in the Plan include:

- safe and healthy public policy, including legislation;
- safe and healthy environments; and
- personal and professional skills.

The Strategy's specific approach to tobacco and health and to reducing tobacco consumption is contained in the National Health Policy on Tobacco in Australia, which was adopted by the MCDS in 1991. It represents an agreement by the Commonwealth, State and Territory Governments on their health, social, economic and environmental objectives with regard to tobacco.

The overall objective of the policy is to improve the health of all Australians by reducing their exposure to tobacco (in all its forms). The policy aims to:

- prevent the uptake of tobacco use in non-smokers;
- reduce the number of users of tobacco products;

- reduce the exposure of users to harmful health consequences of tobacco substances; and
- reduce involuntary exposure to tobacco smoke.

To achieve these aims the policy sets out seven key areas where government action could be implemented. These are marketing, availability, taxation, education, passive smoking, quitting services and monitoring.

Taxation is recommended as a strategy under the policy to ensure that price remains high, because it is believed that it acts as a determinant of an individual's decision to take up smoking. Price is likely to be an important consideration for young people, particularly those who are not in the workforce and hence generally have more significant income constraints than older people.

A recent initiative agreed to by the MCDS was to implement new health warnings on cigarette packets from 1 January 1995 (see Chapter 6, Section 6.3.2). This decision was confirmed at a meeting of the Ministerial Council on 7 July 1993. The National Drug Strategy Committee is also currently developing a national plan of action on juvenile smoking.

B1.2.3 State Government objectives

New South Wales

The New South Wales Government (Sub. 45, p. 6) stated that: 'Smoking is recognised as the largest single cause of preventable death in Australia'.

The health policy adopted by the New South Wales Health Department is set out in the New South Wales Tobacco and Health Strategy. The overall aim of the Government is to reduce the number of people who smoke. Specifically, it aims to:

- minimise the harm to the individual and the community resulting from the use of tobacco;
- reduce the prevalence of tobacco use in the community; and
- prevent the initiation of young people into tobacco use.

Two statutes are of particular relevance. The *Public Health Act 1991* limits the sale of tobacco products to persons 18 years or older. The age was previously 16 years. The other legislation is the *New South Wales Tobacco Advertising Prohibition Act 1991* which imposes restrictions on the advertising and promotion of tobacco products.

The New South Wales Government stated that the two objectives of taxing tobacco products to raise revenue and to address health objectives are related:

> ... the health aspect involves a subjective view from the Government, that the community generally would be better off if fewer of its members were suffering the negative health effects associated with smoking.
>
> From an economic efficiency viewpoint, tobacco consumption has negative externalities. These externalities would not be taken into account in a completely free market and therefore ... consumption would be excessive. There is therefore an economic efficiency argument that consumption should be reduced through higher prices. This is not to say that the current fees are set at the most efficient level. Qualifying the level of externalities is not an exact science. However, in general, the price elasticity of tobacco products suggests that the fee should be fairly high. (Sub. 45, p. 8, Letter 29 June 1994)

The New South Wales Government also stated that it favoured nationally uniform labelling. This would mean that the effects of smoking in terms of health costs should be the same across Australia and:

> The Government recognises the economic and employment benefits which are provided by the location of the tobacco manufacturing industry in NSW. As such, national uniformity is a means of ensuring that the industry does not relocate if different regulations exist in other states or territories. (Sub. 45, p. 9)

Another issue addressed in some detail by the New South Wales Government was the general role of regulations versus the use of price incentives/disincentives to achieve the 'optimal' outcome. Box B1.2 (over) presents the argument.

Victoria

The main health objective of the Victorian Government with regard to tobacco is to discourage smoking. The Government's aim is:

- to encourage non-smokers, particularly young people, not to start smoking;
- to limit the exposure of children and young people to material aiming to persuade them to smoke; and
- to encourage and assist smokers to give up smoking.

To help achieve such objectives, the Victorian Government supports the Victorian Health Promotion Foundation's Quit program. Also on the agenda are legislative changes to increase the legal age for the purchase of tobacco products from 16 to 18 years.

Box B1.2: **Regulation and pricing**

‘While society gives smokers the right to smoke (as against, say, heroin users), their action imposes additional costs on the community via productivity losses and the pressure that smoking related ailments put on the national health system, for which smokers do not directly pay.

Some may argue that smokers should be able to make their own consumption decisions after weighing up the risks and paying the expected costs of their invalidity in advance, say, through a health-cost-reflective, hypothecated excise on cigarettes. This would, however, provide the wrong signals to both smokers and the health system, leading to extensive resources being focussed on curing, or alleviating the symptoms of, smoking related ailments, rather than preventing their occurrence. Allocation of resources to health takes place at the expense of other sectors of the economy, such as education or community services. Given the difficulties in determining relationships between tobacco product consumption and various ailments, it would also be difficult to accurately hypothecate funds to various hospital wards. In addition, the potential external impact that smokers have would not be curtailed.

There is therefore a role for the government in assisting the transition from smoker to a non-smoker. Given the difficulties in policing and rewarding abstinence, the second-best option is to subsidise those who genuinely want to reduce consumption. The addictive nature of smoking means that there are likely to be some costs borne by smokers reducing their consumption. A program aimed at reducing those costs by providing substitutes to tobacco, and support and advice can ease the transition and encourage that process.’

Source: New South Wales Government (Sub. 45, p. 12).

The Victorian Government has also introduced new regulations on health warnings for cigarette packets, based on the standard adopted by the European Community. However, it is the Commission’s understanding that the Commonwealth intends to override the Victorian legislation by using its corporations power through the *Trade Practices Act 1974.*

Queensland

The Queensland Government’s position on tobacco usage is related to the health consequences of smoking on the smoker and on non-smokers (through passive smoking) along with the associated costs to the community. The Queensland Government’s view (Sub. 47, p. 17) (in line with the New South Wales Government) is that: ‘Smoking is currently the leading cause of preventable illness in Australia’.

In November 1993, the Queensland Government adopted the Queensland Drug Strategy, 1993–1997. The main policy goals are:

- to minimise the incidence of illness, disease, injury and premature death associated with the use of tobacco; and
- to minimise the personal and social disruption, loss of quality of life, loss of productivity and other economic costs associated with the tobacco use.

The franchise licensing fee in Queensland is presently set at 75 per cent of the value of tobacco products sold in the prior month. The licence fee is not earmarked to health programs. It is used as a stable means of raising revenue. Nevertheless, the Queensland Government (Sub. 47, p. 20) considers the licence fee to be ‘a legitimate economic instrument to deal with the externalities associated with tobacco consumption’, because it is argued that ‘the social impacts ... are not reflected in ... the market price’.

Very recently the Queensland Government foreshadowed it would strengthen laws relating to the sale of tobacco. It is proposed that the legal age for the purchase of cigarettes will be increased from 16 years to 18 years of age. Other proposals include prohibition of the sale of confectionary items which resemble cigarettes, the sale of single cigarettes and packets containing less than 20 cigarettes. It is also encouraging the introduction of restrictions on the places where people can smoke.

Western Australia

The Western Australian Government is recognised as an international leader in promoting health policies pertaining to smoking. It has been at the forefront of programs such as the Quit campaign and labelling requirements.

The Government’s policy on tobacco and health is found in the Health Department’s Smoking and Health Program. The primary goal of the program is to reduce smoking, and thereby minimise the effects of smoking on health and the costs it imposes on the community. It aims to achieve this by:

- motivating and assisting smokers to quit;
- encouraging non-smokers to remain as such; and
- reducing the factors which influence young people to commence smoking.

Apart from the goal to raise revenue, the high franchise fee on tobacco (100 per cent of prior period sales) is deemed to be an anti-smoking initiative. It is intended to have the most impact on teenage smokers, who are considered to be strongly influenced by the price of cigarettes.

Under the *Tobacco Control Act 1990*, 7 per cent or $12 million (whichever is the lesser) of the annual franchise fee revenue is automatically appropriated to the Health Promotion Fund, established under the Act.

There are two main features of the Act:

- controls relating to promoting and marketing tobacco products; and
- establishment of the Health Promotion Foundation (HPF).

The marketing controls include bans on advertising and tobacco sponsorship of sport and the arts, and penalties for any breaches of the Act were increased. The HPF was set up with a particular focus on youth. The sale of tobacco products to persons under the age of 18 is prohibited. Funds are available from the HPF to replace tobacco company sponsorships and to finance public health initiatives.

Other relevant programs run by the Western Australian Health Department are: Adolescent Drug Education, Young Women and Smoking and Aboriginal Drug Education. (The drug education programs focus primarily on tobacco and alcohol). A more general Drug Education Program encourages workplaces, restaurants and other public places to adopt smoke-free policies and provides resources and materials to health professional groups to motivate their clients to quit smoking.

South Australia

The major health objective of the South Australian Government with respect to tobacco is to reduce tobacco use, and thereby reduce the risks of cardiovascular disease and lung cancer which may be attributed to tobacco use.

Tobacco is one of the major program areas of the South Australian Health Commission, through its Health Promotion Programs Unit (including the administration of tobacco control legislation).

In addition, the South Australian Sports Promotion, Cultural and Health Advancement Trust (Foundation SA) was established in 1988, by amendment of the *Tobacco Control Act 1986*. Foundation SA is funded from revenue from tobacco sales (5 to 5.5 per cent), with an annual income of around $6 million.

The functions of Foundation SA are:

- to promote and advance sports and culture by replacing tobacco sponsorship of sporting and cultural activities;
- to promote good health and health practices through a process of public awareness; and

- prevention and early detection of illness and disease related to tobacco consumption.

The South Australian Government introduced legislative changes on 1 January 1994 to increase the legal age for purchase of cigarettes from 16 to 18 years and also introduced tougher penalties for breaching this provision. It has also announced a number of policy targets:

- to reduce mortality from lung cancer by 10 per cent by the year 2010;
- to reduce the prevalence of smoking by at least 20 per cent by the year 2000; and
- to reduce involuntary exposure to tobacco smoke by increasing the proportion of smoke-free work environments to 95 per cent of all workplaces by the year 2000.

Tasmania

The Tasmanian Government is in the process of developing a plan consistent with the National Drug Strategy and the State's health goals and targets. The Government's aim is to 'reduce hazardous and harmful levels of substance use and the personal and community problems associated with this'. Specifically, in relation to tobacco the Government's goals are:

- to reduce the prevalence of smoking by 10 per cent or more by 1995 and 20 per cent or more by the year 2000; and
- to reduce involuntary exposure to tobacco smoke by increasing the proportion of smoke-free work environments to 80 per cent of all workplaces by 1995 and 95 per cent or more by the year 2000.

The Tasmanian Government supports the MCDS's stand on labelling and supports the development of a national plan of action on juvenile smoking by the NDS Committee. The Tasmanian Government is also developing an options paper on juvenile smoking.

Northern Territory

The Northern Territory Government adopted the policies set out in the National Health Strategy on Tobacco in July 1991. The Government recognised the need to reduce smoking given the link between smoking and major diseases, such as lung cancer, heart disease and respiratory conditions.

The Northern Territory's policies are found in the *NT Tobacco Act 1992*. The overall objectives of the Act are:

- to reduce the prevalence of smoking and consumption of other tobacco products in the population, especially amongst young people;

- to create informed public discussion and decision-making about the health, social and economic consequences of tobacco use;
- to create, support and maintain a social environment in which non-smoking is the expected and desired behaviour; and
- to improve access to appropriate and effective prevention, cessation and information resources and services.

Australian Capital Territory

The Australian Capital Territory (ACT) Government endorses the provisions of the National Health Policy on Tobacco. However, it accepts that government objectives may conflict in relation to any industry, including tobacco. In the interests of health it is the ACT Government's aim to discourage demand for tobacco products and control their supply, while it seeks 'to promote efficiency and profit in the industry' in the interests of primary production and employment.

The ACT Government has implemented a number of initiatives which aim to restrict access to tobacco products by children, reduce the exposure of non-smokers to tobacco smoke, eliminate the exposure to materials which might encourage individuals to smoke and promote health warnings on the consequences of smoking.

Along with the Western Australian Government, the ACT Government has implemented the health warning system for cigarette packets recommended by the MCDS. As mentioned in Chapter 6, the ACT Government is currently considering legislation to prohibit smoking in enclosed public places. The Minister for Urban Services has also recently signed an Occupational Health and Safety Code of Practice which will prohibit smoking in all enclosed workplaces in the ACT within three years (Norman 1994).

B1.3 Conclusion

While not stated explicitly in all of the government submissions or advice to the Commission, it is apparent that no government, including those in the tobacco growing states, wishes the Commission to make recommendations which would encourage or increase the incidence of smoking. Clearly, their health policies aim to reduce the incidence of smoking.

The issues raised by the various governments, when contrasted to the claims and counter-claims made by the anti and pro-smoking interest groups, raise another set of issues. These include the measurement of the costs and benefits of smoking and what are the appropriate policies to achieve particular goals.

The complexities involved (whether they pertain to the medical science evidence or to the practicalities in measuring what are normally considered 'intangibles', such as the value of human life and suffering) mean that the Commission is not in a position to answer, in any definitive way, many of the issues which were raised by participants. Nevertheless, in the following two chapters it addresses aspects of the smoking and health debate.

Chapter B2 explores various matters pertaining to the regulation of smoking. It does this solely from an economics perspective. The objective is to assist in clarifying often contentious issues.

Chapter B3 presents an economics framework for the measuring of the costs and benefits of smoking. It commences with a discussion of the difficulties of delineating private costs and benefits from social ones and the difficulties of determining whether or not an addict can be aware of long term effects and hence make rational decisions. Notwithstanding the unanswered questions, the framework presented should assist policy makers resolve some of the conflicting (and confusing) claims made.

B2 THE ECONOMICS OF SMOKING REGULATION

B2.1 Introduction

Several submissions to this inquiry commented on the health effects of smoking and what governments should do about them. Participants differed on the appropriateness of current government anti-smoking policies and measures. Some saw them as being unduly stringent:

> Substances other than tobacco are not so heavily regulated, even where there might seem to be similarities with tobacco, at least in the eyes of the authorities concerned with the health of the public. (Wills, Sub. 31, p. 32)

Others believed that governments have not gone far enough:

> The Australian government should publicly acknowledge that the only reasonable policy on tobacco is to minimise its use as rapidly as possible. (Non-smokers Movement of Australia Incorporated, Sub. 37, p. 13)

> ... all measures which reduce the prevalence of smoking-related illness should be supported, while activities facilitating or popularising smoking should be resisted. (Australian Medical Association Limited, Sub. 5, p. 2)

This chapter examines government health objectives and anti-smoking measures from an economic perspective. While the Commission recognises that non-economic approaches have often been used in determining public policy on smoking, the Commission's charter requires it to consider issues primarily in terms of their effects on economic efficiency.[1]

B2.2 Optimum levels of smoking

The economic analysis of smoking starts by categorising the effects of smoking as either benefits or costs and then, using this categorisation, it examines the

[1] Economic efficiency refers to the productiveness with which the community uses its resources: it is about getting the highest value from those resources. It relates not only to whether producers use society's resources efficiently but also to whether people's consumption patterns (including the consumption of tobacco products) are consistent with the welfare of society as a whole. Under this approach, society's welfare — or 'net social benefit' — is defined as the aggregate benefits that the members of society accrue from a particular activity, minus the aggregate costs they incur. Consideration of the adverse public health consequences of smoking is an integral part of this approach.

conditions under which it could be considered ‘optimal’ from an economic perspective for an individual to smoke.[2]

The benefits people may gain by smoking include enjoyment of the product, a feeling of relaxation, and, for some, enhanced peer group acceptance. For people who are addicted to/dependent on[3] smoking, another benefit of continuing to smoke is the avoidance of the discomfort and other problems associated with attempting to quit smoking.[4]

The costs of smoking to the individual include the price of cigarettes, the possibility of reduced quality and length of life and any costs of medical treatment borne by the smoker for smoking-related illness. For people who do not presently smoke, one cost of starting is the risk of becoming addicted to or dependent on a substance they later find they want to stop consuming.

From an individual’s perspective, it would be optimal to smoke only if the benefits derived from smoking were to exceed the costs incurred. For many people, the benefits of smoking at any level will never exceed the costs, so their optimal level of cigarette consumption would be zero. However, for others, it is quite plausible that the benefits of smoking, as viewed by the individual, outweigh the costs. These people would be better off, notwithstanding the adverse health effects they may suffer, by smoking.

From society’s perspective, whether it can be considered optimal for a particular individual to smoke depends not only on the benefits and costs to the person concerned, but also any benefits and costs incurred by others as a result of the individual’s consumption of tobacco products. As discussed below, smokers impose costs on others, both through their use of the taxpayer-funded health

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2 A person can make up to three related decisions about smoking. These are: whether to smoke at all, what level of smoking to undertake, and whether to continue or quit. From an analytical viewpoint these decisions can, in the first instance, be considered as the one decision: that is, what is the person’s optimum level of smoking.

3 Throughout this report ‘addiction’ is equated with ‘dependence.’ Rather than use one term or the other, where appropriate both are used simultaneously. A reason for doing this is that much of the literature quoted in this report uses the term addiction. This could be a reflection of the disciplinary background of the authors, primarily economists. That stated, in some of the medical science literature, addiction is used as the inclusive term. For example, Blakeston’s Pocket Medical Dictionary (3rd Edition, 1973), defined addiction as a ‘marked psychological and physiological dependence on a substance, such as alcohol or a drug, which has gone beyond voluntary control.’ It should also be noted that, as discussed in Chapter B3, the Commission is not in a position to adjudicate on questions pertaining to whether, and to what extent, smoking causes addiction/dependence.

4 That said, once a smoker becomes addicted/dependent, issues arise as to what extent the smoker can be deemed to accrue benefits. Issues associated with the classification and measurement of benefits are discussed in more detail in Chapter B3.

system[5] and because of the costs to 'passive smokers'. These additional costs will mean that the optimal level of smoking is lower than it would otherwise be, but it is still plausible that it is optimal for some people to smoke.

The foregoing argument has implications for the merits of policies designed to modify levels of smoking. It suggests that measures to completely eliminate smoking, as advocated by some participants, will not necessarily accord with the goal of maximising society's welfare. In terms of current government policies to reduce tobacco consumption, these policies will enhance society's welfare provided the current level of smoking exceeds the optimal level. The converse similarly applies. Whether this is in fact the case is essentially an empirical matter (some aspects of which are discussed in Chapter B3).

B2.3 Individual decision-making and market failure

For government anti-smoking measures to be justifiable from an economic efficiency perspective, there would need to be some indication that the level and pattern of smoking (in terms of when and where people smoked) chosen by individuals differed from that which is socially optimal.

A basic tenet of economic theory is that individuals, weighing up the various benefits and costs, make consumption choices with the aim of maximising their personal welfare. This implies that people will of their own volition seek out their optimum level of tobacco consumption. This assumption aligns with the concept of 'consumer sovereignty' — that individuals are best placed to know what is in their best interests and that competitive markets will provide what consumers demand.

Economic theory also indicates that, under certain conditions (most notably that the individual accrues all the benefits and incurs all the costs of an action), what is optimal for the individual will also be optimal for society as a whole.

The implication of these theories is that individual decision-making will result in economically efficient levels of tobacco consumption. Were this the case, there would be no need on economic efficiency grounds for governments to regulate the consumption of tobacco products.

From this theoretical starting point, economic analysis examines the major real-world breaches of the assumptions and conditions underlying these theories to see to what extent there is need for government action to correct the decisions made by individual smokers, in the interests of maximising society's welfare.

5 Through their contributions to Medicare, smokers will bear some of these additional costs imposed on taxpayer-funded health care.

In the case of smoking, three broad problem areas can be identified:

- externalities;
- information-related market failures; and
- distortions to smokers' preferences.

These are discussed in turn below.

B2.3.1 Externalities

Externalities refer to the benefits and costs experienced by people other than those directly engaged in a particular activity such as smoking. These external benefits and costs are not accounted for when an individual makes a private decision about smoking. As a result, the level of smoking chosen by individuals will not be optimal from society's point of view.

There are two main sources of externalities (both external costs) commonly associated with smoking.[6]

First, smokers impose external costs on taxpayers if they use the (subsidised) health care system to a greater degree than they would if they did not smoke. However, whether this is the case does not depend simply on whether smokers use the health care system for smoking-related illness. As Markandya and Pearce note:

> It is now generally accepted that the medical costs of tobacco consumption should be measured over the lifetime of an individual. Since this means that future savings which would result from the premature death of a smoker have to be credited to the overall medical costs, the total value ... [of] medical treatment costs could be negative, zero or positive. (1989, p. 1140–1141)

Second, there may be external costs associated with the inhalation, by passive smokers, of 'environmental tobacco smoke' produced by smokers. Such external costs will exist from any adverse health effects from passive smoking. An external cost would also exist, albeit of a lesser magnitude, if people only <u>believe</u> that they will suffer ill-health from passive smoking. A belief that it will do them harm is sufficient to decrease their sense of well-being when others

[6] In addition to these commonly recognised sources of external costs, medical experts have recently indicated that smoking by pregnant women can have adverse effects on the future health of the unborn child.

smoke in their presence. The fact that smoking is a nuisance to some non-smokers is another external cost.[7]

The level of the externality imposed on non-smokers will vary from situation to situation. There is no external cost associated with environmental tobacco smoke if an individual smokes alone but, as the number of people in close proximity to the smoker increases, so will the level of passive smoking and, most likely, the external costs.

There is some disagreement about the extent to which passive smoking results in ill-health.[8] For example, with regard to lung cancer, Johnstone and Ulyatt (1991) surveyed 26 studies and reported that 20 of these revealed no association. However, in the more general health context others have argued that there is strong evidence of adverse health effects. For example, the Australian Council on Smoking and Health (in association with a range of health organisations) stated:

> Scientific reviews have found that passive smoking is a cause of acute respiratory illness in infants and young children. Passive smoking commonly causes irritation of the upper respiratory tract. Studies show that non-smoking adults who live with smokers have an increased risk of lung cancer, and this is generally held to be due to passive smoking. The United States Environmental Protection Agency has classified environmental tobacco smoke as a known human carcinogen. (Australian Council on Smoking and Health *et al.*, Sub. 24, p. 4)

In its submission to the Commission, the Queensland Government stated:

> A 1991 Federal Court decision by Justice Morling found that there was scientific proof that exposure to cigarette smoke by non-smokers causes lung cancer, asthma, and in young children, respiratory disease. Since this decision, the United States Environmental Protection Agency has classed environmental tobacco smoke (passive smoke) as a carcinogen as dangerous as asbestos and benzene. (Sub. 47, p. 17)

Against this, the Tobacco Institute of Australia (Sub. 41, pp. 33–38) presented several arguments suggesting that any adverse health effects of environmental tobacco smoke have been substantially overstated and it referred to an article by Huber, Brockie and Mahajan (1993) which was strongly critical of various aspects of the United States Environmental Protection Agency study.

While the Commission cannot judge the epidemiological or other scientific evidence on these matters, it notes that to the extent that environmental tobacco

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7 It is not unknown for some people to obtain satisfaction (a benefit) from passive smoking. Where this is the case, it is usually associated with the aroma of cigar or pipe tobacco.

8 The scientific evidence linking passive smoking to disease and ill-health is currently being reviewed by the Health Care Committee of the National Health and Medical Research Council.

smoke does contribute to ill-health, there may be significant external costs associated with smoking in certain situations.

B2.3.2 Information-related market failure

Economic analysis assumes, in the first instance, that the consumer is fully informed and acts rationally (in terms of weighing up degrees of satisfaction and prices for all goods and services which he or she wants and is able to afford) on the basis of that information. However, as Walsh (1990, p. 153) notes, people often suffer from ‘information perception and processing problems’. Similarly, McClure (1990, p. 181) argues that ‘one must accept the existence of quite widespread inabilities to gather and process the information necessary for making self-interested consumption choices’. To the extent this is the case with smoking, individuals may be unable to make optimal decisions about whether and how much to smoke.

Risk perceptions

Apart from normal information needs (such as those pertaining to price and quality), prospective smokers need information on issues such as whether smoking causes illness and premature death, the probability that these events will occur, the probability of becoming addicted to/dependent on the product and what the consequences of this would be for the smoker’s future health as well as the financial cost of on-going consumption.

Although tobacco companies have few commercial incentives to divulge information on the adverse health effects of smoking, most people would be aware of, or have access to, information about the potential risks of smoking. This is a result of the efforts of government and other bodies in disseminating such information and government packaging regulations requiring health warnings. In addition to this, medical practitioners may advise their patients who are smokers to stop smoking.

While there are thus many sources of information about the risks of smoking, what matters from an economic perspective is whether people form accurate perceptions about these risks.

One aspect of this is whether people’s assessment of the health risks of smoking accords with the statistical evidence. In a study of the formulation of risk perceptions with regard to smoking, Viscusi, using lung cancer as an example, finds that publicised risks are generally overestimated by a substantial margin:

> The main finding with respect to lung cancer is that not only is there substantial awareness of the smoking hazards, but overall individuals appear to overestimate the risks as compared with the levels in the scientific evidence. Whereas the best scientific estimates of the lifetime lung cancer risks from smoking range from .05 to .10, individual perceptions of the risk are much greater. The entire population assesses this risk at .43, and even current smokers have a substantial risk perception of .37. The fraction of the population under assessing the risk is less than 10 percent, and the extent of their risk underestimation is comparatively small in magnitude. (1992, p. 7)

It should be noted that Viscusi's conclusions have been challenged by Borland (1993) on methodological grounds and because of apparent inaccuracies.

Nevertheless, to the extent that people have excessive risk perceptions they will tend to overcompensate and reduce their level of smoking below the optimal level.

Risk perceptions can differ across sub-groups of the population. Of particular interest are the risk perceptions and smoking decisions of young people. This is because of the difficulty of quitting smoking on becoming addicted to/dependent on cigarettes and the possibility that young people are not aware of this.

There is also a second aspect to understanding the risks of smoking — the probability and implications of becoming addicted/dependent. It is plausible that young people (or potential smokers of any age) may underestimate the likelihood of addiction/dependence.

Information processing problems

Irrespective of the nature of information people have about the risks of smoking and the likelihood of becoming addicted to/dependent on it, individuals may be unable to correctly incorporate information into their decision-making, or may ignore the information they have. In relation to smoking, three main reasons have been advanced to suggest why this may occur.

First, the health risks of smoking are subject to significant uncertainty which people may find difficult to deal with in decision-making. As Head points out:

> There is ... considerable evidence from the literature in individual and social psychology of strong tendencies to irrational behaviour under conditions of great uncertainty. (1990, p. 225)

Second, it has been argued by some that, particularly in the case of younger people, the future costs of smoking are too heavily discounted. That is, young people undertake various risky activities without giving adequate consideration to the future costs of their actions.

Third, the addictive or dependence inducing nature of the product may affect people's abilities to process information about benefits and costs adequately. In fact, notions of benefits and costs may be meaningless in this context because the desire to satisfy the addiction or dependence overrides rational consumer choice. This is the view expressed by McLure:

> ... notions of consumer sovereignty have little content in a situation in which consumption decisions are based on addiction, rather than rational choice. (1990, p. 181)

On the other hand, as Becker and Murphy (1988, p. 675) have pointed out, addiction/dependence need not indicate irrationality. Rather, they argue that addiction/dependence may be cast as 'a consistent plan to maximize utility over time'. What follows from this is that as long as people are fully aware of the risks that smoking brings at the time when they commence smoking, that decision (and, as a result, the possibility of becoming addicted to/dependent on the product) may reflect an optimal decision for a particular individual. (A more detailed discussion of addiction/dependence and rational choice is presented in Chapter B3).

Models of smokers' decision-making

Viscusi (1992) has assimilated various studies on risk perceptions and smokers' decision-making processes. He sets up three models of smoking behaviour and assesses the evidence on these models against the following criteria: availability of information, risk perceptions and recognition of trade-offs in decisions. Viscusi describes three types of smokers: a rational smoker; a 'stylized' smoker; and a smoker with cognitive limitations. A rational smoker would be incorporated in a standard economic model of fully informed choice. A 'stylized' smoker is not aware of the risk of smoking, or if the risk is perceived, does not act on this information in a sensible manner. The smoker with cognitive limitations does act on risk information received but the subsequent choices made often reflect anomalies and biases that may occur under conditions of uncertainty. Viscusi concludes:

> ... one can reject the model of a stylized smoker who is ignorant of the hazards posed by smoking and the importance of taking these risks into account when making decisions. There is much stronger support for the rational smoker framework and the model of smokers with cognitive limitations. (1992, pp. 139–141)

B2.3.3 Distortions to consumer preferences

Economic theory assumes people's preferences as given and that people behave to satisfy these preferences. However, if their preferences are distorted by external factors, the individual may be caused to alter his or her behaviour to satisfy these new, externally imposed, preferences. This, it is argued, may reduce the welfare of the person concerned.

Peer group pressure is one factor which may distort people's preferences. It refers to pressure on individuals to conform to the preferences and behaviour of others in the same age group or of similar social standing. This pressure need not be direct, it may simply derive from the unspoken norms of the group. In the context of smoking, it may encourage people who would otherwise not smoke to do so simply because their peers smoke.[9] This is often believed to be the case with young people.

Persuasive advertising is another factor sometimes thought to distort people's preferences. Persuasive advertising has limited informational content and may seek to seduce the buyer using images which often appear unrelated to the product.[10] This, it is argued, manipulates buyers and makes them desire goods that they would not otherwise have wanted. Galbraith presents this view:

> The even more direct link between production and wants is provided by the institutions of modern advertising and salesmanship. These cannot be reconciled with the notion of independently determined desires, for their central function is to create desires — to bring into being wants that previously did not exist. (1956, pp. 155–56)

This type of argument has been linked to the cigarette industry. For instance, in discussing drug education, Powell states:

> The challenge ... is not only to have young people develop their self image free of the false promises and fantasies of cigarette advertisements, but to encourage them to develop understandings, opinions, and skills to make decisions about their behaviours, based on realistic information. (1991, pp. 34–35)

On the other hand, smoking advertisements can contain information on the health aspects of smoking. As a consequence of smokers' preferences being altered by health warnings, cigarette manufacturers have an incentive to differentiate their low tar/nicotine products to capture that part of the market. For example, advertisements appearing in the United States have included slogans such as:

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9 Similarly, peer group pressure may deter people from engaging in an activity that they would otherwise undertake. In some socioeconomic groups for example, peer group pressure may discourage smoking.

10 Nelson (1974, pp. 732–734) argues that persuasive advertising actually provides 'indirect' information about 'experience goods' or goods that need to be tried before their quality can be ascertained. He argues that only the better brands have an incentive to advertise and, thus, the amount of advertising undertaken by a company gives the consumer some information about which brands are winners — in the sense that they satisfy consumer demands and succeed in making repeat sales.

- ‘significantly less tar and nicotine than any other filter brand’ (Kent);
- ‘Today’s Marlboro — 22% less tar, 34% less nicotine’; and
- ‘lowest tar of all lo-tar cigarettes’ (Duke);

Further, Viscusi notes:

> Also striking is the extent to which advertising became a vehicle for communicating findings in the scientific and medical literature. Almost one-fifth of all the health claims pertain to the citation of scientific and medical research. These citations are in addition to the mandatory references to the warning by the Surgeon General ... . Even ads that do not cite specific studies ... are more technical in nature than the typical product advertising. (1992, p. 41)

While these examples suggest that some cigarette advertising may be a source of information to smokers, it is also clear that much cigarette advertising is essentially persuasive in nature. To the extent that this is so, preferences may be manipulated.

B2.4 Government measures to modify smoking behaviour

The foregoing analysis points to several reasons why individuals, left to their own devices, will not necessarily make consumption decisions which accord with their own best interests or those of society as a whole. As noted earlier, this may imply a role for government to correct the decisions taken by smokers. Government measures designed to modify smoking behaviour would be justified provided the costs of the market failure they are designed to correct are greater than any costs associated with government intervention. While governments have an array of possible measures available to modify people’s smoking decisions, the question which first arises is what outcome corrective actions should seek in order to promote economic efficiency.

In the case of the external costs of smoking (that is, the costs to passive smokers and the taxpayer), economic efficiency requires that tobacco consumption be modified in a way that accounts for the difference between what is privately optimal and what is socially optimal. Corrective actions would thus need to encourage levels and patterns of tobacco consumption that smokers would themselves choose if they were taking not only their private costs but also the social costs of smoking into account. This would involve an overall decrease in the consumption of tobacco products. It would also involve modification to the pattern of consumption: for example, less or no smoking in crowded places.

In the case of possible problems of individual decision-making (such as people acting irrationally or incorrectly perceiving the risk of premature death or ill health due to smoking), economic efficiency requires that tobacco consumption be modified in a way that accounts for the difference between smokers' current decisions and those they would make if they were adequately informed and rational beings.

In the case of factors which distort smokers' preferences (such as peer group pressure and persuasive advertising) the requirements for corrective action to promote economic efficiency are complex. Some economists consider that there is a role for government to counteract or remove the cause of preference distortions. For example, Head states:

> ... it is certainly true that ... policies designed to protect the individual from some of the more blatantly unacceptable types of *intentional preference manipulation*, notably in the area of advertising, could be justified ... .(1990, p. 234)

Other economists have suggested that governments should actually override people's consumption decisions where they are based on preferences which have been distorted. For example, in discussing the implications of peer group pressure McLure suggests:

> There must be many who would like to be able to avoid the effort entailed in 'keeping up with the Joneses' by having the Joneses slow down. Or, to put it in more concrete terms, the parents of many teenagers would almost certainly like to see less peer pressure to smoke, drink alcoholic beverages, use drugs, wear designer jeans, etc. Indeed, it is not unreasonable to believe that many teenagers feel the same way, but find it difficult to 'Just say "No"' to peer pressures of various types: there is evidence that many teenagers desire discipline. Prohibitions that may appear to violate consumer sovereignty may actually be quite welcome, if they help us to strengthen our backbones (or that of our children). (1990, p. 183)

However, McClure also presents a qualification to this view:

> Once one leaves the unrealistic world in which individual actions are fully informed and reflect true preferences, there may be a case for interference with consumer sovereignty; indeed, what may appear to be violation of consumer sovereignty may further the welfare of those whose preferences are not respected. But the potential for loss of freedom inherent in such arguments must never be discounted. (1990, p. 185)

Corrective measures which modify individuals' consumption decisions, but which do not also change their preferences, may make the individuals involved worse off. To put this in the context of smoking, reducing the availability of tobacco products without removing smokers' preferences for tobacco will make smokers worse off. This is because smokers will find themselves unable to satisfy a want that they had previously been able to satisfy.

This suggests that the problems associated with the distortion of preferences may justify measures to reduce pressures on people to smoke but are unlikely to justify measures which, for example, simply prohibit smoking.

As noted earlier, governments have available an array of measures which can be used to modify the decisions of smokers. These include tobacco taxes, smoking bans, education campaigns and so on. The common law also ascribes certain rights and duties to people in relation to smoking. The following discussion assesses the ways these measures can be used to promote the objectives just described.

B2.4.1 Taxation

From an economic efficiency perspective, an ideal tax would aim to correct for market failure and would be set just equal to the social costs associated with smoking.[11] In this way, the individual smoker, when making a private decision about whether to smoke or how much, will face costs that incorporate the impact of his/her decision on others and, to the extent that it is necessary, account for unintended costs to the smoker (see Chapter B3). In theory, the level of smoking then chosen by individuals should accord with the optimal level of smoking from society's point of view.

In reality, it is difficult to determine what the appropriate rate of tax should be, for three reasons. First, there are substantial difficulties in determining what are social costs as opposed to private costs (see Chapter B3). Second, assuming there is a net cost, the external costs generated by smokers through their use of the subsidised health care system may not rise directly in proportion with a rise in smoking levels. That is, if a person smokes twice as many cigarettes as another smoker, he or she may not necessarily impose exactly twice as much cost to the nation's health care resources. If this is the case, a flat rate of tax may not correctly reflect the external costs associated with smoking. Third, a flat rate of tax is unlikely to correctly internalise the external costs associated with passive smoking. This is because, as noted earlier, the costs are likely to vary according to the number of people in the vicinity of the smoker.

These complications mean that taxes are too blunt an instrument to deal perfectly with the market failures related to smoking. Rather, the rate of tax would need to be set at around the average level of social costs and be augmented with other government measures to modify smokers' decisions.

[11] An 'ideal tax' as discussed in this section (and Chapter B3) refers to ideal from the point of view of encouraging economically efficient levels of tobacco consumption. This may differ from what would be the 'ideal tax' from the perspective of raising government revenue.

B2.4.2 Mechanisms to regulate smoking in particular venues

Reflecting increased awareness and concern about passive smoking, governments have in place, and continue to examine, measures to reduce people's exposure to environmental tobacco smoke. For example, the ACT government has recently proposed legislation — the *Smoke-free Areas (Enclosed Public Places) Bill 1993* — that would prohibit smoking in public places such as child-care centres, medical facilities, shopping centres, public bars and various other premises.

The level of environmental tobacco smoke or passive smoking that occurs may be arrived at through various means such as: private negotiations between people; regulations regarding the use of mechanisms such as air extractors; the partitioning or segregating of smokers and non-smokers; or the banning of smoking altogether.

While there are external costs associated with environmental tobacco smoke, it does not necessarily follow that all environmental tobacco smoke should be removed. Just as there exists a level of smoking that is optimal for society, so there exists an optimal level of passive smoking which, in some situations, is likely to be greater than zero. This would be the case where, for example, the benefits which non-smokers gain from social interaction with smokers, and which smokers gain from being able to interact with each other, outweigh the costs associated with passive smoking.

Economic theory indicates that, under certain conditions, the interaction of people in the marketplace should produce an optimal level of smoking, including an optimal level of environmental tobacco smoke. This would be achieved if people could negotiate over how air should be used. This would require people to have property rights to 'parcels' of air which would allow them to exclude or sell to others the rights to use air. While in practice people can control what happens to air in their own homes, in virtually all other circumstances it is not feasible to apply this approach.

However, for venues such as restaurants and cinemas, efficient levels of smoking might be achieved through the owner's decision on the venue's smoking policy. As Tollison and Wagner note:

> The market for dining out, for example, will discipline firms in the restaurant industry to provide preferred eating and drinking environments. This involves ... [using] smoker-nonsmoker segregation, smoke removal devices, price-environmental trade-offs and so on. If the owner bans smoking, smokers will only patronise the establishment if the price-quality combination offered is as attractive as that in alternative eating places

> where smoking *is* allowed. The opposite applies for nonsmokers if smoking is permitted. The owner can indulge his own preferences at a cost. Thus, a variety of smoking policies will arise in the marketplace ... . (1992, p. 136)

Likewise, measures to deal with passive smoking in the workplace could be determined in negotiations between employers and employees, or simply through the employer setting the smoking policy for the firm. The efficacy of these approaches would depend on several factors, including the size of the firm, the flexibility of labour market arrangements, and employers' legal duties to their workers.

However, if market incentives were to lead to an inefficient level of smoking in venues, regulation could be required. As noted above, the regulations adopted could range from requiring the installation of smoke extractors, to smoker segregation, to completely banning smoking in certain venues. From an economic perspective, the goal should be to implement the regulatory alternative which maximises net benefits (taking into account reductions in benefits to smokers, any increases in costs to venue owners, and the reduced costs to passive smokers).

B2.4.3 Provision of information

Education campaigns and product labelling requirements are means through which market failure in the area of information problems can be addressed. From an economic perspective, such measures should be aimed at improving the accuracy of people's perceptions of the consequences of smoking on health and the possibility of becoming addicted to or dependent on smoking.

Education campaigns

While economic theory initially assumes that consumers will have sufficient information (on costs and benefits) to make rational choices, in practice consumers of many products operate in an environment of incomplete information. This raises the question of when this becomes a sufficient problem to warrant the provision of publicly funded education and other informational campaigns. In certain cases, where the market clearly fails, there is a role for government to provide information about particular products. These include cases where:

- the government has access to information that is not readily available to others;
- relevant information would not be revealed by producers for commercial reasons; or

- information is not provided because consumers do not know they need it and therefore do not demand it. For example, this might occur if people were completely unaware that there were health risks associated with smoking. Thus, information on product attributes such as tar and nicotine content might not be demanded.

The provision of information in these cases is likely to contribute to economic efficiency because consumers are more accurately informed and, therefore, are better placed to make decisions that are consistent with their best interests and, ultimately, those of society.

An issue in the design of education and informational campaigns is the targeting of their message. An education campaign may be preferred to other means of disseminating information, such as through 'negative advertising' (discussed in Section B2.4.4 below), because it could be more narrowly targeted towards a specific group (for example, school children). If a campaign is more specifically targeted, it may be more cost-effective in correcting shortcomings in the availability of information.

Another issue is how people respond to the information they receive from education campaigns. The aim of campaigns should be to foster more accurate perceptions of the effects of smoking, rather than simply to provide information *per se*.

Labelling requirements

In Australia, cigarette companies are required to include a health warning and details of tar, carbon monoxide and nicotine content on the labels of all cigarette packets marketed in Australia. As outlined in Chapter 6, these labelling requirements have recently been made more extensive.

Labelling provides a targeted delivery of information to smokers and serves the useful function of reminding smokers of the implications of their decision at the moment the product is to be consumed. It also allows consumers to compare brands on the basis of key contents such as tar and nicotine. However, the effectiveness of labelling requirements depends on several factors:

- whether the labels are read — ideally prior to purchase;
- whether they contain accurate and readily understood information; and
- whether they are believed and acted upon.

In terms of the informational content of the labels, there is a trade-off made between the limitations of space available on the packaging and the usefulness of more detailed information. The main messages found on cigarette packages are short, general statements such as:

- ‘Smoking Causes Heart Disease’;
- ‘Smoking Damages Your Lungs’;
- ‘Smoking Causes Lung Cancer’; and
- ‘Smoking Reduces Your Fitness’.

While all such statements are succinct presentations of medical knowledge, they may contribute little to accurate risk perceptions. The recent changes to labelling regulations require tobacco companies to print on their packages both a succinct warning message and an explanatory message about the health effects of smoking.

There is also a need to ensure that potential smokers are made aware of the possibility of becoming addicted to or dependent on the product. Current warnings focus on the health risks associated with smoking but do not emphasise its addictive/dependency properties. The recent changes to labelling requirements, while still focussing on the health risks of smoking, will also point out that smoking is addictive.

B2.4.4 Measures to counter preference manipulation

As discussed in Section B2.3.3, factors such as persuasive advertising and peer group pressure may distort people’s preferences and, in the case of smoking, increase their desire for tobacco products. Advertising bans and negative advertising are two mechanisms used by governments to counter these problems.

Advertising bans

The case for advertising bans rests on eliminating the persuasive or manipulative effects that advertising may have on consumer preferences.

However, to the extent that advertising bans deny committed smokers a source of information about the product (for example, tar/nicotine content) or reduce competition, they may reduce economic efficiency.

While this suggests that advertising bans should ideally only apply to the persuasive element of advertising, the Commission notes that, in practice, it would be difficult to distinguish between the persuasive and informative elements of advertising.

Negative advertising

Advertising which attempts to influence a consumer to stop purchasing a product can be termed ‘negative advertising’. Negative advertising such as that associated with the ‘Quit for Life’ campaign attempts to deal with distortions to preference formation. Such campaigns seek to have people value their health more highly. This is different to an informational or education campaign (as discussed above) because it goes beyond providing information and rather attempts to change people’s preferences.

From the perspective of economic efficiency, the objective of government action, in the first instance, would be to assist people to make decisions that are more in accordance with their own preferences. The fact that governments support campaigns such as ‘Quit for Life’ implies that preferences formed by individuals are in some way deficient. In this sense, such campaigns may be seen as a means of countervailing distortions to consumer preferences.

B2.4.5 Bans on sales of tobacco products to minors

While economic analysis assumes, in the first instance, that individuals are the best judges of their own well-being, children (and some others, for example the mentally disadvantaged) are excluded from this presumption in many circumstances. This is because the ability to assess and process information is related to age during the early years of life.

Bans on the sale of cigarettes to minors have existed in Australia for over 80 years. These bans attempt to prevent people commencing smoking at a young age when they may not be fully aware of its implications. At the draft report hearings the TIA expressed support for this approach:

> The industry view is that smoking is an adult custom and the industry has, for a number of years, been urging government around Australia to raise the smoking age from 16 to 18 ... [As] with any activity that has risks associated with it that activity should be undertaken by people who are adults who are able to make an informed choice. (Transcript, pp. 489 – 490)

While the effect of these bans on preventing young people from commencing smoking is unknown, they clearly have not eliminated smoking by minors. Young people who are set on smoking are likely to find a means of obtaining cigarettes (for example, from parents or older friends, or due to the difficulty the retailer faces in ascertaining the age of young purchasers). Powell quotes figures on the smoking behaviour of young people which indicate the lack of success in eliminating smoking by attempting to ban the sale of cigarettes to minors[12]:

> By the age of 15 years, 27% of girls and boys are smoking. This is very close to smoking rates of the adult population. Smoking rates of girls 16 and 17 years old are higher than those of adult females. ... It is estimated that 70,000 Australian school children take up smoking every year. (1991, p. 30)

Furthermore, an aspect of banning a product may be to make it more desirable. This might occur if people have a preference for rebellion. As Powell notes:

> For the young smoker ... a cigarette, and the whole smoking process, is part of the illicit pleasure category. ... In the young smoker's mind a cigarette falls into the same category with wine, beer, shaving, wearing a bra (or *purposely* not wearing one), declaration of independence and striving for self identity. (1991, p. 31)

Thus, the effect of the ban may be to make smoking more appealing largely because it is 'forbidden'.

Taken together, these points raise questions about the efficacy of bans on sales of tobacco products to minors.

B2.5 Summary

This chapter has presented some of the key principles underpinning an economic approach to determining optimum levels of smoking and how market failure can result in undesirable levels and patterns of smoking. It has used these principles as a basis for considering various government actions and regulations to modify people's decisions about smoking.

[12] Additional evidence is found in a study by Wakefield, M. *et al.* (1992) which reported sales of cigarettes to 12 to 15 year olds occurring at 45 of 98 retail outlets.

B3 MEASURING THE COSTS AND BENEFITS OF SMOKING

B3.1 Introduction

This chapter explores the methodological issues involved in measuring the costs and benefits of smoking. It also makes some brief observations on some recent analyses of the costs and benefits of smoking in Australia.

Measurement of the costs of smoking is particularly relevant to the issue of what level of tax should be levied on cigarettes. The gap between the production costs and retail prices of tobacco products is tax. Governments tax cigarette production and consumption[1] for both revenue raising and health promotion objectives. The latter has become more important in recent years. If governments are to use taxes to achieve health objectives in an economically efficient manner, they need to have at least two pieces of information: the level of tax that reflects the social costs of smoking and the effectiveness of taxation for this purpose. To set the appropriate level of tax requires the measurement of the social costs of smoking.

Consequently, estimates of the costs (and benefits[2]) of tobacco consumption are often cited in the debate about the appropriateness of the current level of taxes on tobacco products. Comparisons are often drawn between the level of tax revenue raised from tobacco products and the level of costs incurred by the community. The implication of these comparisons is that if these costs exceed the revenue raised, then taxes on tobacco products should be increased. The converse argument is also made.

Several submissions have been made to the Commission presenting conflicting views of what are the relevant costs and benefits of smoking, and what their magnitudes are. Some of the debate (and confusion) results from different studies having different objectives, or making different assumptions, or having

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1 Given that demand is relatively inelastic, any taxes are likely to fall mainly on consumers.

2 Strictly speaking, measurement of the benefits of smoking is not relevant for considering what level of tax should be levied on tobacco products. What is relevant are the social costs of smoking. However, the measurement of the benefits (as well as the costs) of smoking may be useful for other reasons: for example, to gain an understanding of the net contribution of an industry to the economy, or to allow an examination of the existence and magnitude of any resource misallocation within the economy.

different interpretations of the medical science evidence, or applying different definitions of addiction/dependence. However, in the first instance, the debate will only be clarified by reference to the appropriate methodology.

This chapter therefore starts by examining the methodological framework for measuring costs and benefits. It is based mainly on a review article by Markandya and Pearce (1989) entitled ‘The Social Costs of Tobacco Smoking’.

B3.2 Assessing the costs of smoking

B3.2.1 Classification issues and concepts

There are several different types of costs associated with smoking. Some of these fall on smokers, some fall on passive smokers, and some fall on the public health system and thus on taxpayers in general. In addition, tobacco farmers and cigarette companies incur costs in the production of tobacco leaf and tobacco products. Some of these costs are tangible — for example, the costs of producing cigarettes or of treating people with smoking-related illnesses. Some of the costs are difficult to measure — for example, the suffering of friends and relatives of smokers who experience poor health or premature death.

One way of categorising these costs is to divide them into ‘privately borne’ costs[3] and ‘external’ costs. The ‘privately borne’ costs of smoking are those incurred directly by the smoker (for example, reduced physical well-being) or incurred by others, but reflected directly in the price paid by the smoker (for example, the cost of producing tobacco products). The ‘external’ costs of smoking are those borne by people other than the smoker and include the costs of passive smoking and of public health care. Together, the sum of privately borne costs and external costs equals the total costs of smoking.

The concept of external costs is significant in that it is this amount that a tax on tobacco products would need to recoup to cover the costs smokers impose on other members of society.

Another important concept is that of the ‘social’ cost of smoking. It is the amount that tobacco products would need to be taxed to recoup in any consideration of an optimal level of tobacco consumption. From an economic efficiency perspective, it is this concept which is most relevant for policy.

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3 These costs would normally be called ‘private costs’. However, as discussed below, Markandya and Pearce use that term for a narrower group of costs. Hence, the Commission has chosen to use the term ‘privately borne costs’ in this chapter.

The social cost of smoking is equal to the external costs of smoking plus that portion of privately borne costs which are not intentionally incurred by smokers. The significance of the distinction between privately borne costs which are intentionally and unintentionally incurred is made clear in the following statement by Markandya and Pearce[4]:

> To the extent that ... costs are knowingly and freely borne by the consumer or producer himself, they are referred to as PRIVATE COSTS but to the extent that they are not so borne but fall on the rest of society, they are referred to as SOCIAL COSTS. Hence the total cost of any activity is the sum of the private and social costs.
>
> The simple distinction, however, is complicated by a number of factors. As far as tobacco consumption is concerned, the most important of these is the extent to which the consumer is *aware* of the costs he bears. If his actions are determined by a perceived cost that is in fact less than his actual cost, then the difference between the two can be viewed as a social cost. The reason for making this interpretation is that the individual himself has not adjusted his behaviour to reflect these higher costs and they are therefore, in some sense, unaccounted for. ...
>
> The second key, and related, issue that arises in connection with tobacco consumption is that of addiction ... [which raises] the difficult question of what it means to *knowingly* incur certain costs. (1989, p. 1139–1140)

Markandya and Pearce, drawing on Atkinson (1974), also highlight the significance of addiction/dependence for the classification of privately borne costs. At one extreme:

> ... the addict derives no pleasure at all from smoking. Such a smoker has wholly distorted choices because he is purchasing something that gives him no benefit. His total expenditure on tobacco is thus an ‘overvaluation’ ... . (Markandya and Pearce 1989, p. 1144)

Were this the case, all privately borne costs would be ‘unintended’ and thus part of social costs. In other words, if all smokers were continuing smokers and were addicted/dependent and fully irrational, all costs associated with tobacco production and consumption would be social costs. However, at the other extreme:

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4 As alluded to above, Markandya and Pearce give the label ‘private costs’ to a group of costs which are narrower than that which is normally understood by the term. ‘Private costs’ would normally include all costs privately borne by the smoker, whether he or she intended to bear them or not. However, Markandya and Pearce, in using the term, are referring to only those privately borne costs which the smoker intended to bear. Regardless of terminology, what is more important from an economic perspective is that the portion of privately borne costs which the smoker did not intend to bear are part of social costs.

> ... there is a view of a 'rational' addict. Such a person takes account of how his tastes will change as a result of consuming a particular product and, for him, there are no direct social costs to consider. (Markandya and Pearce 1989, p. 1144)

Were this the case, social costs would simply comprise the external costs of smoking.

B3.2.2 The prevalence of unintended costs

The foregoing analysis indicates that the classification and magnitude of social costs will depend crucially on knowledge of smokers' behaviour or assumptions made about it, particularly the extent to which smokers incur unintended costs.

One facet of this is whether, and to what extent, smokers are addicted to or dependent on tobacco products — an issue which received much comment at the draft report hearings.

The Tobacco Institute of Australia (TIA) (Sub. 60, p. 6) described addiction as exhibiting four characteristics: intoxication; physical dependence; tolerance; and one's life being dominated by the substance in question. The TIA (Sub. 60, p. 6) argued that 'none of these criteria are satisfied by cigarette smoking.'

The Australian Council on Smoking and Health commented that:

> As to addiction, tobacco use is classified as an addiction by the American Psychiatric Association. ... There is any amount of evidence that there are many, many smokers who, with all the will in the world, apparently find it very difficult to quit.
>
> There are also of course 3.6 million ex-smokers in Australia, so plainly a large number of people who used to smoke have found the will and the way to give up. Does therefore that make smoking not addictive? ... the fact that there are a lot of people who used to smoke, and no longer do, does not suggest that tobacco is not addictive. (Transcript, p. 564)

These disagreements to some extent reflect differing interpretations of addiction/dependence. The description used by the TIA differs from a medical science definition. Box 3.1 presents the medical science definition of addiction, which was agreed to by the World Health Organisation.

As stated in Chapter B2, the Commission is not competent to resolve scientific issues relating to addiction/dependence and the smoking of tobacco products. This is an issue for the medical scientists and the Commission can do no more than proceed on the basis of existing scientific knowledge.

Box B3.1: Defining addiction and dependence

The term 'dependence' is used to describe a state of psychological or physical dependence, or both. The term dependence eliminates the terms 'addiction' and 'habituation'.

Before the acceptance of dependence as the appropriate term, psychological dependence was called habituation and always preceded physical dependence. As Plueckhahn (1983, p. 208) states: 'It may in fact be the main component of physical dependence and occurs when the use ... reaches the stage of a need and, in a more marked form, a craving ... either for its pleasurable effects or to relieve unpleasant feelings. Even when psychological dependence may build up to a physical dependence, it will still operate in the total picture. Physical or psychological dependence used to be known as addiction and involves concepts of ... tolerance built up on dosage and withdrawal symptoms. The motive ... may become linked with avoidance of painful withdrawal and thereby adds to the psychological component which always precedes and interacts with the physical dependence ... tolerance involves the adaptation of body tissue to steadily increased dosages ... The body then reacts in an abnormal way when the toxic drug, to which certain tissues of the body have been accustomed, is suddenly withdrawn. Both tolerance and withdrawal are physical phenomena which respond to physical treatment.'

The 1988 Report of the US Surgeon General is deemed by the medical science community to be an authoritative statement on nicotine addiction. The major conclusions of the report are:

- cigarettes and other forms of tobacco are addictive;
- nicotine is the drug in tobacco that causes addiction; and
- the pharmacologic and behavioural processes that determine tobacco addiction are similar to those which determine addiction to drugs such as heroin and cocaine.

Much of the economics literature which attempts to put the costs and benefits of smoking into that discipline's framework assumes that addiction/dependency is a potential result of consuming tobacco. However, as will be shown later, not all economists use the medical science definition of addiction/dependency and this leads to disagreements.

A second facet of determining whether smokers incur unintended costs is the extent to which an individual can be said to be 'rationally' addicted. That is, regardless of the definition of addiction/dependency used, the issue is: to what extent can smokers who are addicted to/dependent on tobacco products make rational decisions about the consumption of tobacco products? Markandya and Pearce state:

> With a 'rationally' addicted individual — i.e. one who knows how his desires and tastes will change in the future as a result of his smoking now — one can speak of costs having been knowingly and willingly incurred. But such cases are rare (or even non-existent) and so the problem of how to measure social costs in the presence of addiction will remain. (1989, p. 1140)

Prima facie, the perspective of these analysts is that they doubt the existence of a perfectly rationally addicted person. Nevertheless, they state (1989, p. 1143) that 'the notion of an "aware" addict is not meaningless: smokers do sometimes report that they know the publicized risks of smoking but are "unable" to give up'. Furthermore, the authors distinguish between addicted and non-addicted smokers, but do not suggest how to differentiate the two.

Economists who have posited the existence of perfectly rational addicts include Becker and Murphy (1988). They state (1988, p. 678): 'A rational person recognises that consumption of a harmful good ... has adverse effects on future utility and earnings'. From their perspective, much depends on the meaning of addiction/dependency, rather than on the meaning of rationality (which *prima facie* does not differ from that of Markandya and Pearce).

Becker and Murphy (1988, pp. 675–676) write of people becoming addicted to cigarettes, cocaine and alcohol, but also to 'work, eating, music, television, their standard of living, other people, religion, and many other activities'. These authors extend their view of rationality further when they argue (1988, pp. 683–684) that myopic (short-sighted) behaviour can be 'formally consistent with our definition of rational behaviour'. Becker and Murphy (1988, p. 684) argue this by reference to old people being less concerned about future consequences of current consumption than are young people, and hence the old 'are more likely to become addicted'. That stated, myopia (since attention was drawn to it by Pigou in 1928) has been defined as a 'defective telescopic faculty'. That is, an individual's decision today may be inconsistent with the outcomes he/she desires in the future.

On face value, the Becker and Murphy perspective is based on the colloquial definition of an addict, one who is an 'enthusiastic devotee of sport or pastime' (The Concise Oxford Dictionary, 7th Edition, 1982). If that is the case, their inclusion of the range of activities they list as being potentially subject to addiction is not inconsistent with human experience. On the other hand, if addiction/dependency is defined in the stricter scientific sense, it is possible that Becker and Murphy are discussing a different phenomenon to that discussed by Markandya and Pearce.

The main difference in these perspectives derives from differing views about an individual's ability to know the future — how his/her desires and behaviour will change in the future as a consequence of consuming, say, tobacco now. To the extent that people are aware of, and act on, the probable future implications of their current consumption, people can be rational addicts. To the extent that they do not, they will diverge from the model of rational addiction.

One issue relevant for determining whether addicted/dependent smokers can be considered rational addicts is whether the smoker had sufficient information to understand the possible health effects and the probability of addiction/dependency at the stage when he or she first contemplated (or experimented with) smoking. While this would have to be answered by each individual smoker, three generalisations can be made. The first is that, in many countries including Australia, health warnings have been issued for a long time. Second, with the advance in medical knowledge, health warnings have become more specific and extensive.[5] Third, until recently, little publicly supplied information (such as that on labels) emphasised that smoking was <u>addiction/dependency inducing</u>. It is plausible that at least some people were aware of the addictive/dependency inducing nature of smoking. Nevertheless, as far as warnings are concerned, it can be too late once a smoker is addicted or dependent on smoking — that is, one cannot become a perfectly rational addict after the event.

It thus seems that, while information has been provided, appropriate information (on the probability of addiction/dependency) has not been provided until recently. To the extent that this is the case, people who have been smoking for some years are candidates for experiencing at least some unintended costs.

There are several other reasons why smokers may not make rational decisions and thus incur unintentional costs.

First, rational decision-making may be constrained by an inability to comprehend and process information. One question here is whether all individuals, in all stages of their lives and in all circumstances, are the best judges of their own welfare. Societies have, through custom and/or regulation, excluded the immature (that is, those defined as children) from this principle. In this regard, the Commonwealth Department of Human Services and Health argued that young people are unable to make rational decisions:

> The debate surrounding the concept of “rational addiction”, is only relevant in the context of an adult market. A consensus exists among economists and the tobacco industry, about the inability of young consumers to make the fully-informed, mature, and responsible judgements which the concept “rational addiction” implies.
>
> Indeed, health research provides overwhelming evidence that the **majority** of smokers start smoking regularly in their early teens. The average age at which male smokers commence smoking is 14 years and for females it is slightly later, at 15 years. Trend

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5 It should be noted that the nature and the extent of scientific advice have changed dramatically over time; for example, only last century medical practitioners were recommending that asthmatics smoke.

> data show that with every successive generation, children and young teenagers are being offered, and are experimenting with cigarettes at ever younger ages.
>
> It would appear, therefore, that given the typically early onset of smoking and attendant addiction, the concept of "rational addiction" has limited applicability in relation to tobacco smoking. (Sub. 82, p. 2)

This suggests that smokers who commenced smoking at an early age may be incurring 'unintentional' costs as a result of their addiction/dependency. The unintentional addict might be considered unable to judge his or her best interests with regard to smoking.[6]

Second, as discussed in Chapter B2, distortions to consumer preferences may also interfere with rational decision-making. Non-informative and purely persuasive advertising can be thought of as an example. Likewise, the influence of fashion can be viewed as distorting preferences. The case for this type of influence has been argued thus:

> Indeed the influence of fashion is such that, for significant aspects of a range of consumption choices, decisions are in a very real sense *delegated to*, if not actually *dictated by*, 'experts', 'leaders', 'authorities', and 'opinion makers' in the relevant areas of choice. (Head 1990, p. 233–234)

Similarly, peer pressure is also pertinent to a young person's decision to experiment with smoking. One view is that conforming with one's peers is a subset of a more general human characteristic of accepting certain community values even though one's own preferences might diverge. This view is not that because individual preferences are affected by social settings, they become mirror images of what a community approves or disapproves. Rather:

> We ... find that individuals, as members of the community, accept certain community values or preferences, even though their personal preferences might differ. Concern for maintenance of historical sites, respect for national holidays, regard for environment or for learning and art are cases in point. By the same token, society may come to reject or penalise certain activities or products. Restriction of drug use or of prostitution ... may be seen to fit this pattern. Community values are thus taken to give rise to merit or demerit goods. (Musgrave 1990, pp. 208–209)

6 The view that people are not necessarily the best judge of their own welfare in all circumstances does not contradict economic theory. As Taylor (1990, p. 46) points out: 'The utilitarian theory is ... not committed to the view that all persons will always understand their own interests best. An agent may be mistaken about what will bring about states which he feels satisfying. He may be ignorant enough to think that drinking methyl alcohol has precisely the same consequences as drinking wine, and he knows that the state induced by the latter was highly satisfying. He may therefore have to be protected from the results of his own ignorance. But it is absolutely clear that the warrant for saying that he needs protection, viz, the negative consequences of drinking the spirits come from his own tastes and reactions. He himself would not find blindness satisfying.'

Whether the outcome of conforming to peer values or community norms causes unintended private costs would have to be assessed on a case-by-case basis, but whatever the situation, rationality based on the individualistic ethic is overridden, voluntarily, under this view.

A counter view is that conforming to peer group norms or community values is simply the manifestation of an innate human preference. Were this the case, the fact that people's preferences for certain goods, services or activities were influenced by community attitudes and values would not indicate that the individual concerned was incurring unintentional costs.

Third, an individual may make erroneous choices because, for whatever reason, he or she did not know what his or her true preference (or 'reflective choice') was until after the event. Head (1990, pp. 220–223) argues that such situations may arise if there are divergences between 'desires' (that is, what one's preferences are when making a consumption decision) and satisfaction actually received from the consumption of the good or service in question. He states:

> Divergences between ... desires and satisfactions ... may ... be related to the well known distinction between an ill-considered or impulsive choice as against a carefully considered or reflective choice. An impulsive or ill-considered market choice may, of course, be made under the influence of persuasive advertising. More generally perhaps, such choices may reflect problems under the heading of 'weakness of the will' ... major examples would include the important case of addictive drugs which directly 'weaken the will'. (1990, p. 223)

By way of summary, Walsh (1990, pp. 154–155) discusses a range of circumstances under which an individual may make decisions which in the long run are not in his or her best interests: actual consumption of a good is necessary to determine true preferences[7]; a product is technically complex and/or its costs and benefits cannot be adequately determined by independent evaluations; the costs or benefits of consuming a good are long-delayed; choices are made infrequently and once made are highly inflexible or have high costs; significant irreversibilities are involved; where consumption is habit-forming and weakness of will is involved.[8] Walsh states that smoking has the appropriate attributes to fit this situation.

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7 Education is often cited as an example inasmuch as individuals are unable to fully appreciate the benefits of education without actually consuming it — being educated.

8 McLure (1990, p. 180) defines 'weakness of will' as 'defects of will' which can have their source 'in the dualistic conflict between the mind, the residing place of "true" preferences, and the body, where desires hold sway over "actual" preferences, as expressed in actions taken in the market place'. He cites examples: 'Evidence of the reality of defects of will is found in the remorse caused by overindulging in a variety of activities (for example, gambling, eating, use of narcotics, and smoking)'.

In the final analysis, whether or not there are unintended costs to the smoker depends on whether there exists persons who are capable of taking into account the uncertain and probabilistic effects of addiction/dependency when they commence smoking. While this is theoretically possible, the economic literature indicates several reasons why smokers decisions may diverge from this model.

B3.2.3 The measurement framework

Markandya and Pearce list the following as the types of costs which are widely deemed to be constituent parts of the social costs of smoking:

- costs of medical treatment for smoking-related disease;
- loss of earnings due to absence from work due to sickness related to smoking;
- social security benefits paid out to smokers during periods of smoking related illness;
- a smoker’s valuation of loss of his/her life due to premature death;
- a smoker’s valuation of pain and suffering resulting from smoking-related illness;
- transfer payments such as pensions and taxes paid or foregone due to premature death;
- value of resources used in growing tobacco and manufacturing tobacco products (if the smoker is both addicted and unaware of the health costs of smoking);
- suffering of a smoker’s friends and relatives if he/she suffers from smoking-related disease/premature death; and
- cost to others of environmental tobacco smoke (passive smoking).

Markandya and Pearce also list taxation of tobacco products as a factor widely considered to be relevant to an assessment of social costs. They state that if tobacco taxes are levied to compensate for social costs, the taxes should be subtracted from the sum of the other costs so as to arrive at a net amount.

As the authors point out, each of the above items cannot simply be added to produce the appropriate total for social costs. Rather, some cost items need to be reduced (or deleted) depending on the extent to which they are privately and intentionally borne.

To assist in this regard, the authors distinguish four types of smokers based on whether the smoker is addicted[9] or not and whether the smoker is aware or unaware of the costs of smoking, and they indicate how these characteristics would influence which costs (and proportions thereof) are relevant.

How the various cost items should be taken into account is summarised below.

Medical treatment costs

The medical treatment cost for a smoker with a smoking-related disease is a 'private' cost if it is covered by a private insurance scheme (plus compulsory contributions to Medicare) or a direct payment by the smoker, otherwise it is a social cost. The authors argue that it is now generally accepted that the medical costs of smoking should be measured over the lifetime of an individual. This means the estimation is by no means straightforward. It means that there could be future savings in medical costs related to non-smoking illnesses if a smoker dies prematurely, and these would be credited to overall medical costs. Whether the total value of medical treatment costs is positive, zero or negative will depend on each individual's 'life cycle'. In referring to an empirical study by Leu and Schaub (1984) in which a lifetime approach was used, Markandya and Pearce state:

> Although smokers have higher annual medical costs, they have lower life expectancy and thus generate savings in medical costs which partly offset the costs of treating smoking related diseases. (1989, p. 1146)

The basic approach for estimating medical costs is presented in Box B3.2.

The practical problem in estimating these costs is determining, from medical science, whether or not certain diseases are wholly or partly due to smoking.

Box B3.2: **Estimating medical treatment costs**

'For a given population, the mortality ratio is estimated as deaths for a given disease for smokers relative to non-smokers. Combined with the numbers in the population who smoke relative to the total population of smokers and non-smokers combined, it is then possible to calculate an "attribution" factor which measures the proportion of deaths from that disease which can be regarded as arising from smoking. Given that the number of deaths due to a smoking-related disease are now estimated, this number is multiplied by some treatment cost per disease.'

Source: Markandya and Pearce 1989, p. 1144.

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9 As Markandya and Pearce use the term addicted and the following discussion draws heavily on their work, the term addicted rather than addicted to/dependent on is used.

Earnings loss due to sickness

This relates to wages, salaries or profits foregone due to an inability to work as a consequence of a smoking related illness. It is in the context of discussing this cost that the authors once again highlight the need to distinguish between a smoker who is adequately informed and one who is not. If adequately informed the smoker's foregone income will be internalised as an element of the private costs of smoking. If inadequately informed, then at least part of the loss of earnings will be a social cost. The appropriate procedure in making this calculation is presented in Box B3.3.

Box B3.3: **Estimating the social cost component of earnings loss**

'The correct measurement of such a social cost requires the demand curves for tobacco to be identified with and without the correct information ... this can be approximated by multiplying the difference between the true and the perceived probability of income loss by the loss of earnings itself. It should also be noted that if [earnings loss] is relevant, any transfer payments received because of sickness ... must not be added ... adding the two would be double counting.'

Source: Markandya and Pearce 1989, p. 1141.

Sickness benefits

If a smoker on becoming ill absents him/herself from work, and consequently is paid a sickness benefit by governments, that benefit is a transfer payment. If the smoker is aware of the health risks (and therefore internalised any sickness related foregone earnings), the sickness benefit is a cost to society. This occurs because the smoker's private cost will be decreased by the amount of the benefit and he/she will be operating the basis of that lower cost. This means that for aware smokers, sickness benefits are relevant social costs. However, for unaware smokers, sickness benefits are not relevant because to include them would be to double count the loss of earnings.

Smokers' value of life

A very basic point is made by Markandya and Pearce on this item. It is simply that what has to be measured is the smoker's valuation of his/her own life. This must not be confused with a measure of the cost to society in terms of 'lost' Gross National Product as a consequence of premature death. This view is expressed in greater detail in Box B3.4.

Box B3.4: Valuing life and ‘lost’ production

‘The concepts that are confused are the smoker’s valuation of his own life ... and some measure of cost to society in terms of “lost” Gross National Product (GNP) because of premature death. ... The latter ... is not a social cost, at least wholly. This is because society as a whole does not “lose” any GNP simply because smokers die prematurely in comparison with non-smokers. It only “loses” what the smoker would have paid the rest of society in the form of taxes and “gains” what it would have paid him through transfer payments.’

Source: Markandya and Pearce 1989, p. 1141.

The authors also draw attention to the fact that smokers who are aware that they are at risk of shortening their lives will have taken account of this in deciding whether to smoke or not. They state:

> Thus, for the rational and informed smoker, the value that he places on his own life is not relevant to calculation of social cost. (Markandya and Pearce 1989, p. 1141)

Smokers’ valuation of pain and suffering

Again, whether or not this is a social cost depends on a smoker’s awareness of potential health risks. Suffering due to smoking related ill-health is not a social cost for the aware smoker but is an unanticipated cost for the unaware. The authors point out that, if it is a social cost, it has to be net of any privately borne health costs and any value of life estimates. They do not suggest how pain and suffering could be measured, but to be consistent with the general framework it has to be based on an individual smoker’s valuation of cost to him/herself from pain and suffering.

Transfer payments paid or foregone due to premature death

This item is given the alternative title of ‘Lifetime benefits and taxation’. It is a measure of the difference between a smoker’s tax contributions and the amount he or she obtains through various forms of social security payments, calculated over the lifetime of a non-smoker. The concept is explained in greater detail in Box B3.5. The authors point out that this item is relevant in all cases, whether the smoker was aware or unaware, addicted or not addicted.

Box B3.5: **Net effect of transfer payments due to premature death**

'These amounts are calculated over the *lifetime of the non-smoke*r ... . That is, the taxes and benefits that would have been paid if the smoker had lived a normal age have to be estimated and a discounted present value of the two streams of financial flows calculated. If the net present value of the benefits exceeds that of the costs, there is a net social cost from smoking and vice versa.'

Source: Markandya and Pearce 1989, p. 1142.

Value of resources used in producing cigarettes, etc

Growing tobacco and manufacturing cigarettes etc uses resources which have a price; that is, there is a cost involved. Whether or not these costs are private ones (which *prima facie* they are) or social ones depends clearly on whether the smoker is an unaware addict or not. If he or she is the former, the authors argue that choices will be wholly distorted and thus the total expenditure on tobacco products is an 'overvaluation'. Box B3.6 contains a more detailed discussion.

Box B3.6: **Cost of production as a social cost of addiction**

'... the addict ... has wholly distorted choices ... . His total expenditure on tobacco is thus an "overvaluation" and the smoker could benefit by an amount equal to that expenditure if he spent it on something else. His expenditure on tobacco is equal to the cost of producing it (including tobacco companies' profits) and the excise tax. Thus [the cost of production plus taxes/charges] is the gross cost of addiction. But [a tax] is a transfer payment (ie it accrues as a benefit to others). So the true cost of addiction is [the cost of production] only.'

Source: Markandya and Pearce 1989, p. 1144.

The authors add to this assessment by arguing that if an unaware addict took into account the costs of his/her purchases (which equal the costs of production plus taxes/charges) and was made aware of the health risks, this might suggest the smoker would stop smoking. But they state (1989, p. 1144): 'Since this is unlikely to be true, [the cost of production] probably overestimates the social costs of this aspect of tobacco consumption'.

Suffering of smoker's friends and relatives

If a smoker becomes ill or suffers premature death, his/her friends and relatives will experience grief and suffering, which is a social cost. The authors argue this is the case notwithstanding whether the smoker was aware or unaware, addicted or not. The authors do not suggest how such costs should be measured but to be consistent with the framework, the person suffering is the only one who can place a ‘price’ on that suffering.

Tobacco taxation

The authors note the considerable debate about the role of tobacco taxes and who are the beneficiaries. They take the view that tobacco taxes began their existence as a means of raising revenue and that only in recent years has there been evidence that increases in taxes have at least partly been justified as a means of deterring smokers and/or compensating society for the social costs of smoking.

To the extent that taxes are levied for the latter purpose, they need to be deducted from the sum of social costs; that is, social cost is a <u>net</u> cost which recognises the compensation paid to those adversely affected by smoking.

The authors’ discussion of the debates about tobacco taxation helps clarify what is often a contentious issue. It is presented in Box B3.7.

Environmental tobacco smoke and passive smoking

Passive smoking, whether it causes illness or is just an annoyance, is a cost to non-smokers and hence an obvious externality. In addition, fire damage to others’ property or loss of their lives, if caused by smokers, is another externality.

Box B3.7: **Pigovian taxes or revenue raising?**

‘The taxation of tobacco products is widely referred to in debates about the social costs and benefits of smoking, primarily because pro-smokers argue that society benefits more from tobacco taxation than any social costs imposed [on] non-smokers. In fact the role played by [tobacco taxes] is not at all straight forward. In large part this is because of differences of opinion as to the *purpose* of such taxes. At one extreme is the view that the tax is explicitly designed to deter smokers from smoking and/or to recompense society for the social costs of smoking. Such a tax would be referred to in economic terms as the Pigovian tax, after the economist, AC Pigou, who elaborated the idea of taxing products according to the social costs they impose.

... There is in fact very little evidence that excise duties on tobacco began their existence as such taxes. Indeed, the presumption must be that excise duties on tobacco owe far more to the fact that ... cigarette smoking is price inelastic (increasing price does not reduce demand in equal proportion).’

Source: Markandya and Pearce 1989, pp. 1142–1143.

Workplace costs

Although not identified as separate costs in the list presented earlier, the authors discuss what they term ‘workplace cost’. Given the types of costs involved it is difficult to determine what, if any, are social costs. Those likely to be social costs are, in most cases, already included under one of the earlier headings.

Markandya and Pearce (1989, p. 1148) refer to various studies which have suggested the following range of workplace costs related to employing smokers: excess insurance costs, fire, workers’ compensation, absenteeism, productivity loss of smokers and non-smokers and costs of occupational health. It is argued that loss of productivity results from time lost to ‘smoking rituals’, extra cleaning costs, damage to equipment, furniture and fittings, and errors due to the effect that high levels of carbon monoxide in smokers’ blood have on attentiveness, cognitive ability and ability to exercise.

In discussing whether such costs are social costs the authors state:

> On one interpretation, a perfectly functioning labour market would internalise all such costs through wage-bargaining procedures. That is wages would be adjusted downwards compared to what they would otherwise be to reflect the costs imposed by smokers. Although wages in general may well reflect such costs, there is no evidence that *differential wages* are paid to smokers versus non-smokers. Hence part of the costs of smoking are borne by the smokers but part are borne by the rest of the workforce. It is this latter that constitutes a social cost. (Markandya and Pearce 1989, p. 1148)

Summary

The analytical framework suggested by Markandya and Pearce is summarised in Table B3.1. It distinguishes four cases: addicted/non-addicted and aware/unaware. The authors state (1989, p. 1143) that the aware case is the more <u>empirically</u> relevant and that the aware and addicted category ‘presents problems of interpretation since it is not at all clear what awareness of risks combined with addiction actually implies’. They therefore do not attempt to adjudicate on whether or not social costs are involved.

Table B3.1: **Identification of social effects**

Costs	*Category of smokers* Unaware and addicted	*Unaware and non-addicted*	*Aware and addicted*[a]	*Aware and non-addicted*
1. Medical treatment costs[b,c]	Yes	Yes		Yes
2. Smoker's valuation of his/her life	Yes	Yes		No
3. Loss of earnings due to smoking-related sickness	Yes	Yes		No
4. Sickness benefit payments	No	No		Yes[d]
5. The lifetime difference between smokers' contribution to government taxes and what he/she withdraws from government revenue (eg social security payments) MINUS a proportion of tobacco taxes[e,f]	Yes[f]	Yes		Yes
6. Suffering of a smoker's friends and relatives if he/she suffers from smoking-related disease/premature death	Yes	Yes		Yes
7. Smoker's own suffering	Yes	Yes		No
8. Cost of producing tobacco products	Yes	No		No
9. Costs of passive smoking	Yes	Yes		Yes

a This column is left blank because of problems of measuring social costs in the presence of addiction.
b As measured over the lifetime of an individual and since future savings could result from premature death, the value could be negative, zero or positive.
c Not a social cost if incurred through a private insurance or direct payment scheme.
d If a smoker is aware of health risks, he/she will have internalised any loss of earnings; but if paid a sickness benefit this is a cost to society, although a transfer payment. Private costs will be lowered by the amount of the payment and the smoker will make decisions on the basis of that lower cost.
e If the net present value of the benefits exceeds the costs, there is a social cost and *vice versa*.
f If tobacco taxes are paid by smokers to compensate the cost to society, they should be deducted. Markandya and Pearce do not subtract tobacco tax for the unaware and addicted smoker.
Source: Adapted from Markandya and Pearce 1989.

B3.3 Assessing the benefits of smoking

As discussed in Chapter B2, the benefits of smoking pertain to the satisfaction smokers get because it does one, some or all of the following:

- provides a pleasurable taste or aroma;
- provides a sensation of heightened concentration;
- provides a sense of sophistication (particularly to the young);
- enhances peer group acceptance (depending on the values and attitudes of the peer group); and

- satisfies a physiological craving (as in the case of addiction).

Three observations should be made about this list. First, these benefits all accrue to the individual smoker and are thus private benefits. There does not appear to be any significant external benefits associated with smoking. Second, while the benefits listed are all very difficult to measure, it does not mean they are any less valuable to smokers nor of less importance in an economic sense. Third, this list contains many items which physiologists or psychologists might strongly dispute either because they are based on smokers' misperceptions or because they are not 'beneficial'. Without negating this point, what matters from an economic perspective is how smokers' perceive their own well-being.

At a conceptual level, a measure of the benefits people accrue from the consumption of a particular product is the amount they are willing to pay for it. The idea behind this measure is that, the greater the benefits, the greater will be the amount of money (or other goods and services) that the person will be willing to give up to obtain it.[10]

While each consumer pays the same price per unit of tobacco product, some consumers are likely to be willing to pay more than they currently do. If so, these smokers would appear to obtain a benefit from smoking over and above the market price. This benefit is referred to as 'consumer surplus'. Consumer surplus is often used as a measure of the benefits people obtain from consuming a particular product. This measure is relevant if the issue is the comparison of the costs and benefits of, say, altering the regulations pertaining to smoking or the consumption of cigarettes to some other good or service. The use of consumer surplus is not appropriate if it is used to measure the value of <u>all</u> the goods and services produced in an economy.

Problems arise with using willingness to pay (and consumer surplus) to measure benefits received from smoking when smokers are addicted to or dependent on the product. In theory, rational addicts will be aware that their current consumption of tobacco products will increase their need for consumption in the future and, to the extent that this will involve future costs, this should be reflected in a reduced willingness to pay for tobacco products at any particular point in their life. Hence, the consumer surplus measure will accurately capture

[10] 'Willingness to pay' could in theory be measured in terms of how much time people are willing to give up, or how much work they would be willing to do, or how much pain they are willing to suffer, in order to secure the product in question. However, willingness to pay studies are usually presented in monetary terms. This is because money can be traded for a variety of goods, services and activities. The amount of money people are willing to pay for a product is thus seen, in the first instance, as a reasonable indicator of how much value people put on a product (relative to the value they put on other goods, services and activities they could consume or undertake).

the net benefits to the smoker of smoking in these circumstances. However, to the extent that tobacco addicts are not rational, conceptual difficulties arise. In one sense, all addicted smokers (including non-rational addicts) get a benefit simply by satisfying their addiction and this would be reflected in their willingness to pay for tobacco products. However, an alternative interpretation is that the willingness to pay of irrationally addicted smokers may overstate any benefits they gain from smoking. This view can be inferred from Markandya and Pearce when they speak of ‘the addict [who] derives no pleasure at all from smoking’.

B3.4 Studies of the costs and benefits of smoking in Australia

Two recent studies have attempted to quantify the costs and/or benefits of smoking in Australia.

In a study commissioned by the Commonwealth Department of Health, Sydney economists Collins and Lapsley (1991) provided an estimate of ‘the current year net costs of all past and current [tobacco] abuse’. These were estimated as being at least $6.8 billion in 1988. The authors emphasised that these estimates were likely to understate the actual costs of tobacco abuse in Australia.

In a revised (1994) study submitted to this inquiry by the Commonwealth Department of Human Services and Health, Collins and Lapsley estimated that costs of tobacco use in 1992 were $9.2 billion. Unlike the 1988 estimates, the revised figures include cost estimates for passive smoking. The authors stress (Sub. 51, p. 59) that the figures of the separate studies are <u>not</u> directly comparable due to ‘developments in methodology and an extension in coverage’. However, the authors still state that the costs are likely to be underestimated.

In a study commissioned by the TIA for this inquiry, ACIL Economics and Policy Pty Ltd sought to assess ‘the costs and benefits to Australians and Australia from smoking’. ACIL estimated that smoking, and associated activities which supply tobacco products to smokers, provided <u>net</u> benefits (benefits minus costs) of around $12.5 billion in 1992–93. Of this, $3.4 billion constituted the tobacco industry’s value-added or contribution to Gross Domestic Product, and $9.1 billion accrued to smokers in the form of consumer surplus.

In a revision to its study submitted at the draft report hearings, ACIL adjusted the price elasticity of demand for smoking which resulted in a lower estimate of consumer surplus of $5.7 billion per year. ACIL also deleted the $3.4 billion value-added estimate as value-added does not represent net benefits to the tobacco industries. The actual net benefit (producers' surplus) remains unknown although ACIL suggested it would not differ significantly from the value-added estimate.

It is apparent that these studies give a significantly different impression of the economic effects of smoking, and it is pertinent from a public policy perspective to inquire as to the differences between the two.

While the Commission has not attempted to make a comprehensive assessment of these studies, the following observations are intended to clarify some of the issues raised by them.

First, the studies differ markedly in their treatment of benefits. Based on smokers' willingness to pay for tobacco products, ACIL calculate substantial net benefits to smokers. In contrast, in their 1991 study, Collins and Lapsley, on the basis of medical opinion, viewed all smoking as drug abuse and consequently assumed that there are no benefits. In their more recent study, Collins and Lapsley allow for some level of non-addictive or dependent consumption.

To put ACIL's original $9.1 billion estimate of consumer surplus into perspective, the Commission notes that total private final consumption expenditure on food for 1992–93 was $36.6 billion — and since less than one quarter of the population are smokers, it implies that smokers were willing to pay an additional amount (over and above the $5.4 billion spent on cigarettes and tobacco in that year) equivalent to their total expenditure on food in order to maintain the same level of cigarette consumption.

Despite ACIL's downward revision of the estimate of consumer surplus, the Commission is inclined to question the validity of equating willingness to pay with a net benefit to consumers of tobaccco products. Since each consumer has a finite budget, the ability to pay would require a reduction in consumption of other goods and a corresponding reduction in whatever benefit currently accrues from the consumption of those other goods.

Second, the studies make different assumptions about the value of certain variables. For example, while ACIL starts with the same cost data as the Collins and Lapsley 1991 study, it makes different assumptions regarding aetiological (or cause of death) fractions and these generate lower cost estimates.

Third, the studies differ in their categorisation of private and social costs. Collins and Lapsley include as social costs all costs which are privately borne by smokers themselves. These include such items as the resources used in producing tobacco products (which is reflected in the price of cigarettes paid by smokers), loss of production and income to smokers, and the value of life foregone by smokers who contract smoking-related diseases. These costs are treated as private costs, rather than social costs, in the ACIL study.

As discussed in Section B3.2, whether costs privately borne by smokers should be classified as private costs or social costs (as defined by Markandya and Pearce) depends on the extent to which they were intentionally borne. This in turn depends on the extent to which smokers are aware of the health risks of smoking, whether they are addicted or not and, if they are, whether they can be said to be rationally addicted. To the extent that smokers are aware, non-addicted and/or rationally addicted, these costs will indeed be private costs. However, to the extent that smokers are not aware or are irrationally addicted, at least some proportion of these costs will be social costs.

APPENDIX A CUSTOMS TARIFF AND EXCISE TARIFF PROVISIONS

A.1 CUSTOMS TARIFF ACT 1987: TOBACCO, MANUFACTURED TOBACCO AND MANUFACTURED TOBACCO SUBSTITUTES

Schedule 3

2401	Unmanufactured tobacco; tobacco refuse
2402	Cigars, cheroots, cigarillos and cigarettes; of tobacco or of tobacco substitutes
2403	Other manufactured tobacco and manufactured tobacco substitutes; ‘homogenised’ or ‘reconstituted’ tobacco, tobacco extracts and essences

Schedule 4

35A	Tobacco products for medical or scientific purposes
35B	Unmanufactured tobacco and tobacco refuse entered under the Local Leaf Content Scheme to manufacture cigarettes
35C	Unmanufactured tobacco and tobacco refuse entered under the Local Leaf Content Scheme to manufacture tobacco

Note:

Customs duty on imported tobacco products is based on the net invoice weight of the goods and any cards, tags and bands or like attachment imported with, and to be sold with, the goods. In the past, it was common practice for cigarettes to be imported with cards included in the packets. However, this practice ceased many years ago. Cigars, cheroots and cigarillos are still imported with tags, bands, etc and these attachments are included in the weight for duty purposes.

		CUSTOMS TARIFF R.4 SCHEDULE 3	Section 4 Chapter 24/3
Reference Number	*Statistical Code/Unit*	*Goods*	*Rate* [a]
2401		**Unmanufactured Tobacco; Tobacco Refuse:**	
2401.10		-Tobacco, not stemmed/stripped:	
2401.10.1		--- For use, other than in the manufacture of snuff, by a person who is a manufacturer for the purposes of the *Excise Act 1901*:	
2401.10.11	*01 kg*	---- For use in the manufacture of cigars, cheroots or cigarillos	Free
2401.10.12[b]	*02 kg*	---- For use in the manufacture of cigarettes or of fine cut tobacco suitable for the manufacture of cigarettes	23%, or, if lower $1.42/kg DC:18%; or, if lower, $1.42/kg, less 5%
		From 1 July 1989	21%, or, if lower, $1.42/kg, DC:16%; or, if lower, $1.42/kg, less 5%
		From 1 July 1990	19%, or, if lower, $1.42/kg DC:14%; or, if lower, $1.42/kg, less 5%
		From 1 July 1991	17%, or, if lower $1.42/kg DC:12% or, if lower, $1.42/kg, less 5%
		From 1 July 1992	15%, or, if lower, $1.42/kg DC:10%; or, if lower, $1.42/kg, less 5%

[a] Unless otherwise indicated NZ, PNG, FI and DC rates are Free.

[b] Operative 1/7/1988

Section 4 **CUSTOMS TARIFF**
Chapter 24/4 **SCHEDULE 3**

Reference Number	*Statistical Code/Unit*	*Goods*	*Rate* [a]
2401.10.13[b]		---- For use in the manufacture of tobacco, NSA	23%, or if lower, $1.07/kg DC:18%; or, if lower, $1.07/kg, less 5%
		From 1 July 1989	21%, or, if lower, $1.07/kg DC:16%; or, if lower, $1.07/kg, less 5%
		From 1 July 1990	19%, or, if lower, $1.07/kg DC:14%; or, if lower, $1.07/kg, less 5%
		From 1 July 1991	17%, or, if lower, $1.07/kg DC:12%; or, if lower, $1.07/kg, less 5%
		From 1 July 1992	15%, or, if lower, $1.07/kg DC:10%; or, if lower, $1.07/kg, less 5%
	03 kg	*Flue cured virginia type*	
	04 kg	*Other*	

[a] Unless otherwise indicated NZ, PNG, FI and DC rates are Free
[b] Operative 1/7/1988

CUSTOMS TARIFF **Section 4**
R.4 SCHEDULE 3 **Chapter 24/5**

Reference Number	*Statistical Code/Unit*	*Goods*		*Rate* [a]
2401.10.90[b]	*05 kg*	--- Other		23%, or, if lower, $1.99/kg DC:18%; or, if lower, $1.99/kg, less 5%
			From 1 July 1989	21%, or, if lower, $1.99/kg DC:16%; or, if lower, $1.99/kg, less 5%
			From 1 July 1990	19%, or, if lower, $1.99/kg DC:14%; or, if lower, $1.99/kg, less 5%
			From 1 July 1991	17%, or, if lower, $1.99/kg DC:12%; or, if lower, $1.99/kg, less 5%
			From 1 July 1992	15%, or, if lower, $1.99/kg DC:10%; or, if lower, $1.99/kg, less 5%
2401.20		- Tobacco, partly or wholly stemmed/stripped:		
2401.20.1		--- For use, other than in the manufacture of snuff, by a person who is a manufacturer for the purposes of the *Excise Act 1901*:		
2401.20.11	*06 kg*	---- For use in the manufacture of cigars, cheroots or cigarillos		Free

[a] Unless otherwise indicated NZ, PNG, FI and DC rates are Free

[b] Operative 1/7/1988

Section 4
Chapter 24/6

CUSTOMS TARIFF
SCHEDULE 3

Reference Number	*Statistical Code/Unit*		*Goods*	*Rate* [a]
2401.20.12[b]	*05*	*kg*	---- For use in the manufacture of cigarettes of fine cut tobacco suitable for the manufacture of cigarettes	23%, or, if lower, $1.42/kg DC:18%; or, if lower, $1.42/kg, less 5%
			From 1 July 1989	21%, or, if lower, $1.42/kg DC:16%; or, if lower, $1.42/kg, less 5%
			From 1 July 1990	19%, or, if lower, $1.42/kg DC:14%; or, if lower, $1.42/kg, less 5%
			From 1 July 1991	17%, or, if lower, $1.42/kg DC:12%; or, if lower, $1.42/kg, less 5%
			From 1 July 1992	15%, or, if lower, $1.42/kg DC:10%; or, if lower, $1.42/kg, less 5%
	07	*kg*	*Flue cured virginia type*	
	08	*kg*	*Other*	

[a] Unless otherwise indicated NZ, PNG, FI and DC rates are Free
[b] Operative 1/7/1988

		CUSTOMS TARIFF SCHEDULE 3	**Section 4 Chapter 24/7**
Reference Number	*Statistical Code/Unit*	*Goods*	*Rate* [a]
2401.20.13[b]		---- For use in the manufacture of tobacco, NSA	23%, or, if lower, $1.07/kg DC:18%; or, if lower, $1.07/kg, less 5%
		From 1 July 1989	21%, or, if lower, $1.07/kg DC:16%; or, if lower, $1.07/kg, less 5%
		From 1 July 1990	19%, or, if lower, $1.07/kg DC:14%; or, if lower, $1.07/kg, less 5%
		From 1 July 1991	17%, or, if lower, $1.07/kg DC:12%; or, if lower, $1.07/kg, less 5%
		From 1 July 1992	15%, or, if lower, $1.07/kg DC:10%; or, if lower, $1.07/kg, less 5%
	09 kg	*Flue cured virginia type*	
	10 kg	*Other*	

[a] Unless otherwise indicated NZ, PNG, FI and DC rates are Free

[b] Operative 1/7/1988

Section 4 **CUSTOMS TARIFF**
Chapter 24/8 **SCHEDULE 3**

Reference Number	*Statistical Code/Unit*	*Goods*		*Rate* [a]
2401.20.90[b]	*11 kg*	--- Other		23%, or, if lower, $1.99kg DC:18%; or, if lower, $1.99/kg, less 5%
			From 1 July 1989	21%, or, if lower, $1.99/kg DC:16%; or, if lower, $1.99/kg, less 5%
			From 1 July 1990	19%, or, if lower, $1.99/kg DC:14%; or, if lower, $1.99/kg, less 5%
			From 1 July 1991	17%, or, if lower, $1.99/kg DC:12%; or, if lower, $1.99/kg, less 5%
			From 1 July 1992	15%, or, if lower, $1.99/kg DC:10%; or, if lower, $1.99/kg, less 5%

[a] Unless otherwise indicated NZ, PNG, FI and DC rates are Free

[b] Operative 1/7/1988

		R.13	**CUSTOMS TARIFF SCHEDULE 3**	**Section 4 Chapter 24/9**

Reference Number	*Statistical Code/Unit*		*Goods*	*Rate* [a]
2401.30.00	*12*	*kg*	- Tobacco refuse	15%, or, if lower, $1.99/kg DC:10%; or, if lower, $1.99/kg, less 5%
2402			**Cigars, Cheroots, Cigarillos and Cigarettes, of Tobacco or of Tobacco Substitutes:**	
2402.10.00[b]			- Cigars, cheroots and cigarillos, containing tobacco	$67.37/kg NZ: $63.56/kg PNG: $63.56/kg FI: $63.56/kg DC: $67.37/kg, less 5%; or, if higher $63.56/kg
	13	*kg*	*Not exceeding 2kg/1000*	
	14	*kg*	*Exceeding 2kg/1000 but not exceeding 5kg/1000*	
	15	*kg*	*Exceeding 5 kg/1000*	
2402.20.00[b]	*16*	*kg*	- Cigarettes containing tobacco	$66.00/kg NZ: $63.56/kg PNG: $63.56/kg FI: $63.56/kg DC: $66.00/kg, less 5%, or, if higher $63.56/kg
2402.90.00	*17*	*kg*	- Other	Free
2403			**Other Manufactured Tobacco and Manufactured Tobacco Substitutes; ‘Homogenised’ or ‘Reconstituted’ Tobacco; Tobacco Extracts and Essences**	
2403.10			- Smoking tobacco, whether or not containing tobacco substitutes in any proportion:	

[a] Unless otherwise indicated NZ, PNG, FI and DC rates are Free

[b] Operative 1/7/1988

Section 4 **CUSTOMS TARIFF**
Chapter 24/10 **SCHEDULE 3** (Section 5 follows)

Reference Number	*Statistical Code/Unit*	*Goods*	*Rate* [a]
2403.10.10[b]	*18 kg*	--- Fine cut, suitable for the manufacture of cigarettes, not put up for retail sale	$66.00/kg NZ: $63.56/kg PNG: $63.56/kg FI: $63.56/kg DC: $66.00/kg, less 5%, or, if higher $63.56/kg
2403.10.90[b]		--- Other	10%, and $63.56/kg NZ:$63.56/kg PNG:$63.56/kg FI:$63.56/kg DC:5%, and $63.56/kg
	19 kg	*Cigarette tobacco*	
	20 kg	*Pipe tobacco*	
2403.9		- Other	
2403.91.00	*21 kg*	-- ‘Homogenised’ or ‘reconstituted’ tobacco	The rate of duty set out in this column in the tariff classification that would apply to the tobacco if it were unmanufactured tobacco DC: The rate of duty in relation to which ‘DC’ is specified set out in this column in the tariff classification that would apply to the tobacco if it were unmanufactured tobacco
2403.99		-- Other:	
2403.99.10	*22 kg*	--- Not containing tobacco	Free

[a] Unless otherwise indicated NZ, PNG, FI and DC rates are Free
[b] Operative 1/2/94

		CUSTOMS TARIFF SCHEDULE 3	**Section 4 Chapter 24/10**
Reference Number	*Statistical Code/Unit*	*Goods*	*Rate* [a]
2403.99.20[b]	*23 kg*	--- Snuff	10%, and $1.57/kg NZ:$1.57/kg PNG:$1.57/kg FI:$1.57/kg DC:5% and $1.57/kg
2403.99.90[b]		--- Other	10%, and $63.56/kg NZ:$63.56/kg PNG:$63.56/kg FI:$63.56/kg DC:5%, and $63.56/kg
	24 kg	*Chewing tobacco*	
	25 kg	*Other*	

[a] Unless otherwise indicated NZ, PNG, FI and DC rates are Free

[b] Operative 1/2/94

CUSTOMS TARIFF
SCHEDULE 4
CONCESSIONAL RATES OF DUTY
Part III
R.9 Other Concessions for Prescribed Goods **Schedule 4/13**

Item	*Treat Code*	*Reference Number*	*Statistical Code/unit*	*Goods*	*Rate* [a]
35A	..	**9999.40.35**	*29 kg*	Tobacco, cigars, cigarettes or snuff, in quantities approved by the Comptroller, for use in a medical or other scientific research programme approved by the Comptroller	Free
35B	615	*		Unmanufactured tobacco and tobacco refuse classified under 2401.10.12, 2401.20.12 or 2401.30.00 of Schedule 3, as prescribed by by-law, being: (a) for use by a person who is a manufacturer for the purposes of the *Excise Act 1901*, and also the holder of a certificate issued by the Comptroller for the purposes of this item; and (b) for use in the manufacture of cigarettes or of fine cut tobacco suitable for the manufacture of cigarettes, being cigarettes or fine cut tobacco that will contain Australian grown tobacco leaf, entered for home consumption on or before 30 September 1995	$0.47/kg DC:$0.47/kg less 5%

[a] Unless otherwise indicated NZ, PNG, FI and DC rates are Free

* Enter under tariff classification and, where provided, statistical key requirements in Schedule 3. Statistical requirements not provided in Schedule 3 are listed in this Schedule.

CUSTOMS TARIFF
SCHEDULE 4
CONCESSIONAL RATES OF DUTY
Part III
R.9 Other Concessions for Prescribed Goods **Schedule 4/13**

Item	*Treat Code*	*Reference Number*	*Statistical Code/unit*	*Goods*	*Rate*[a]
35C	617	*		Unmanufactured tobacco and tobacco refuse classified under 2401.10.13, 2401.20.13 or 2401.30.00 of Schedule 3, as prescribed by by-law, being: (a) for use by a person who is a manufacturer for the purposes of the *Excise Act 1901*, and also the holder of a certificate issued by the Comptroller for the purposes of this item; and (b) for use in the manufacture of tobacco (other than snuff, cigarettes or of fine cut tobacco suitable for the manufacture of cigarettes, being cigarettes) being tobacco that will contain Australian grown tobacco leaf, entered for home consumption on or before 30 September 1995	$0.33/kg DC:$0.33/kg, less 5%

[a] Unless otherwise indicated NZ, PNG, FI and DC rates are Free

* Enter under tariff classification and, where provided, statistical key requirements in Schedule 3. Statistical requirements not provided in Schedule 3 are listed in this Schedule.

A.2 EXCISE TARIFF ACT 1921: TOBACCO, CIGARS, CIGARETTES, SNUFF

Note:

Excise is liable on the weight of tobacco as harvested but on the premise that all product that goes to manufacture is actually levied only on the weight of manufactured products (tobacco, cigars, cigarettes etc). In this way, waste, residue etc is not dutiable.

Excise duty on locally manufactured tobacco products is based on the weight of the product. In the case of cigarettes, excise is based on the total weight of the cigarette — ie including the weight of the paper and the filter. The *Excise Tariff Act* refers to 'cigarette' - and a cigarette is comprised of tobacco and other components.

E 62 **THE SCHEDULE**

Reference Number	*Statistical Code/Unit*		*Goods*	*Rate*
* **6 ---**			**Tobacco (except tobacco delivered under Item 8 or Item 9A of this Schedule)**	$63.56 per kilogram
	10	*kg*	+ fine cut	
	21	*kg*	+ pipe	
	32	*kg*	+ other	
* **7 ---**			**Cigars (except cigars delivered under item 9A of this Schedule)**	$63.56 per kilogram
	19	*kg*	+ not exceeding 2 kg per 1000	
	2X	*kg*	+ exceeding 2 kg per 1000 but not exceeding 5 kg per 1000	
	30	*kg*	+ exceeding 5 kg per 1000	
* **8 ---**			**Cigarettes (except cigarettes delivered under Item 9A of this Schedule); fine-cut tobacco suitable for the manufacture of cigarettes (except goods delivered under item 6 or item 9A of this Schedule)**	$63.56 per kilogram
	17	*kg*	+ cigarettes	
	28	*kg*	+ fine-cut tobacco suitable for the manufacture of cigarettes	
* *9* ---			**Snuff (other than snuff delivered under item 9A in this Schedule)**	$1.57 per kilogram
	26	*kg*		
9 A --			**Tobacco, cigars, cigarettes and snuff, being goods for use in a medical or other scientific research programme approved by the Comptroller, and delivered with the approval of the Comptroller**	Free
	11	*kg*		

* Operative 1/2/94

APPENDIX B EXCHANGE OF CORRESPONDENCE

On 17 March 1994, Senator the Honourable Bob Collins, the Minister for Primary Industries and Energy, wrote to Dr Tor Hundloe, the Presiding Commissioner on the inquiry into the tobacco growing and manufacturing industries, concerning the import commitments contained in Australia's draft Uruguay Round schedule including the tariffication of the Local Leaf Content Scheme.

Dr Hundloe replied on March 18 1994.

The correspondence is reproduced on the following pages.

APPENDIX C INQUIRY PARTICIPANTS AND VISITS

C.1 Inquiry Participants

Organisations and individuals who made submissions to the inquiry are listed below. Participants marked * appeared at public hearings. Participants marked ** made no written submissions but appeared at the hearings. The remainder made written submissions only.

Participant	Submission No[1]
ACIL Economics & Policy Pty Ltd*	41, 59
Agricultural Assessments	2
Alchin, Mr Terry M.	1
Australian Council on Smoking and Health (WA) * on behalf of:	24, 54
Australian Cancer Society	
Anti-Cancer Council of Victoria	
Anti-Cancer Foundation of the Universities of South Australia	
Cancer Foundation of Western Australia	
NSW Cancer Council	
ACT Cancer Society Inc	
National Heart Foundation	
Public Health Association	
Royal Australasian College of Physicians	
Australian Medical Association	
Adventist Health	
Australian Customs Service	18, 78
Australian Medical Association Limited	5
Australian Tobacco for Australian Consumers *	26, 53, 74
Australian Tobacco Marketing Advisory Committee *	11, 55, 85, 86
AWU-FIME Amalgamated Union	40
Canberra ASH Incorporated	6, 52[a]
Central Tobacco *	67
Ciavarella, Mr Cyril *	15
Commonwealth Department of Human Services and Health	51, 82
Department of Foreign Affairs and Trade	71
Dodd, Hon Peter, MP	81
Federated Tobacco Workers Union of Australia	35
Federation of Australian Retail Tobacco Trade Associations	36
Gapella, Mr Jorge	32
Gilmore, Mr T.V. *	7
Gilmore, Mr Tom, MLA *	8, 75

1 Submissions from number 52 onwards were submitted after release of the draft report

Participant	Submission No
Hei-Tana Management *	16
Joalma Poultry Farm	4
Katter, Hon Bob MP *	10
Kiell Tobacco Pty Limited	3
Lieberman, Hon Lou MP *	10
London Economics *	62
Lynch Rural *	63, 65
McDonald, Cr Sally *	30
McLees, Kevin and Maureen	12
Mareeba Chamber of Commerce *	46
Mareeba District Fruit and Vegetable Growers' Association *	19
Mareeba Shire Council *	49, 76, 77
Masterton, Ms Jackie *	14
New South Wales Government	45, 84
Non-Smokers' Movement of Australia *	37, 83
North Queensland Tobacco Growers' Co-operative Association Limited	50
Ovens Research Station *	68
Philip Morris Limited *	38, 57, 69
Queensland Cancer Fund	28
Queensland Government	47, 80
Queensland Sales Representatives and Commercial Travellers' Guild	27
Revrenna, Mrs Caterina *	9
Rindo, George and Lena	44
Rothmans of Pall Mall (Australia) Limited *	39, 64, 79
Savoy Club Myrtleford Welfare Sub-Committee *	13
Shires of Bright, Myrtleford and Oxley *	22
Smith, Mr Kevin *	25, 58
Smith, L.D. & L.M.	20, 56
South Queensland Tobacco Growers' Co-Operative Association Limited	42
Srhoj, Barbara **	
Stuart Alexander & Co Pty Ltd *	33
Tobacco Institute of Australia Limited *	41, 60
Tobacco Leaf Marketing Board — New South Wales *	48
Tobacco Leaf Marketing Board — Queensland *	29, 72
Tobacco Leaf Marketing Board — Victoria * on behalf of:	34, 73
Tobacco Growers Council of Australia	
Tobacco Growers of Victoria	
Tollison, Professor Robert *	
Tomasoni, Vic and Rosa *	17
Wangaratta Regional Development Corporation	66
WA Tobacco Retailers' Asssociation Inc	21, 70
WD & HO Wills (Australia) Limited *	31, 61, 87
Women in Tobacco Farming *	23
Young Tobacco Farmers Organisation *	43

C.2 Informal discussions/list of visits undertaken

The following organisations, companies and individuals were visited:

Australian Capital Territory

Australian Medical Association Limited
Australian Tobacco Marketing Advisory Committee (ATMAC)
Commonwealth Department of Primary Industries and Energy, Rural Division
Department of Human Services and Health
Tobacco Research and Development Council (TRDC)

Victoria

Myrtleford grower forum
Myrtleford grower visits ─ 11 farms
Myrtleford growers' selling centre
Ovens Research Station
Philip Morris Limited
Shire Councils of Bright, Myrtleford and Oxley
Tobacco Growers of Victoria
Tobacco Leaf Marketing Board ─ Victoria
Victorian Anti-Cancer Council
Victorian Department of Food and Agriculture
Victorian Health Promotion Foundation
Women in Tobacco Group

New South Wales

Coraki grower visits - 3 farms
David Collins and Helen Lapsley
Inverell Shire Council
New England Rural Counselling Service
New South Wales Agriculture
New South Wales Cancer Council
New South Wales grower forum
New South Wales Rural Assistance Authority
Rothmans of Pall Mall (Australia) Limited
Stuart Alexander and Co Pty Ltd
Tobacco Leaf Marketing Board – New South Wales
Tobacco Institute of Australia Limited
W.D. & H.O. Wills (Australia) Limited

Queensland

Arthur Graham, ATMAC and TRDC Chairman
Dimbulah grower visits – 5 farms
Glasshouse Mountains grower visits – 2 farms
Glasshouse Mountains grower forum
James Cook University, Cairns Economic Research Unit
Mareeba grower forum
Mareeba grower visits – 4 farms
Mareeba Shire Council
North Queensland Tobacco Growers Cooperative Association
Queensland Department of Business, Industry and Regional Development, Cairns Regional Office
Queensland Department of Primary Industries
Queendland Industry Development Corporation – Brisbane Head Office
Queendland Industry Development Corporation – Mareeba Branch Office
Queensland Water Resources Commission
Tobacco Leaf Marketing Board – Queensland
Southedge Research Station

APPENDIX D THE CHANGING NATURE OF GOVERNMENT INVOLVEMENT IN TOBACCO

D.1 History of government initiatives for tobacco growing

Tobacco was one of the first crops cultivated in Australia with seed being brought in by the early settlers. Philip Schaeffer is recorded to have planted tobacco at Parramatta, New South Wales, in 1790 (Muir 1993). By 1840, about 160 hectares of tobacco were under cultivation within 160 kilometres of Sydney.

The tobacco industries are among the oldest of existing Australian industries. Manufacturing activity dates back to the early 1820s, while leaf growing commenced on a commercial scale in Victoria, around Myrtleford, in the 1860s and in southern Queensland, around Texas, in the 1880s. By 1889, about 3000 tonnes of air-cured leaf was produced. This level of annual output was not exceeded again until over 50 years later.

The growing industry flourished prior to Federation, encouraged in part by high State tariffs on imported leaf and supply disruptions to leaf imports as a result of the American Civil War. The manufacturing industry also experienced growth in that period and had captured more than 40 per cent of the domestic market for tobacco products by the turn of the century. In 1900, there were some 614 producers of tobacco products purchasing both domestic and imported leaf. However, only 103 of these worked from registered factories. The leaf required at the time was for 'cut tobacco' for pipe smoking, roll-your-own cigarettes, cigar manufacture, snuff or chewing tobacco.

Government intervention in the tobacco industry is by no means a recent phenomenon. Protection was afforded by State Governments to Australian grown leaf prior to the introduction of the first Commonwealth Customs Tariff in 1902 (Tariff Board 1927, p. 5). In 1927, growers of tobacco were generously protected by a duty on imported leaf, the *ad valorem* equivalent of which was well over 100 per cent (Tariff Board 1927, p. 27). Taxes on tobacco have been an important revenue raising instrument since the early 1800s.

The twentieth century has seen a substantial increase in regulation of the tobacco growing and manufacturing industries. This includes the development of a rigid and complex set of assistance arrangements for the growing industry, increased taxation revenue derived from tobacco and increased concern about the effects on health of tobacco consumption.

In recent years, the introduction of health policy measures designed to discourage the consumption of tobacco products has restrained any growth in the industries. This increase in government intervention has been accompanied by inevitable conflicts, both between growers and manufacturers, and between the different arms of government pursuing sometimes conflicting objectives.

Government involvement in the tobacco industry takes the forms of:

- supply management and price control arrangements for locally produced leaf;
- local content requirements for manufacturers;
- taxation;
- trade arrangements; and
- regulations concerned with public health and safety.

Following Federation, Commonwealth tariffs on imported leaf, the improved attractiveness of other agricultural pursuits and technical problems inhibiting the production of commercially viable leaf, led to a decline in the growing industry. Local leaf production fell from a pre-Federation high of 3.2 million kilograms to less than 1 million kilograms in 1925.

By contrast, domestic manufacture of tobacco products grew significantly over this period, with local manufacturers increasing their market share from 40 to 98 per cent. One factor underlying this growth was access to cheaper imported leaf as a result of the reduction in tariffs. As imported leaf yielded the Commonwealth Government a higher unit tax receipt in the final product than local leaf, the significant increase in the use of imported leaf led to an increase in the total tax revenue derived from tobacco. Such revenue considerations may have been one factor explaining the absence of action, at this time, to halt the decline in the growing industry.

Experimental tobacco crops were first planted in the Mareeba-Dimbulah area of Queensland in late 1927. In September 1927, the Queensland Department of Agriculture and Stock officers were authorised to offer individuals in the Mareeba area the sum of £5 to cultivate a small area of tobacco and an additional £5 if fencing or other associated expenses were incurred (Manning 1993, p. 13). However, the Mareeba-Dimbulah land settlement scheme nearly collapsed because of poor planning — it was based on goodwill and optimism rather than agricultural and market research (Manning 1993, p. 71).

Not all tobacco farms were established on Crown Land opened up by the Queensland Government. In 1931, a group of farmers started planting on privately leased or owned property (Manning 1993, p. 21). At the peak of the tobacco growing boom in northern Queensland (that is, 1932–33) there were 1200 farmers growing the crop (Beal 1971). At that time, most growers were inexperienced and advisory services very limited. Growers were also faced with conflicting advice from State and Commonwealth authorities on cultivation practices (Manning 1993, p. 30).

Tobacco farmers speak of the 1932–33 season as the ‘Black Year’. Wet weather, disease, farmers’ inexperience and capital shortfalls, combined with the contracted demand for local leaf because of tariff changes, had disastrous consequences (Manning 1993, p. 36).

The dominance of tobacco manufacturing over growing was temporarily altered by the Great Depression. In 1929–30, in response to a worsening balance of payments, the Government significantly increased tariffs on imported leaf from 24 to 62 pence per pound, which represented about 10 times the average price received by American growers (Tariff Board 1932). Higher imported leaf prices, together with a shift in consumer demand towards cheaper tobacco products incorporating lower grade leaf of the type produced in Australia, led to a rapid expansion of the growing industry. Local leaf production increased from 772 000 kilograms in 1929–30 to 4.7 million kilograms in 1931–32. By contrast, in the manufacturing industry higher leaf costs together with a decline in total demand for tobacco products led to a fall in activity.

These structural changes were short lived. In the manufacturing industry, the end of the depression signalled a recovery in demand such that by 1938 the industry had surpassed pre-Depression levels of output. On the other hand, the boom in the growing industry during the depression proved to be unsustainable. This was due to leaf quality problems and, after the Depression, to a shift in demand away from locally produced leaf types combined with a reduction in import duties.

Adjustment in the growing industry involved a significant decrease in the area under crop, a concentration of leaf growing into areas more suited to the production of higher grade leaf and a switch from air to flue-curing of leaf. To alleviate grower hardship associated with this adjustment, the Commonwealth Government introduced a Percentage Leaf Usage Requirement Scheme in 1936. Intended ‘... to encourage the use of Australian leaf’ (Tariff Board 1940), the scheme provided tariff concessions on imported leaf to manufacturers who used a specified minimum proportion of local leaf in their output. The initial local leaf proportions required to gain duty concessions on imported leaf were 2.5 per cent (cigarettes) and 13 per cent (cut tobacco). The introduction of this local content scheme signalled the emergence of a more protectionist policy stance for the growing industry and provided a convenient mechanism for future increases in assistance.

The 1930s also saw significant developments in relation to the taxation of tobacco products. Falls in receipts from other taxation sources during the Great Depression and recognition by the Commonwealth Parliament of the industry's potential '... to be a large revenue source' (Australia. Parliament 1930), encouraged the Government to seek higher tax revenues from tobacco. During the 1940s, unit customs and excise rates were increased by up to 65 per cent, with total receipts increasing by 43 per cent.

The onset of the Second World War saw further increases in government intervention in the tobacco industries. Funding requirements for the war led to large increases in taxation. Significant duty increases saw the revenue derived from tobacco more than double. Largely as a result of these tax measures, cigarette prices increased by up to 65 per cent between 1939 and 1945.

On the production side, in 1940, manufacturers, growers and the Commonwealth Government agreed to a plan to double domestic leaf production. However, due to labour shortages and many tobacco farmers switching to vegetable crop production, this plan failed to come to fruition and, in fact, domestic leaf production fell by nearly 50 per cent during the war years. Production of manufactured products also declined, in part reflecting lower domestic leaf production and supply difficulties with imported leaf. The impact of falling production levels on local manufacturers' profitability was exacerbated by Government price controls, which were introduced for both leaf and manufactured tobacco products in 1941. These controls were retained until the early 1950s.

Reduced domestic production of tobacco products led to a shortfall in market supplies. Tobacco marketing came under the control of the Commonwealth Government in May 1941 with the formation of the Australian Tobacco Board under National Security Regulations. In 1942, rationing was introduced with the Government assuming control of tobacco allocations to retailers. Allocations to tobacco retailers remained regulated until 1952. This, in turn, led to a black market in tobacco products.

In the immediate post-war years, a shortage of foreign exchange led to the imposition of import controls on a variety of products, including tobacco leaf. However, despite the boost to demand for domestic tobacco leaf, production remained low. In 1946, a temporary reduction in the Percentage Leaf Usage Requirement was necessary to allow local manufacturers to fully utilise their entitlements to concessional imports. These shortages in leaf supplies significantly constrained the expansion of domestic output of manufactured tobacco products. This may have been one factor explaining the absence of import controls on manufactured tobacco products until 1952, by which time imports supplied over 40 per cent of the domestic market (Walker 1984, p. 71).

Queensland growers, dissatisfied with continued use of emergency powers, pushed for abandonment of the Commonwealth marketing controls. In July 1948, the Queensland Government constituted the Queensland Tobacco Leaf Marketing Board to control the marketing of all Queensland tobacco leaf (Manning 1993, p. 199). The resulting competition led to increased prices and then manufacturers' collusion (Manning 1993, p. 200). In 1948, 100 tonnes of leaf rejected at the sales were processed into manufactured products in a new factory, co-operatively owned by North Queensland growers. This factory experienced fluctuating levels of profitability, eventually ceasing operation in October 1958 with an accumulated loss of £160 021 and owing another £130 000 to the then Agricultural Bank (Manning 1993, pp. 125–141).

In an attempt to stimulate the growing industry, from the mid-1950s the Commonwealth Government implemented a series of increases in the Percentage Leaf Usage Requirement and concomitant increases in the duty concession on imported leaf. The specified leaf content increased from 7.5 per cent (cigarettes) and 17.5 per cent (cut tobacco) in 1955 to 50 per cent (for both products) in 1966. The statutory blending percentages were increased by the Commonwealth Government in 1959 and again in 1960 to try to keep pace with annual crop increases. In 1960, Australian manufacturers had to use 28.5 per cent Australian-grown leaf in cigarette manufacture and 24.5 per cent in cut tobacco to qualify for concessional rates on imported tobacco. By 1963, the rates had grown to 40 and 37 per cent, respectively. Underpinned by these measures, domestic leaf production increased from 2.7 million kilograms in 1955 to 15.5 million kilograms in 1963.

As with expansion of the growing industry in the early 1930s, the new boom involved the production of large quantities of low quality leaf. Leaf quality problems and disputes over grading and pricing procedures at leaf sales led to increasing conflict between growers and manufacturers. The problems caused by the rapid expansion of the growing industry were highlighted by marketing difficulties associated with the 1961 crop, which saw 2 million kilograms of leaf remain unsold. These problems led to the establishment of a plan for the controlled marketing of Australian leaf.

The Tobacco Industry Stabilisation Plan (TISP) was introduced in 1966 to '... provide growers (with) an assured market' whilst protecting manufacturers from any further '... over-rapid and indiscriminate expansion of the local growing industry' (Australia. Parliament 1965). The main features of the first TISP included an aggregate marketing quota determined by the Commonwealth Government, State (Queensland, Victoria and New South Wales) and individual grower quotas, administered prices and a manufacturers' minimum stockholding requirement for domestic leaf. These arrangements provided a highly regulated environment for the production and sale of Australian leaf. Subsequent TISPs have retained the essential features of the first Plan.

The Australian Tobacco Board (ATB) was established under the *Tobacco Marketing Act 1965* to administer the TISP. Complementary legislation regarding the functions and powers of the ATB was set up in New South Wales, Victoria and Queensland. The State Acts conferred on the ATB the powers to operate the Stabilisation Plan. The ATB consisted of four members representing the Commonwealth, New South Wales, Victorian and Queensland Governments, three grower representatives of the State Tobacco Leaf Marketing Boards and three members representing the tobacco manufacturers. The functions of the ATB were to:

- make recommendations to the Commonwealth Minister with respect to the making of regulations to control the export and the sale and distribution of tobacco leaf;
- make reports and suggestions to, and to formulate plans for the consideration of, the Commonwealth Minister with respect to the interstate marketing and the export and the marketing overseas, of Australian tobacco leaf; and
- with the consent of the Commonwealth Minister, advise any State Board or other authority or person with respect to the interstate marketing, or the export and the marketing overseas, of Australian tobacco leaf.

Although the focus of the ATB's functions was on exports and marketing overseas, leaf exports have always been negligible.

From the outset of the first TISP, manufacturers had expressed concern about the cost burden imposed by their holdings of excess stocks of Australian leaf. Discussions held between manufacturers and the Commonwealth Government in 1967 resulted in manufacturers agreeing to increase their use of Australian leaf to 55 per cent, in return for the provision of assistance to finance domestic leaf purchases. Such assistance was ultimately provided in 1969 in the form of the Tobacco Industry Leaf Financing Agency. This allowed manufacturers to purchase part of their quota leaf allocations on a deferred payment basis.

The maintenance of high marketing quotas plus declining tobacco consumption led to the continuation of excess leaf stock problems for manufacturers during most of the 1970s. In 1977, to reduce their excess holdings of domestic leaf, manufacturers agreed to a further temporary increase in their usage of local leaf to 57 per cent. By arrangement with growers, manufacturers made this concession on the understanding that this additional usage would not be used as a precedent for future negotiations (Commonwealth Record 1977, p. 288). However, the 57 per cent usage level has since become a permanent, although voluntary, part of the local content arrangements.

In the latter half of the 1970s, discussions were held between industry representatives and the Commonwealth Government with a view to developing proposals aimed at reducing the aggregate marketing quota. Recognising the need '... to bring supply, demand and [the] stock position into balance so as to avoid the collapse of the stabilisation arrangements' (Commonwealth Record 1977, p. 97), in 1979 the Government introduced a more market-oriented method of determining the aggregate marketing quota as part of the fourth TISP. This new method took into account consumption trends, leaf stockholdings and shortfalls in leaf production.

Despite improved grower/manufacturer relations and a common desire to maintain a stable domestic tobacco growing industry, during the 1980s the growing industry was required to bear some of the adjustment pressures imposed by declining tobacco consumption. The continual increase in assistance afforded tobacco growing during the 1960s and 1970s in order to avoid the need for significant adjustment, meant that it had become one of the most highly assisted and regulated industries in Australia. Increasing concern about this high assistance ultimately led the Government to adopt a policy of improving the efficiency of the growing industry. This high level of assistance to tobacco leaf production has continued while the Commonwealth Government has initiated policies aimed at significantly reducing assistance levels (to 5 per cent or less) in most other sectors of the Australian economy.

D.1.1 Previous Industries Assitance Commission reports

There have been many inquiries into the tobacco industries since the Tariff Board was set up in 1921. The following review focuses on Industries Assistance Commission (IAC) inquiries in the 1980s.

In 1980, the IAC (now the Industry Commission) was requested to report on levels of assistance necessary to facilitate the use of Australian-grown tobacco leaf by overseas suppliers of manufactured tobacco products to the Australian market. The IAC outlined arrangements involving duty concessions on imports of manufactured cut tobacco which could have been implemented to achieve that objective. However, the IAC did not recommend such arrangements, deeming that they would have been incompatible with the policy guidelines of the *Industries Assistance Commission Act 1973*. The Commission proposed that it be given a broader reference on assistance afforded the tobacco growing and manufacturing industries.

In late 1981, the IAC received a formal request and terms of reference to inquire into these industries. The terms of reference asked the IAC whether assistance to tobacco growing and manufacturing was warranted after the 1983 growing season and, if so, the nature and extent of such assistance. In its 1982 report, the IAC recommended that the then existing assistance measures for the growing of tobacco leaf (which included a local content scheme, leaf marketing quotas and administered pricing arrangements) be gradually dismantled. The IAC also recommended that the industry be reviewed prior to the completion of this process. Only relatively minor changes to the assistance arrangements applying to manufactured tobacco products were recommended (IAC 1982).

In June 1983, the Acting Minister for Primary Industry announced that the Government had rejected the IAC recommendation to dismantle the existing assistance measures for the growing of tobacco leaf. The Acting Minister stated that such a move would cause severe disruption and undermine industry confidence at a time when investment was crucial towards improving industrial efficiency. The Commonwealth Government therefore decided not to accept the IAC's recommendations in the belief that it was possible to lift the industry's performance within the framework of the existing marketing arrangements. In doing so, it announced that a new stabilisation plan would be introduced for the period 1984 to 1988. This retained the main elements of the previous arrangements, although some modifications were made in an effort to improve the industry's efficiency and gradually reduce the level of assistance provided (see Chapter 4).

In December 1986, the Australian tobacco growing and manufacturing industries were again referred to the IAC. In its 1987 report, the Commission recommended that the local content, marketing quota and administered pricing arrangements governing the growing and sale of tobacco leaf be terminated on 1 October 1993.

On 19 November 1988, the Commonwealth Government announced its decision that:

- although the marketing quotas and administered pricing arrangements of the Tobacco Industry Stabilisation Plan would end on 1 July 1993, the Local Leaf Content Scheme would, as sought by the industry, be extended until 1 October 1995;
- the tariff reduction program for non-concessional tariffs (announced in the May 1988 Economic Statement) would not be altered for tobacco and tobacco products;
- concessional arrangements applying to imports of certain manufactured tobacco products and duty rebates on tobacco leaf for use in cigarettes and cigars would terminate; and

- an IAC inquiry would be held in 1993 into tariff assistance for the tobacco growing and manufacturing industries to apply from 1 October 1995, though on the understanding that there would be no further extension of the local content scheme.

D.1.2 State Government measures during the current TISP

The Queensland Government, in its 1988–89 budget, allocated an amount of \$10 million over a four-year period to provide assistance to the tobacco growing industry to restructure its operations following the introduction of a State wholesale/retail licence fee on tobacco products. Because it was recognised that this State tax would lead to increased prices and a reduction in tobacco sold, the Queensland Government allocated the money to allow individual growers to restructure their farming operations and become more efficient, and to allow growers to leave the industry and diversify into other commodities. All current growers should have by now received the approved quota unit entitlement from the fund of \$1.28 per kilogram. Originally intended to end on 30 June 1992, the scheme was extended for a further 12 months (fuller details regarding this scheme are provided in Appendix F). Funds that remained uncommitted at the end of the scheme have been applied to activities associated with the economic advancement of the Atherton Tablelands region.

In 1991, the Queensland Department of Primary Industries instigated a three-year Model Farm Program involving 15 farms and aimed at fast-tracking new cultivation and farm management techniques in the region (Manning 1993, p. 194).

In light of the ‘severe difficulties’ facing the industry, the Victorian Government decided early in 1994 to provide \$3 million to assist with industry restructuring. The \$3 million fund will, in effect, be used to purchase quota from growers who agree to voluntarily leave the industry. (See Chapters 7 and 8 for further information about this scheme and similar schemes being proposed for New South Wales and Queensland growers).

D.2 History of government positions on tobacco consumption issues and related industry adjustment

Declining demand for domestic leaf as a result of reduced consumption of tobacco products has been the main factor imposing adjustment pressure on the tobacco growing industry. Increased government emphasis on health aspects and increased taxes have contributed to this decline. Tobacco taxation has increased significantly over the last two decades and numerous health regulations, intended to restrict tobacco consumption or modify smoking behaviour, have been introduced.

Health concerns commenced in January 1963, when the United States Surgeon General announced that there was a direct link between tobacco smoking and lung cancer.

In the early 1970s, changing public attitudes to tobacco consumption placed increasing pressure on the industries. A number of studies linking smoking to various health problems had been released in the preceding decade, and pressure increased on the Commonwealth Government to intervene to reduce tobacco consumption. At this time, the Government (Australia. Parliament 1972, p. 1905) viewed its role as '... (not) to impose prohibitions on people's freedom of choice except for the most compelling national reasons'. However, it also noted that '... the health hazard (of smoking) presents a public health problem of such dimension as to impose a significant social cost on the community'. Consequently, in 1972, the Commonwealth Government introduced a number of measures intended '... to educate and inform the population ... of the danger of the health hazards of smoking'. These measures included anti-smoking campaigns and the provision of health warnings on cigarette packets and in advertisements. Subsequently, new measures such as restrictions on advertising and the prohibition on smoking in certain public places were introduced.

Significant increases to taxes on tobacco products were also made during the mid-1970s. The Commonwealth Government increased excise on cigarettes by 22, 15 and 20 per cent in 1973, 1974 and 1975, respectively. Further, between 1973 and 1976, State Governments (other than Queensland and Tasmania) introduced licensing fees on tobacco wholesalers and retailers. Licensing fees were subsequently introduced in Tasmania in 1981 and in Queensland in 1989.

These developments in health and tax policies were factors which contributed to the stagnation and ultimate decline in tobacco consumption during the 1970s. The aggregate marketing quota was increased from 11.8 million kilograms in 1968 to 16.4 million kilograms in 1971 and remained at that level until 1979. Despite these trends in (intermediate user) consumption, the aggregate marketing quota for domestic leaf was increased significantly during the early 1970s and agreement was reached to maintain it at high levels during the mid- and late 1970s. This reflected '... an atmosphere of improved co-operation between growers and manufacturers' (Australian Government 1976).

Prior to the early 1980s, pressures for adjustment were offset by modifications made to the stabilisation arrangements. These involved, in various forms, an increased uptake of Australian leaf by local manufacturers so as to avoid the need for significant reductions in domestic leaf production. The modifications effectively shifted adjustment associated with reduced demand for tobacco products on to the manufacturers. Although changes to the stabilisation arrangements increased manufacturers' costs, they generally co-operated in effecting the changes. This co-operation may be explained, in part, by the benefits to manufacturers from achieving greater industry unity at a time when public attitudes to smoking were becoming increasingly hostile (IAC 1982, p. 66).

Continuing public concern about the health risks associated with smoking placed the industries under further pressure in the late 1970s and early 1980s. Following the release of the 1977 Senate Report on Drug Problems in Australia (Australia. Parliament 1977), the Government took a firmer stand on the need to reduce smoking-related illnesses. In 1980, the Government adopted a policy which involved seeking reductions in the tar and nicotine content of cigarettes, and further reductions in tobacco consumption. Existing measures were extended and new measures affecting the production, packaging, promotion and consumption of tobacco were introduced.

Over the same period, heavy tax increases put further pressure on the industries. Excise on cigarettes was increased by 28 per cent in 1978 and 20 per cent in both 1982 and 1983, and has since been indexed to movements in the Consumer Price Index (CPI). However, from 1988 onwards, the rate of excise has increased at a faster rate than the CPI. Significant increases in State charges applying to tobacco products were also imposed in the 1980s.

One way in which the industries responded to these pressures was with increased unity. As noted above, grower/manufacturer relations improved markedly during the 1970s. Co-operation between manufacturers also increased, being most strongly reflected in the formation of the Tobacco Institute of Australia (TIA) in 1979. The TIA was established '... to promote better understanding of the tobacco industry in Australia — by the public, all levels of government administration and other authorities' (Walker 1984, p. 126).

An indication of current Commonwealth and State Government positions on health and smoking is given in Chapter B1.

APPENDIX E TOBACCO INDUSTRY STABILISATION PLAN 1989–1995

The current Tobacco Industry Stabilisation Plan, approved in November 1988 by the Commonwealth Government to commence in 1989 and terminate on 1 October 1993 has been extended for a further two years and is now scheduled to finish on 1 October 1995. The extended plan is:

General

(a) The 1988–1993 Tobacco Stabilisation Plan is extended for two years terminating on 30 September 1995.

(b) The three existing Australian tobacco manufacturing enterprises undertake to participate in accordance with the provisions of the Plan during its term and to seek to develop alternative selling arrangements to avoid market disruption on termination of the Plan.

(c) Each of the three existing Australian tobacco manufacturing enterprises undertakes to maintain 57 per cent Australian leaf content of total production for domestic consumption.

(d) The growers in the three producing States of Queensland, Victoria and New South Wales undertake to participate in accordance with the provisions of the Plan during its term and to seek to develop alternative selling arrangements to avoid market disruption on termination of the Plan.

(e) The Governments of the Commonwealth, Queensland, Victoria and New South Wales will maintain appropriate complementary legislation to facilitate the operation of the Plan.

(f) The Plan will be administered by the Australian Tobacco Marketing Advisory Committee (the Committee), with the present membership representation.

Price

(g) The average minimum price for Australian flue-cured quota leaf will be determined by the Ministers responsible for Agriculture in the Commonwealth and the tobacco producing States of Queensland, Victoria and New South Wales on the recommendation of the Committee. The Committee will make its recommendation to Ministers before March of each year.

(h) In making its recommendation on the average minimum price, the Committee will recognise the need for consensus amongst growers and manufacturers and for Australian leaf to be price competitive with imports during the term of the Plan.

Grade and Minimum Price Schedule

(i) The Committee will conduct annual reviews of the Grade and Minimum Price Schedule. The reviews will modify the Schedule over time so as to ensure that it reflects market requirements. The modifications may include the elimination or additions of grades.

(j) The Committee's Grade and Minimum Price Schedule will be constructed so as to yield, according to the grades in the schedule and on the basis of the fall-out of these grades in the previous seven crops, the average minimum price determined for each selling season.

Quota

(k) The annual flue-cured tobacco leaf marketing quota and its distribution between the tobacco producing States of Queensland, Victoria and New South Wales will be determined each year by the Ministers responsible for agriculture in the Commonwealth and the tobacco producing States, on the recommendation of the Committee. The recommendation will take into account the need for consensus amongst growers and manufacturers and factors including usage and the level of manufacturers' stocks estimated as at 31 December in each year.

(l) The formal stabilisation requirement for manufacturers' stockholdings will be reduced to the equivalent of 10 months' usage by 31 December 1995.

(m) State marketing quotas will be translated into quotas for individual growers in each State by State Quota Committees.

(n) Quota leaf will include only grades listed in the Committee's Grade and Minimum Price Schedule.

(o) Quota leaf will be offered for sale in Australia by the State Tobacco Leaf Marketing Boards. Export leaf sales will be the responsibility of State Tobacco Leaf Marketing Boards.

(p) Conditions applying to the sale of quota and non-quota (over-quota and out-of-quota) leaf will be determined by the Committee.

(q) Quotas will be freely transferable both intra-State and inter-State, subject only to normal administrative arrangements and timings required by State Quota Committees for the effective management of the Plan.

Other

(r) In the event that agreement cannot be reached between buyer and seller on the grade of any leaf offered for sale, that leaf will be submitted for arbitration as determined by the Committee.

(s) Arrangements will be made by State Tobacco Leaf Marketing Boards for adequate financial accommodation at reasonable cost to manufacturers to ensure their continuing participation in the sales for each full annual marketing quota and to enable them to carry stocks.

APPENDIX F IMPACT OF THE QUEENSLAND $10 MILLION TOBACCO FUND

F.1 Introduction

In its 1988–89 budget, the then Queensland Government introduced a State licence fee on tobacco products. The State Government also provided $10 million assistance to the Queensland tobacco industry because it was anticipated that the licence fee would increase prices and reduce demand for tobacco products. The assistance was provided to allow individual tobacco growers to restructure their farming operations. An objective of the scheme was to make growers more efficient (by investing in irrigation, machinery, harvesters, barns, quota etc) so as to be able to withstand expected lower prices and lower demand.

The assistance scheme was administered by a committee comprising a representative of the Queensland Department of Primary Industries, a representative from Queensland Treasury, the Chairman of the Tobacco Leaf Marketing Board, the Chairman of the North Queensland Tobacco Growers' Cooperative Association, and another tobacco grower, with the Manager of the Tobacco Leaf Marketing Board as Secretary.

Guidelines for distribution of the $10 million were prepared by the committee following extensive input from growers. In September 1989, growers were advised that the Queensland Government had agreed to a set of guidelines (see Annex F.1) which provided for grants up to the equivalent of $1.28 per kilogram of each grower's selling entitlement as at 1 January 1989. The Commission understands that on this basis growers received an average of about $30 000 from the fund, with some grants exceeding $100 000.

Although the purpose of the fund was to help tobacco growers adjust to an anticipated reduction in demand following the imposition of licence fees, most of the grants were used to keep existing growers on their farms, and very few for the purpose of leaving the industry in favour of some other activity. One of the main reasons for that outcome was a guideline which gave priority in the allocation of funds to tobacco projects. Table F.1 shows the final distribution of the $10 million.

At the same time as grants from the fund became available, growers were being advised to improve their efficiency — to get big or get out. Very few got out. The high profitability of tobacco growing and the incentives provided by the availability of grants to stay in the industry and upgrade equipment reinforced most growers' commitment to tobacco growing, and in doing so severely restricted their option to leave the industry at some future time.

Table F.1: **Distribution of funds under the Tobacco Industry Assistance Scheme — as at 31 December 1993**

	$
1. As allocated by the Committee administering the Scheme	
Administration	10 462
Department of Primary Industries ('Tobacco 2000')	50 000
Department of Primary Industries (Geographic Information System)	72 330
Tobacco Leaf Marketing Board (consultancy for structural adjustment exercise)	30 000
Tobacco Research and Development Corporation	12 000
Trees (diversification)	38 256
Land improvements	98 110
Research and development	102 725
Buildings	188 019
Farm purchases	239 597
Curing barns	1 268 409
Harvesters ('rack-on-top')	1 279 457
Quota purchases	1 366 150
Irrigation (tobacco and other crops)	2 277 394
Farm machinery and tractors	2 354 811
Total	**9 387 720**
2. Balance to part-fund DPI Atherton Tableland structural adjustment initiatives	
	612 280
	10 000 000

Source: Queensland Government (Sub. 47, Appendix D).

F.2 Impact on tobacco quota market

One of the provisions of the 1989–1995 Tobacco Industry Stabilisation Plan (TISP) is that quota will be freely transferable both intrastate and interstate. The purpose of this provision is to allow market forces to determine the regions in which tobacco is grown, and within regions, the growers who supply the market for tobacco leaf. The free transfer of quota between growers and regions was seen as an effective means of improving the efficiency of the industry in preparation for a deregulated market environment. However, the distribution of grants to Queensland growers, and the conditions under which they were made, resulted in price and other effects which impacted severely on the transfer of quota, both within Queensland and between growing regions.

An immediate impact of the scheme was to increase the price of quota as growers sought to follow advice to get big.

An increased quota price had been anticipated by the administering committee which placed a $3.00 per kilogram ceiling on the price of quota which could be purchased using grants from the fund. At that price, quota from Queensland growers who chose to leave the industry was quickly purchased by other growers using their allocation from the fund.

One of the guidelines for distribution of the tobacco fund required Queensland growers who received money to undertake not to sell quota within three years of obtaining a grant, and to guarantee not to dispose of an item which was financed by a grant for a similar period. Any grower who sold quota, or disposed of equipment within the three year time frame, was required to return the money received from the fund. In effect, grant recipients were not permitted to sell quota even if grants were used for purposes other than to buy quota. Consequently, there was soon no quota available for sale within Queensland.

Growers then attempted to purchase quota from other growing regions. Some was purchased from New South Wales growers.

Applications to purchase quota from Victoria were unsuccessful. Under the TISP, the Victorian Minister for Food and Agriculture had the power to disallow the interstate transfer of quota, and in mid-1992 the Minister exercised that power following representations from the Victorian tobacco growing industry. At the time, Victorian quota was being traded within the State at about $2.50 per kilogram. The market for quota was seen to be corrupted by the availability of a subsidy to Queensland growers to purchase quota, and by the conditions attached to the receipt of grants which restricted the supply of quota to the market.

F.3 Impact on tobacco industry adjustment

The intention of the TISP to allow market forces to identify the most efficient growers and growing regions, as a means of improving the overall efficiency of the growing industry, was severely constrained by the $10 million Queensland tobacco fund. Quota prices increased, transfers of quota within Queensland were restricted, and transfers from Victoria to Queensland were prevented as a direct consequence of the availability of subsidies to Queensland growers.

Table F.2 gives one perspective on the fund's effect on industry adjustment. In the year before grants were available the number of Queensland quota holders declined from 446 to 432. Numbers declined by a further 47 in the first full year grants were available. But in the three years since then the rationalisation of quota holder numbers has virtually ceased.

Table F.2: **Number of quota holders, 1988–1993**

	Qld	*Vic*	*NSW*
1988	446	245	32
1989	432	243	28
1990	385	228	26
1991	385	217	23
1992	380	212	23
1993	377	206	25

Source: ATMAC (Sub. 11, p. 14).

The Queensland experience in this respect can be compared to that of Victoria where industry rationalisation within the State has not been interrupted by subsidies and restrictions on intrastate quota transfer.

For New South Wales the picture is clouded by several factors which provided incentives for growers not to sell their entire quota holdings. Consequently, an examination of changes in the number of quota holders may give a misleading impression of the extent of rationalisation which has occurred in New South Wales. In fact it is most likely that the greatest beneficiaries of the Queensland fund were New South Wales growers who sold quota to Queensland and continued to grow tobacco under temporary quota arrangements.

F.4 Impact on Queensland growers

Understandably, many Queensland growers are confused by the messages they have received from industry leaders and governments. They were told to get big or get out and were given $10 million to rationalise their industry because the demand for their produce was expected to decline in response to price increases following the introduction of the licence fee. In the face of that declining demand all growers had access to substantial non-repayable grants which encouraged them to stay in the industry. Furthermore, the guidelines for distribution of the $10 million encouraged growers to invest heavily in equipment specific to tobacco growing, and to borrow money to supplement grants from the fund.

Growers who accepted grants became locked into tobacco growing. When demand for tobacco leaf (and growers' selling entitlements) subsequently declined significantly, their options were severely limited. They were not permitted to sell quota within three years of receiving a grant, and when that time expired the quota for which many paid $3.00 per kilogram had lost its value. Reduced selling entitlements diminished growers' capacity to service debts on equipment they had been encouraged to purchase, and if they wished to leave the industry the value of tobacco specific equipment they owned had dramatically declined. The tobacco fund had generated excess capacity in an industry facing declining demand for its output.

Annex F.1

$10 million Queensland Tobacco Fund — guidelines for distribution

1. Abiding by growers' wishes it was decided that assistance should be by way of a grant for approved projects.

2. Only tobacco quota holders will be eligible for assistance.

   To be eligible a grower would have needed to be a quota holder on 1 January 1989 and continue to hold a quota after that date.

   This rule implies that sharefarmers are not eligible for assistance. They would be assisted indirectly by having use of the items purchased under the scheme by the quota holder.

   It also means that quota purchased after 1 January 1989 would not be able to be used in the calculations to determine the amount of a grower's entitlement under this assistance scheme.

3. Successful applicants will be asked to sign a 'condition of grant' form. Each will have to undertake not to sell his quota within three years of obtaining the grant except as detailed below and will have to guarantee not to dispose of the item which was financed by the grant for the same period.

   A grower would not be prevented from selling his quota or his farm within the three-year time frame, but if he did, he would be required to return the money he had received from the fund.

4. To receive assistance a grower must undertake a project approved by the working group that will enhance the viability of the farming enterprise.

5. All growers will be eligible for grants in proportion to the size of their quota on 1 January 1989. (An exception to this is the New South Wales quota which had been contracted well before 1 January 1989, but was not transferred to Queensland until 1989.)

   Grants up to the equivalent of $1.28 per kilogram of 1989 selling entitlement will be available.

6. Priority will be given to tobacco projects. While the funds will also assist diversification projects into other industries, they should do this after tobacco oriented projects have been satisfied. If sufficient funds are

available to satisfy both types of requests early in the program, this condition will not be necessary.

7. Assistance cannot be retrospective. The funds are to offset future effects of the State licensing fee. Therefore, past restructuring projects which occurred irrespective of State licensing fees would not be eligible. In other words the funds will not be used for reducing existing debts but must be used for a new project.

8. There will be a ceiling on the price of quota above which the scheme will not provide assistance for quota purchase.

   If the existence of the scheme caused the price of quota to escalate, the funds would be wasted if they then assisted people to pay an artificially high price caused by the scheme.

Source: Tobacco Leaf Marketing Board – Queensland: Letter to growers 23 September 1989.

APPENDIX G THE DECLINE IN NATIONAL SELLING ENTITLEMENTS

Growers' selling entitlements have been reduced from 13.5 million kilograms in 1992 to 8.1 million kilograms in 1994. This represents a reduction of 40 per cent in the space of two years.

To understand the causes of the reduction in selling entitlements it is useful to start with the 1991 selling season — a year in which cigarette manufacturers' purchases of leaf matched their leaf consumption. As shown in Table G.1 below, in 1991, 13.4 million kilograms of domestic leaf were purchased and consumed, and at the end of the season, manufacturers' stocks of domestic leaf were reported to be 12.6 million kilograms — equivalent to 11.3 months' usage in that year.

Table G.1: **Domestic tobacco leaf purchases, consumption and stocks, 1991–1994**

	Selling entitlement	*Purchases[a]*	*Consumption[b]*	*Stocks at end of season[c]*	
	(Million kilograms green weight)				*(Months' use)*
1991	13.5	13.4	13.4	12.6	11.3
1992	13.5	13.4	12.2	13.8	13.6
1993	12.5	12.5	11.9	14.4	14.5
1994	8.1	8.1	11.6	10.9	11.3

a Australian Tobacco Marketing Advisory Committee (ATMAC) (Sub. 11, Table 2).
b Beginning stock + purchases - stock at end of period.
c ATMAC (Sub. 11, Table 4).

For the 1994 selling season, if industry expectations are realised, manufacturers will purchase all 8.1 million kilograms of the selling entitlement and consume 11.6 million kilograms of domestic leaf, so that at the end of the season their stockholdings will again be equivalent to 11.3 months' leaf usage.

The three factors which account for the reduced selling entitlements are:

- reduced consumption of domestic leaf;
- an overestimate of production requirements; and
- a stock adjustment caused by declining consumption.

The Australian Tobacco Marketing Advisory Committee (ATMAC) challenged the method the Commission used to estimate tobacco leaf consumption because it makes no allowance for stocks of manufactured tobacco products, or presumably, for changes in those manufactured product stockholdings. ATMAC claimed that the Commission understated consumption of leaf for 1992 and 1993. The Commission notes that the equation it employed is identical to the one which was used by ATMAC, up to and including 1992, in its deliberations about national marketing quota. Stocks at end of season refer to leaf stocks held by manufacturers, and double counting occurs if reductions in manufactured product stocks are added to leaf consumption in any period — the leaf included in manufactured stocks having been recorded as consumption in previous periods.

Reduced consumption of domestic leaf

In 1991 manufacturers consumed 13.4 million kilograms of domestic leaf. In 1994 consumption is expected to be 11.6 million kilograms, a decline of 1.8 million kilograms. Much of this reduced leaf consumption can be attributed to a reduction in the amount of tobacco used to produce a given quantity of cigarettes.

Overestimate of production requirements

For the 1992 and 1993 selling seasons, manufacturers purchased more domestic leaf than was used in the manufacture of tobacco products. In 1992, purchases of domestic leaf exceeded consumption by 1.2 million kilograms and in 1993 by 0.6 million kilograms. As leaf purchases are directly related to selling entitlements, responsibility for these overestimates rests with the members of ATMAC. This raises the question of the effectiveness of the process within ATMAC for setting the national marketing quota. One of ATMAC's major objectives and tasks is to 'maintain an appropriate supply/demand balance for tobacco leaf and to assist in the cost effective management of tobacco leaf stocks'.

Stock adjustment

For the purpose of the TISP, manufacturers' stockholdings of domestic leaf are measured as equivalent to a certain number of months' leaf usage in that year. Consequently, although for each of the years 1991 and 1994 the level of stockholding is equivalent to 11.3 months' leaf usage in those years, the physical level of stocks is lower in 1994 because the level of leaf consumption is lower in that year. For the 1991 level of consumption, 11.3 months' leaf usage is equivalent to 12.6 million kilograms, whereas for 1994 the corresponding stockholding requirement is 10.9 million kilograms — a reduction of 1.7 million kilograms on the requirement for 1991.

Summary

The reduction in manufacturers' purchases of domestic leaf from 13.4 million kilograms to 8.1 million kilograms (total reduction of 5.3 million kilograms) can be accounted for as follows:

- reduced consumption of leaf 1.8 million kilograms;
- overestimate of production requirements 1.8 million kilograms; and
- stock adjustment 1.7 million kilograms.

APPENDIX H ATMAC GRADE AND MINIMUM PRICE SCHEDULES

Table H.1: **Grade and Minimum Price Schedule, 1993 selling season**

Group	*Price Cents/kg green*	*Grades*				
1	740		C1O C2O C3O	L1O L2O L3O L1M L2M	F1O F2O F3O F1B F1M	
2	720	X1O X2O		L4O L1B L3MX	F2B F2M	
3	690	X3O X1B X2B	C1B C1M	L2B L50X L3M	F3B F4O	T2O
4	665	X3B X2M		L3B L4MX	F4B F3M	T2M T3O
5	630	X40	C2B C2M	L3GO L4M	F5BX F4MX	T3M
6	580	X4B X3M	C3B C3M	L4B L4GO L3MR L3D	F4M	T4M
7	534	X5BX X4MX		L5M L4D		T5M
8	485	X4M		L4MR L3GM L5D	F5B F5M	
9	414	X5B X5M	C4BX	L5BX L3GB L5MR		T3B
10	340		C4B	L5B L4GB L4CMX L4GM	TR	T4B T5B
Weighted average	613					

Source: ATMAC Annual Report 1993, Appendix D.

Table H.2: Grade and Minimum Price Schedule, 1994 selling season

Group	*Price Cents/kg green*	*Grades*				
1	743		C1O C2O	L1O L2O L1M	F1O F2O F1M	
2	733		C30	L2M L3O	F1B F3O	
3	718	X1O X2O		L41O L1B L3MX	F2B F2M	
4	703	X3O		L2B		
5	693	X1B		L5OX	F40	
6	688	X2B		L3M	F3B	T2O
7	673		C1B	L50		
8	663	X3B X2M	C1M	L3B L4MX	F3M F4B	T3O
9	643					T2M
10	623	X40	C2B	L3GO L4M	F4MX F5BX	
11	602		C2M			T3M
12	577	X3M X4B		L3MR L4B	F4M	
13	567		C3B	L3D L4GO		
14	542		C3M			T4M
15	527	X4MX X5BX		L5M		
16	517			L2GM L4D		
17	497					T5M
18	477			L4MR	F5M	
19	457	X4M		L3GM L5D	F5B	
20	392	X5B X5M	C4BX	L5BX		
21	372			L3GB L5MR		
22	297			L4GM		T3B
23	277		C4B	L4GB L5B		T4B
24	252	TR		L4CMX		T5B
Weighted average	603					

Source: Tobacco Leaf Marketing Board of Victoria (Sub. 34, Attachment 2).

Leaf grade codes[1]

Location on the plant

X lugs

C cutters

F subleaf (a grading of thin dry-natured leaf)

L leaf

T tips

Quality Relativity

1, 2, 3, 4, 5 with 1 being the highest quality

Colour

O orange

B bright

M mahogany

L lemon

D dark

R red

Other Symbols

X intermediate grade (used after the colour symbol identifies, a mid-grade half a grade higher than the number used)

G green

C common

TR trashy leaf (used without a colour indicator)

[1] Sourced from ATMAC (Sub. 11, p.16).

APPENDIX I DRAFT INTERNATIONAL CLASSIFICATION SYSTEM[1, 2]

Table I.1: **Standard grades**

Plant Position		*Quality*		*Colour*	
X	Lugs	1	Top	L	Lemon
C	Cutters	2	Good	O	Orange
F	Subleaf	3	Medium	F	Full Orange
L	Leaf	4	Low	R	Mahogany
T	Tips	5	Poor		
		NG	No grade		

Quality level determination

1 (Top) Choice ripe, oily, grainy, soft natured tobaccos from all stalk positions.

2 (Good) Choice ripe, oily, grainy, soft natured tobaccos from all stalk positions carrying minor defects (disease etc).

3 (Medium) Standard tobaccos.

4 (Low) Sub-standard tobaccos.

5 (Poor)

NG (No grade) Not suitable for manufacture.

The above forms the basis of the standard grades for the national crop and will be written in the sequence of plant position, quality and lastly colour.

Special factors

‘When special factors apply, the “factor” will be written after the quality and before the colour, in the sequence of plant position, quality, factor and lastly colour.’

1 This scheme is being trialed during the 1994 selling season.

2 Source: Tobacco Leaf Marketing Board of Victoria (Sub. 34, Appendix 1).

A Fully ripe, oily, nutty aroma and true natural colour: expected to be used only on the first, second and third quality and identifies an exceptional bale. This is used to raise the quality standard but not to a full quality level.

V Running green: expected to be used only on the second, third and fourth quality and identifies a greenish hue on the leaf surface which will ‘sweat’ out after a period of time.

P Perished: applicable to all qualities and identifies perished or trashy leaf which is in excess of acceptable tolerances for the respective plant position, expected to be used mainly on third, fourth and fifth qualities. As the quality level decreases the tolerance for perish increases.

J Slight discolouration, slightly smooth, water stained: expected to be used on second, third, fourth and fifth qualities.

K Close grained applied to all plant positions: expected to be used mainly on the fourth and fifth qualities.

Z Slick, sponge, grey: applied to all plant positions and expected to be used on the fourth and fifth quality tobaccos.

Q Scorched, cherry red, caramelised: applied to all plant positions and expected to be used on the third, fourth and fifth quality and identifies that tobacco which has discoloured due to excessive heat in the barn.

Colour factors

G Fixed green: applicable only to the fourth and fifth quality and identifies crude green on the leaf which will not ‘sweat’ out after a period of time. When applied, the colour code will fall away as the crude green will be the predominant colour.

Y Pale white: applicable mainly to the fourth and fifth quality and identifies that tobacco which does not have a true lemon colour. Y will normally be associated with K and Z off-type tobaccos. When applied, the colour code will fall away as the pale white will be the predominant colour. Can be applied for two faced tobacco.

D Dark: applicable only to the fourth and fifth quality and identifies that tobacco which has discoloured and is darker than mahogany, but is not scorched (Q). When applied, the colour code will fall away as the dark will be the predominant colour.

APPENDIX J THE TOBACCO RESEARCH AND DEVELOPMENT COUNCIL

Table J.1 provides details of the income and expenditure items of the Tobacco Research and Development Council (TRDC). It includes details of the TRDC's expenditure on research projects from 1991.

For the years 1988 to 1990, details are given for the Tobacco Research Council. The Council was replaced on 1 August 1990 by the Tobacco Research and Development Council, for which details are given from 1991 to 1993.

Table J.1: **Statement of income and expenditure for the Tobacco Research and Development Council** (dollars)

	Year ending 30 June					
	1988	*1989*	*1990*	*1991*	*1992*	*1993*
Carryover (balance at 1 July)	1 938 298	2 253 336	2 773 264	3 142 418	2 813 538	2 192 366
Income:						
Commonwealth contribution	729 000	745 898	774 650	591 240	413 000	413 000
Interest from investments	232 808	365 442	457 224	249 236	185 149	97 172
Industry contribution/levy	641 401	833 497	774 650	591 240	765 604	742 883
State Government contributions	16 250	5 000	11 250	na	na	na
Sale of produce	na	na	40 742	20 454	8 333	28 422
Sale of assets	49 963	89 498	57 472	na	na	na
Project refunds	117 336	55 217	30 116	16 184	6 546	119 090
Other income	na	na	28 313	28 878	6 708	65 317
Total income	1 786 758	2 094 552	2 174 417	1 497 232	1 385 340	1 465 884
Expenditure:						
State departments	1 378 703	1 429 936	1 455 712	na	na	na
Universities	16 040	19 157	2 839	na	na	na
Commercial bodies	6 700	35 172	na	na	na	na
Other research bodies	na	na	221 716	na	na	na
Commonwealth organisations	1 496	1 590	1 750	na	na	na
Subtotal	1 402 939	1 485 855	1 701 017	na	na	na
Research Projects:						
Plant breeding	na	na	na	461 788	471 301	490 290
Extension of new technology	na	na	na	181 631	355 618	328 202
Pest and disease control	na	na	na	192 758	178 715	125 340
Plant nutrition		na	na	210 110	195 493	53 847
Farm environment & management	na	na	na	58 126	51 130	170 519
Mechanisation and on-farm processing	na	na	na	161 382	188 066	55 250
Infrastructure	na	na	na	403 056	437 731	448 008
Education and training	na	na	na	25 030	3 606	9 198
Publications	na	na	na	1 904	2 120	1 000
Outstanding commitments	na	na	na	2 550	na	na
Subtotal	na	na	na	1 701 335	1 883 780	1 681 654
Corporate activities	na	na	na	75 092	73 460	58 717
Administration	68 781	88 755	94 371	49 685	49 272	41 648
Other expenditure	na	14	na	na	na	na
Total expenditure	1 471 720	1 574 624	1 795 388	1 826 112	2 006 512	1 782 019
Balance at 30 June	2 253 336	2 773 264	3 152 293	2 813 538	2 192 366	1 876 231

na not applicable/available

Sources: Tobacco Research Council and Tobacco Research and Development Council Annual Reports.

APPENDIX K TOBACCO LEAF PRODUCTION AND PRICE DISADVANTAGES

K.1 Introduction

Chapter 5 discusses the competitiveness of, and assistance available to, tobacco industries. In that chapter, reference is made to detailed information about price, price disadvantages, trading linkages and assistance to manufacturing. This appendix provides detailed reference information to support the discussion on competitiveness and assistance to tobacco industries. Where appropriate, the national information is disaggregated to the four tobacco growing regions:

- northern Queensland;
- southern Queensland;
- New South Wales; and
- Victoria.

This appendix first outlines the alternative points in the tobacco leaf production and distribution chain available for making price comparisons, the adjustments that are necessary in order to place import and domestic supplies on a comparable price basis and the assumptions that are made to apply the methodology. The appendix then provides detailed results based on comparisons using that methodology. It also provides a time series of assistance to the manufacture of tobacco products.

K.2 Methodology

K.2.1 Points in the production and distribution chain for price comparisons

In order to assess the price disadvantage of Australian tobacco leaf as against leaf transacted on the world market, leaf from alternative sources must be compared at a common point in the production and distribution chain. As Australian tobacco production is assumed to be an import competing activity, the import substitution price is the appropriate benchmark for price comparisons.

There are a number of points in the tobacco leaf marketing and distribution chain at which price comparisons could be made. The most identifiable points are at the:

- green leaf stage at which the leaf is submitted by local growers for sale. Green leaf has been subject to on-farm curing. The Australian Tobacco Marketing Advisory Committee's (ATMAC) Grade and Minimum Price Schedule for tobacco leaf relates to green leaf. Sale returns to growers are determined by the grading of their crop according to this schedule and the scheduled price for each grade; or
- dry/threshed leaf stage at which leaf enters the blending processes of manufacturers. Imported leaf, having gone through a drying process in order to reduce the moisture content and a threshing process to separate the leaf into its lamina, stem and fines in the country of origin before transit, is normally valued on a dry/threshed leaf basis. It is ready to enter blending without further processing. Australian leaf must go through a drying/threshing process after it leaves the farm but prior to blending. The drying/threshing of Australian leaf is undertaken by the local manufacturers.

In the estimation of price disadvantage and assistance to Australian growers, the green leaf stage is the most appropriate valuation point in the production and distribution chain because it relates to growers' returns. It has been adopted in this study. Since imported leaf is generally processed at source, a green leaf price comparison involves adjusting the import price downwards to a comparable basis to the ATMAC green leaf floor price received by growers.

For the calculation of tariff equivalents of assistance provided under the tobacco industry marketing arrangements, Australian and foreign sourced leaf should be valued on a 'value for duty' (vfd) and 'free on board' (fob) basis in the foreign country of origin. Import information is readily available on this basis. In order to show Australian leaf on vfd/fob basis, it is necessary to take the green leaf sales floor price and:

- first, revalue Australian leaf from domestic prices as determined in ATMAC's Grade and Minimum Price Schedule to import substitution prices (green leaf basis) to give an import parity price for Australian leaf grades; then
- convert those import substitution prices to a semi-processed, threshed, leaf price in a foreign port (ie the equivalent of the fob value of foreign leaf).

The green leaf and threshed leaf bases of valuation stand at opposite ends of the tobacco leaf production and distribution chain. They both provide a perspective on the leaf trade appropriate to different analytical needs. Box K.1 outlines the elements in the conversion of leaf between the two points.

Box K.1: **Elements in the conversion of tobacco leaf from a dry leaf (foreign port) to green leaf (Australian sales floor) cost** ($A)

Imported leaf (or Australian equivalent) – stemmed and stripped, free on board (fob) in foreign port	
Add International costs of insurance, freight and exchange	
Imported leaf (or Australian equivalent) - stemmed and stripped, free in warehouse in Australia	
Add	*Subtract*
Yield loss - conversion or yield gain back to whole leaf form	Freight and insurance from leaf processing plant to tobacco products manufacturing plant (leaf processing is not necessarily undertaken at manufacturing site) Fumigation (domestic tobaccos are fumigated after processing and before storage) Packaging and labelling of processed leaf Threshing cost (removal of stem and preparation of leaf for storage) Freight and insurance from processing plant to sales floor (Melbourne, Brisbane and Mareeba) Handling charges at the sales floor Manufacturers levy to provide funds for the administration of ATMAC and the Tobacco Research and Development Council (TRDC)
Green price on Australian sales floor	

Sources: Wills, Philip Morris and Rothmans (personal communication).

K.2.2 Main assumptions

There are a number of assumptions that must be applied to available data about tobacco leaf production and trade in order to express import and domestic leaf on common valuation bases. Data were available for the four marketing seasons 1990 to 1993, inclusive. The main data assumptions and treatments are set out below:

- the analysis is undertaken on a financial year basis to encompass the growing season and the marketing season. For example, the financial year 1992–93 year includes the tobacco crop grown during 1992–93 and sold during the 1993 selling season (which in broad terms extends over the second half of the financial year);

- import substitution price data were provided by manufacturers, on a confidential basis, in order to estimate the price disadvantage of Australian growers. In order to determine the average import substitution price, a simple average is taken across manufacturers;
- import substitution prices were generally provided by the manufacturers on a common exchange rate of $US0.75 per Australian dollar. Data on these rates have been adjusted to prevailing exchange rates using the Reserve Bank of Australia’s market information for the relevant trading periods. The appropriate exchange rate has been assumed to be the average monthly exchange rate applying to the calender year corresponding to the marketing of the tobacco leaf. For example, for tobacco marketed through 1990 the average exchange rate for the calender year 1990 is used;
- import substitution prices provided by manufacturers for each grade of leaf are based on a local market selling floor, green leaf equivalent. For some manufacturers, this value is inclusive of any duty paid on imports of leaf and is thus on a landed duty paid price basis rather than a world price (ie a duty free price) basis. A landed duty free price is required for Commission analysis. To adjust the duty paid prices to a landed duty free basis, it was necessary to deduct from the original values an estimate of the duty paid on each grade of leaf, algebraically that is,

$$Duty\ free\ price = A - \left(\$0.47 - DC\ preference\right)$$

where, A is the import parity green leaf price, inclusive of duty, at the Australian floor; and $0.47 is the value of the concessional duty on imported leaf. The developing country (DC) preference by individual grade is approximated by revaluing leaf back to the foreign port and applying the DC concessional rate of five per cent of the value for duty, algebraically that is,

$$DC\ preference = \left(A*1.3*0.93\right)*0.05$$

where, 1.3 is the value added due to threshing (see dot point below) (this value adding factor is applied uniformly to all grades of leaf); 0.93 is the ratio of the value of goods in the foreign port (vfd) to the value at the Australian port (cost, insurance and freight (cif)) (this international freight factor is also applied uniformly to all grades of leaf); and 0.05 is the DC preference applied to the vfd value of imported leaf, assuming that Australian leaf is mainly competing with leaf from countries eligible for DC preferential entry.

According to this formula, the DC preference would increase with the price of leaf. Higher priced leaf would therefore attract a lower duty and lower priced leaf a higher duty. No adjustments were made to data provided on a duty free basis:

- for analyses based on run-of-crop, the average domestic selling price and average import substitution price (green leaf basis) are weighted according to the production of each grade of tobacco making up the run-of-crop. For the regional analysis, regional production weights are used. The production weights were supplied by ATMAC;
- in order to convert Australian leaf from a green leaf price on the Australian sales floor to a dried and threshed equivalent (for comparison with import leaf in tariff equivalence calculations) an allowance for drying and threshing must be made. Based on the Industries Assistance Commission's (IAC) 1987 Report and information received from manufacturers during this inquiry, it is assumed that an appropriate allowance is around 30 per cent of the Australian green leaf price; and
- in order to convert Australian leaf from a dried and threshed equivalent to a free on board (fob) in foreign port (ie vfd) equivalent, an allowance for international transport and insurance costs must be made. Based on Australian Bureau of Statistics (ABS) foreign trade data the allowance for tobacco leaf is estimated to be 7 per cent of the cif value of imports. That is, the fob value for duty is 0.93 of the cif value. Once Australian leaf has been converted to a dried and threshed leaf basis, the information on international transport costs is used to estimate the vfd equivalent of Australian leaf at foreign port prices.

K.3 Results

K.3.1 Price disadvantage by leaf type

Under the Tobacco Industry Stabilisation Plan (TISP), manufacturers do not have the right to reject different grades of the tobacco leaf crop. The manufacturers therefore purchase run-of-crop, the components of which are differentiated in the Grade and Minimum Price Schedule. The production and revenue contribution of each leaf type are shown in Chapter 5, Figure 5.1.

The contribution by the different leaf products to production and revenue varies across the regions studied (see Table K.1). This variation reflects the productivity of each region, the varieties of tobacco grown and the grade and quality of tobacco produced. The mix of leaf products and contribution to revenue has changed over time. For example, growers in northern Queensland have increased their sale volume of subleaf from 24 per cent to 29 per cent of the crop. Sale of cutters in the same region has fallen.

Table K.1: **Production and revenue shares (green leaf) by plant leaf position and region[a], 1989–90 to 1992–93** (shares)

	1989–90		*1990–91*		*1991–92*		*1992–93*		*Average*	
	Prod'n	*Revenue*	*Prod'n*	*Revenue*	*Prod'n*	*Revenue*	*Prod'n*	*Revenue*	*Prod'n*	*Revenue*
					Australia					
Tips	0.10	0.10	0.10	0.10	0.13	0.13	0.11	0.11	0.11	0.11
Leaf	0.50	0.49	0.48	0.46	0.48	0.46	0.44	0.43	0.47	0.46
Subleaf	0.27	0.29	0.32	0.33	0.31	0.33	0.36	0.38	0.31	0.33
Cutters	0.05	0.05	0.03	0.03	0.02	0.02	0.03	0.03	0.03	0.03
Lugs	0.08	0.08	0.07	0.07	0.06	0.06	0.06	0.05	0.07	0.06
					Regions					
Northern Queensland										
Tips	0.12	0.12	0.14	0.14	0.16	0.15	0.16	0.16	0.15	0.14
Leaf	0.50	0.49	0.51	0.51	0.49	0.49	0.47	0.47	0.49	0.49
Subleaf	0.24	0.25	0.24	0.25	0.28	0.29	0.29	0.31	0.26	0.28
Cutters	0.07	0.07	0.05	0.04	0.03	0.03	0.03	0.03	0.04	0.04
Lugs	0.07	0.07	0.07	0.06	0.04	0.04	0.04	0.04	0.05	0.05
Southern Queensland										
Tips	0.06	0.05	0.09	0.09	0.06	0.06	0.06	0.06	0.07	0.07
Leaf	0.45	0.44	0.50	0.49	0.48	0.47	0.53	0.51	0.49	0.48
Subleaf	0.39	0.41	0.36	0.37	0.43	0.44	0.39	0.41	0.39	0.41
Cutters	0.05	0.05	0.01	0.01	0.00	0.00	0.00	0.00	0.02	0.02
Lugs	0.05	0.05	0.03	0.03	0.03	0.03	0.02	0.02	0.03	0.03
New South Wales										
Tips	0.08	0.08	0.07	0.07	0.04	0.04	0.03	0.03	0.05	0.06
Leaf	0.55	0.54	0.51	0.49	0.55	0.51	0.52	0.47	0.53	0.50
Subleaf	0.28	0.29	0.35	0.37	0.29	0.33	0.37	0.43	0.33	0.35
Cutters	0.04	0.05	0.03	0.03	0.08	0.08	0.05	0.04	0.05	0.05
Lugs	0.04	0.04	0.05	0.04	0.04	0.04	0.03	0.03	0.04	0.04
Victoria										
Tips	0.07	0.07	0.04	0.04	0.09	0.09	0.05	0.04	0.06	0.06
Leaf	0.49	0.48	0.42	0.39	0.45	0.42	0.39	0.36	0.44	0.41
Subleaf	0.31	0.33	0.43	0.46	0.35	0.38	0.45	0.49	0.39	0.42
Cutters	0.02	0.02	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02
Lugs	0.10	0.10	0.09	0.09	0.09	0.09	0.09	0.08	0.09	0.09

a Over the tobacco leaf positions, the shares reported sum to one (except in cases of rounding error).
Source: Commission estimates.

The average selling price for different leaf from different plant positions varies across the regions (see Table K.2). Queensland producers have, on average, received higher prices from each plant position than have been achieved in other growing regions.

Table K.2: **Average selling price (green leaf) by plant leaf position and region, 1989–90 to 1992–93**
(dollars per kilogram)

	1989–90	*1990–91*	*1991–92*	*1992–93*	*Average*
			Australia		
Tips	5.74	6.07	6.06	5.93	5.95
Leaf	5.84	5.90	5.96	5.97	5.92
Subleaf	6.23	6.39	6.50	6.55	6.42
Cutters	6.10	6.15	6.00	5.85	6.03
Lugs	5.94	5.74	5.77	5.56	5.75
			Regions		
Northern Queensland					
Tips	5.76	6.10	6.12	5.99	5.99
Leaf	5.96	6.27	6.33	6.26	6.20
Subleaf	6.37	6.63	6.64	6.63	6.57
Cutters	6.14	6.18	6.10	5.94	6.09
Lugs	6.09	6.05	6.02	5.66	5.95
Southern Queensland					
Tips	5.54	5.90	5.97	5.74	5.79
Leaf	5.86	5.98	5.96	6.22	6.01
Subleaf	6.25	6.27	6.25	6.70	6.36
Cutters	6.11	5.89	6.23	6.32	6.14
Lugs	5.95	5.71	6.03	5.88	5.89
New South Wales					
Tips	5.55	5.75	5.72	5.36	5.60
Leaf	5.57	5.37	5.14	4.94	5.25
Subleaf	6.00	5.84	6.14	6.20	6.05
Cutters	5.88	5.90	5.49	4.96	5.56
Lugs	5.83	5.22	5.63	5.31	5.49
Victoria					
Tips	5.70	5.99	5.91	5.68	5.82
Leaf	5.68	5.30	5.47	5.59	5.51
Subleaf	6.10	6.25	6.36	6.49	6.30
Cutters	5.97	6.10	5.95	5.86	5.97
Lugs	5.79	5.44	5.59	5.50	5.58

Source: Commission estimates.

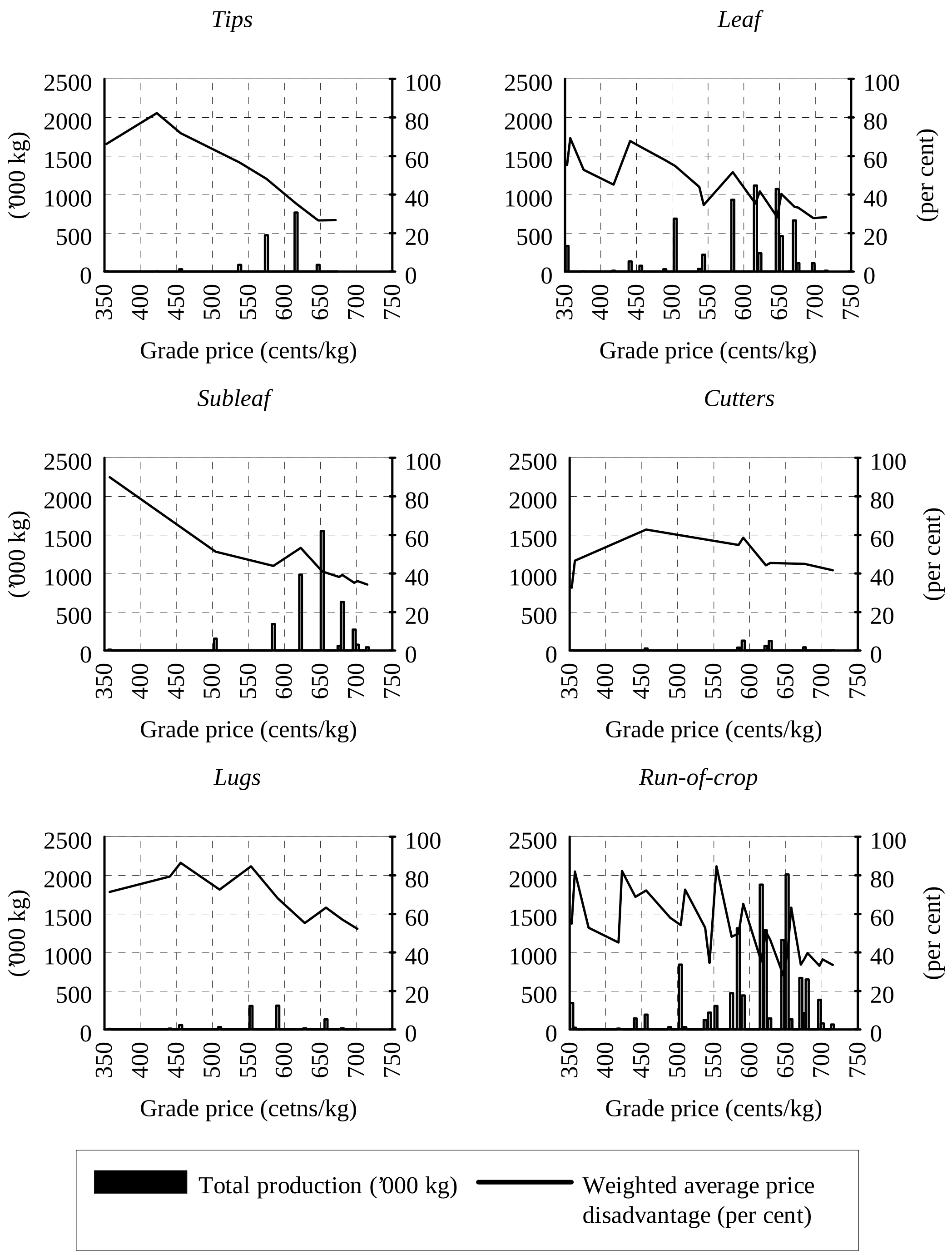
The price disadvantage applying to sales of leaf, like the selling price for each grade of leaf, varies between leaf type and grade (see Table K.3). The variable price disadvantages indicate that the deregulation of the tobacco growing industry could have a different impact on farm income across the growing regions.

Table K.3: **Price disadvantage (green leaf) by plant leaf position and region, 1989–90 to 1992–93**
(per cent)

	1989–90	*1990–91*	*1991–92*	*1992–93*	*Average*
			Australia		
Tips	28	32	36	73	42
Leaf	34	32	34	60	40
Subleaf	45	35	36	57	43
Cutters	59	44	36	65	51
Lugs	97	59	56	86	74
			Regions		
Northern Queensland					
Tips	27	31	35	73	42
Leaf	31	30	31	58	38
Subleaf	42	33	34	56	41
Cutters	58	43	36	65	50
Lugs	89	52	55	85	70
Southern Queensland					
Tips	33	36	38	72	45
Leaf	31	30	34	55	38
Subleaf	43	34	37	52	41
Cutters	57	44	37	62	50
Lugs	93	55	54	81	71
New South Wales					
Tips	36	40	40	77	48
Leaf	39	37	40	66	45
Subleaf	46	37	38	61	45
Cutters	68	47	38	64	54
Lugs	100	61	56	85	76
Victoria					
Tips	29	34	38	71	43
Leaf	37	37	38	65	44
Subleaf	49	37	39	58	46
Cutters	65	44	39	63	53
Lugs	106	68	57	86	79

Source: Commission estimates.

Figure K.1: **Production and price disadvantage by plant leaf position, average 1989–90 to 1992–93**
('000 kilograms and per cent)



Source: Commission estimates.

Within each of the five leaf positions — tips, leaf, subleaf, cutters and lugs — there are many grades of leaf attracting different selling prices under the Grade and Minimum Price Schedule. For example, for tips, average prices ranged from around 350 cents per kilogram to around 670 cents per kilogram (shown on the horizontal scale of Figure K.1).

The price disadvantage is not uniform between grades. Taking each leaf position individually, the price disadvantage is highest for lower priced grades and lower for the higher priced grades (line graph in Figure K.1). For tips traded around 350 cents per kilogram, the price disadvantage is around 66 per cent while for tips traded at an average price of 670 cents per kilogram the average price disadvantage is around 27 per cent.

Most production has been concentrated in grades with average selling prices in the range of 600 cents per kilogram to 650 cents per kilogram (average sales over the period 1989–90 to 1992–93 are shown as vertical bars in Figure K.1). In the case of tips, the most common average selling price was around 616 cents per kilogram. There have been substantial pockets of production below these levels. These pockets of production have been particularly advantaged by the tobacco leaf marketing arrangements.

The consolidation of the leaf types into run-of-crop produces a much more erratic link between price and price disadvantage than is evident for individual plant leaf positions. There is no uniform relationship between the price in the Grade and Minimum Price Schedule and the price disadvantage across the grades. Therefore, the price received for individual leaf products is not necessarily a good reflection of the international competitiveness of the run-of-crop. This pricing structure sends very mixed signals to growers about the international pricing of their leaf and their tobacco crop. A decision by a grower to emphasise production of leaf types yielding a higher price may not necessarily lead to a decision to grow the most internationally competitive tobacco leaf.

Table K.4 shows the standard deviation in price disadvantage for each leaf product. It can be seen that the variation in price disadvantages is significant and has fluctuated over the period examined. It appears that a reduction in the variation in price differentials was achieved over the period 1989–90 to 1991–92, however, this trend was altered in 1992–93, when the standard deviation increased for three of the leaf products. The largest variation occurs in the pricing of tips.

In summary, Table K.5 shows the average domestic price, the average import substitution price and price disadvantage, on a run-of-crop basis for Australia and each growing region.

Table K.4: **Standard deviation in price disadvantage (green leaf) by plant leaf position[a], 1989–90 to 1992–93**
(per cent)

	1989–90	*1990–91*	*1991–92*	*1992–93*	*Average*
Tips	39	23	14	18	24
Leaf	24	14	12	13	16
Subleaf	14	8	9	13	11
Cutters	17	10	8	8	11
Lugs	25	13	7	6	13
Overall	**28**	**15**	**13**	**15**	**18**

a The standard deviation is a measure of dispersion. In this analysis, it measures how widely the percentage price disadvantages across the individual leaf grades differ from the average value. The larger the variability amongst individual price disadvantages, the larger the standard deviation.

Source: Commission estimates.

Table K.5: **Average domestic price, import substitution price and price disadvantage (green leaf) by region, 1989–90 to 1992–93**
(dollars per kilogram)

	1989–90	*1990–91*	*1991–92*	*1992–93*	*Average*
			Australia		
Average domestic price	5.96	6.07	6.13	6.15	6.08
Import substitution price	4.23	4.49	4.51	3.80	4.26
Price disadvantage	1.73	1.58	1.62	2.34	1.82
			Regions		
Northern Queensland					
Average domestic price	6.05	6.31	6.36	6.29	6.25
Import substitution price	4.39	4.75	4.76	3.92	4.46
Price disadvantage	1.67	1.56	1.60	2.37	1.80
Southern Queensland					
Average domestic price	6.01	6.07	6.08	6.37	6.13
Import substitution price	4.31	4.57	4.48	4.10	4.36
Price disadvantage	1.70	1.50	1.60	2.27	1.77
New South Wales					
Average domestic price	5.71	5.57	5.50	5.43	5.55
Import substitution price	3.97	4.03	3.94	3.31	3.81
Price disadvantage	1.74	1.54	1.56	2.13	1.74
Victoria					
Average domestic price	5.83	5.76	5.84	6.00	5.86
Import substitution price	4.01	4.13	4.17	3.68	4.00
Price disadvantage	1.83	1.63	1.67	2.33	1.86

Source: Commission estimates.

K.3.2 Import penetration of tobacco leaf market

In order to complete estimates of the cost of assistance to manufacturers prior to estimating tariff equivalents of current arrangements, it is necessary to estimate the share of imports and domestic production entering the Australian leaf market. Tables K.6 sets out the domestic and import components of supply, in volume terms. The import volumes are taken directly from foreign trade statistics. The domestic volumes are taken by multiplying domestic sale volumes by 0.96 to take account of the yield loss that occurs in the drying of leaf before it enters the blending stage of production.

From Table K.6, the domestic share has risen above the 57 per cent agreed level under the tobacco industry marketing arrangements. The higher per cent reflects the effects of stockpiling of local leaf. The operation of the scheme has therefore exaggerated the demand for local leaf. It has raised the costs of the scheme to manufacturers above the level that would flow from the purchase of leaf exactly in line with year-to-year requirements. In order to complete the weights to calculate the cost of the scheme to manufacturers, the volumes are revalued to a vfd basis, according to the assumptions set out above.

Table K.6: **Local and imported component of supply of tobacco leaf (dried/threshed leaf), 1989–90 to 1992–93** (kilograms and per cent)

	1989–90	*1990–91*	*1991–92*	*1992–93*	*Average*
			Kilograms		
Domestic production	12 527 428	12 614 942	12 605 150	11 961 786	na
Imports					
General entry	4 387 298	4 088 741	3 998 842	3 456 807	na
DC preference	5 538 054	5 181 660	5 061 386	4 614 833	na
Total imports	9 925 352	9 270 401	9 060 228	8 071 640	na
Total	**22 452 780**	**21 885 343**	**21 665 378**	**20 033 426**	**na**
			Per cent		
Domestic production	56	58	58	60	58
Imports					
General entry	20	19	18	17	18
DC preference	25	24	23	23	24
Total imports	44	42	42	40	42
Total	**100**	**100**	**100**	**100**	**100**

na not applicable
Source: Commission estimates.

K.3.3 Manufacturing industry assistance

The conceptual framework for assistance evaluation is described in Appendix L.

The Commission’s estimates of the assistance provided to ‘tobacco products’, ‘food, beverages and tobacco’ and ‘manufacturing’ for the years 1968–69 to 1992–93 are presented in Table K.7 (over). The table shows that over the period the effective rate of assistance provided to ‘tobacco products’ by tariffs and certain non-tariff measures has been declining. The rate for ‘tobacco products’ has been less than the average effective rate for ‘manufacturing’ as a whole, and, for the last decade, below the average for ‘food, beverages and tobacco’.

There have been some substantial variations in the effective rate of assistance for ‘tobacco products’. These variations are due to the variable effect that the tobacco leaf marketing arrangements have had on input costs to manufacturing. Nominal rates of assistance which reflect in the main the effects of tariffs on tobacco product imports, have been declining.

Table K.7: **Average nominal and effective rates of assistance for 'tobacco products', 'food, beverages and tobacco' and 'manufacturing'[a,b], 1968–69 to 1992–93**
(per cent)

	Nominal rates			*Effective rates*		
	Tobacco products	*Food, beverages and tobacco*	*Manufacturing*	*Tobacco products*	*Food, beverages and tobacco*	*Manufacturing*
1968–69	31	14	24	22	16	36
1969–70	31	13	23	22	17	36
1970–71	31	12	23	23	18	36
1971–72	31	11	22	23	19	35
1972–73	31	10	22	23	19	35
1973–74	31	8	17	24	18	27
1974–75	38	9	15	30	21	27
1975–76	31	9	16	22	20	28
1976–77	27	7	15	16	16	27
1977–78	23	6	15	6	10	23
1978–79	16	7	15	2	14	24
1979–80	17	5	15	10	13	23
1980–81	15	4	15	6	10	23
1981–82	13	6	16	1	9	25
1982–83 c	12	9	16	4	9	25
1982–83 c	6	7	13	-12	7	21
1983–84	10	7	13	0	6	21
1984–85	9	8	13	-6	6	22
1985–86	7	8	12	1	5	20
1986–87	9	8	12	8	6	19
1987–88	7	8	11	4	7	19
1988–89	8	5	10	-4	3	17
1989–90 c	7	5	9	-4	3	16
1990–91 c	7	5	9	-4	3	15
1989–90 c	8	5	9	1	4	15
1990–91 c	8	5	8	-1	4	14
1991–92 d	8	5	8	-4	4	13
1992–93 d	7	5	7	-17	4	12

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 comparative purposes estimates for 1982–83, and 1989–90 and 1990–91 have been presented for the previous (1983–84 base) series.

d Estimates for tobacco products revised using specific rates of duty applying to imports of tobacco products, the actual value for duty of the imported products and revised price disadvantages on Australian tobacco leaf as an input to the manufacture of tobacco products.

Sources: Industry Commission Annual Report 1992–93 and Commission estimates.

APPENDIX L CONCEPTUAL FRAMEWORK FOR ASSISTANCE EVALUATION

L.1 Introduction

The assistance provided to tobacco growing by the Tobacco Industry Stabilisation Plan (TISP) and the Local Leaf Content Scheme (LLCS) is discussed in Chapter 5. The chapter first considers the price disadvantage of growers and then expresses the effects of these disadvantages in terms of the Commission's standard nominal and effective rate of assistance measures. The chapter goes on discuss assistance to tobacco products manufacturing. This appendix examines the assumptions underlying the model for estimating nominal and effective rates. It also looks at the implications of the measures and how they fit into a more general economic analysis of tobacco growing and manufacturing. The derivation of the assistance measures used is provided.

The model for nominal and effective rates is applied by the Commission in its annual reporting and industry inquiry obligations. Broadly, the Commission is required to report on '... assistance and regulations affecting industry ... and the effect of such assistance, regulations and matters on industry and the Australian economy generally'.[1] To meet the first part of this requirement, it is desirable that assistance for individual industries be measured on a common basis so that assistance levels may be compared across industries. The Commission's nominal and effective rates model meets this criterion.

The nominal and effective rates model looks at the effects of government regulation and interventions on individual industries from the point of view of price differences between industry levels and some benchmark price (usually taken from international trade). It also takes into account the effects of any direct grants or subsidies to industry. In this sense, the model looks at the initial effects of industry programs before they are translated into production and consumption decisions of industries and consumers. In economic terminology the model can be regarded as coming within a 'partial equilibrium' framework.

The model abstracts from the complex intra-industry and inter-industry linkages in both supply and demand which take into account behavioural responses to the initial effects of nominal and effective rates. Care should be taken in interpreting the resulting assistance measures. Section L.2 discusses the main

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1 *Industry Commission Act 1989*, Section 45 (2b).

assumptions of the model, and their implications for the interpretation of the assistance measures. The formal derivation of the Commission's two major assistance measures is provided in Section L.3.

L.2 Assumptions of the model and implications for the assistance measures

L.2.1 Assumptions

(i) There is perfect substitution in consumption between goods of nominally the same description (ie exports, imports and locally consumed domestic products). Under this assumption, the domestic market price of an import competing product in the absence of assistance would be the landed duty free (ldf) price. The imposition of, say, a tariff on an imported good raises its price and allows domestic production to compete at a higher price which fully reflects the tariff. A local content scheme or tariff-quota would insulate producers from the effects of world markets enabling them to sell their goods and services above international parity prices. A tariff equivalent of the local content scheme or quota can be estimated.

(ii) Australia is too small, relative to the rest of the world, to influence the price it receives for its exports and pays for its imports through its own trading behaviour. In other words, Australia faces infinite elasticities of export demand and import supply.

(iii) Trade exists before and after assistance, and the direction of trade in the absence of assistance can be assessed. That is, whether an industry would be classified as import competing or as an export industry can be determined. Further, the benchmark international price of a good is import parity for import competing activities and export parity for exporting activities.

(iv) In the absence of assistance, the prices of goods, services and factors would represent their opportunity cost to the community. This implies that there are no price or quantity distortions other than those included in the analysis.

(v) The ratio of material input to output is assumed not to be affected by the provision of assistance. In reality, changes in assistance to a specific industry may alter the relative prices of materials used in production and lead to physical substitution between inputs and hence to a change in the ratio of materials to outputs.

L.2.2 Implications for assistance measurement

The measures derived from the Commission's assistance model are broad indicators of the extent to which the assistance arrangements increase the gross or net returns to an activity. For example, the nominal rate of assistance afforded an activity may be interpreted as the percentage by which producers' gross returns per unit of output are increased by assistance to that activity. Similarly, the effective rate of assistance measures the net assistance to an activity's value adding factors. It takes into account both assistance on output which increases returns, and the taxing, or price raising effect of any assistance on the activity's inputs of good and service plus transfer payments (for example, tax concessions and government grants) that increase income.

The assistance structure afforded an industry or activity alters production and consumption decisions. However, in isolation, the measures provided cannot be used to make judgements about how the size of an industry will change in response to changes in assistance. In order to draw such conclusions, it would be necessary to take into account additional information about factors, such as the responsiveness to price changes of the demand for, and supply of, each industry's output. In turn, these are a function of such factors as the responsiveness of supplies of primary factors of production to price changes; the possibilities for substitution between primary factors in response to changes in their relative prices; the proportions in which factors of production are used in each industry; the mobility of factors of production between different activities; and the scope for revaluing assets, such as land, in order to reduce (or raise) the price of goods and services.

L.3 Derivation of assistance measures

L.3.1 Nominal rate of assistance

The nominal rate of assistance for an activity is defined as the percentage by which producers' gross returns (ie the value of sales) per unit of output are increased by assistance to that activity. To calculate a nominal rate requires an estimate of the 'unassisted' price which that output would command as a benchmark for comparison with the actual domestic price. For an import-competing activity, the ldf price of comparable imports represents the unassisted price, since that would be the maximum price that domestic producers could obtain if assistance were removed (excluding any premium for local advantage).

In the case of tobacco leaf, the nominal rate estimates presented in Chapter 5 have been calculated by comparing the industry average domestic price of tobacco leaf with the average import substitution price of comparable leaf available on the international market and expressing the price difference as a percentage of the import substitution price. Algebraically, that is:

$$df = \frac{f - pm}{pm}$$

where: df is the nominal rate of assistance to tobacco leaf growing;
f is the domestic price of each unit of domestic production, and
pm is the unit import substitution price of tobacco leaf.[2]

By referring to assistance afforded outputs as the 'gross subsidy equivalent' (GSE) of an industry, and defining it as:

$$GSE = f - pm$$

the nominal rate formula can be simplified to:

$$df = \frac{GSE}{pm}$$

In the case of domestic manufactured tobacco production which is assisted by tariffs, nominal rates of protection have been calculated using the following formula:

$$df = ty$$

where: t is the *ad valorem* tariff or *ad valorem* equivalent of the specific tariff; and
y is the ratio of the free on board (fob) price to the ldf price of the imported tobacco products.

This latter adjustment by the ratio of the fob to ldf price of trade flows reflects the fact that tariffs are levied in Australia on the fob import price of traded goods, that is, before insurance, freight and other importing costs are added. These costs are not inflated by the tariff. Thus, the *ad valorem* tariff rate if used directly would overstate the percentage by which the ldf import price is increased by the tariff. (Again, any production subsidies paid and other grants to an industry would raise its nominal rate of assistance.)

[2] The nominal rate of assistance is equal to the average price disadvantage of the local industry in this analysis. Often, this is not the case. For example, when production subsidies are afforded an industry they raise the measured level of nominal assistance.

L.3.2 Effective rate of assistance

The effective rate of assistance is defined as the proportional increase in the value added by an activity due to the assistance. This notion can be represented algebraically as:

$$g = \frac{VA - VA'}{VA'}$$

where: g is the effective rate of assistance;
VA is value added with assistance (ie the level prevailing in the industry); and
VA' is the estimated value added in the absence of any assistance.[3]

Assistance to value adding factors through income transfers benefiting individual industries such as that provided by some specific tax concessions, adjustment assistance and research grants would raise the effective rate of assistance afforded to an industry. The tobacco leaf growing industry receives such income raising assistance and these are taken into account in the effective rate assistance calculations in this report. The more general definition of the effective rate which encompasses the effect of income transfers is:

$$g = \frac{VA - VA' + i}{VA'}$$

where the additional term i is assistance to value adding factors through income transfers. By referring to assistance afforded value adding factors as the 'net subsidy equivalent' (NSE) to an industry, and defining it as:

$$NSE = VA - VA' + i$$

the effective rate formula can be simplified to:

$$g = \frac{NSE}{VA'}$$

3 From this definition, an alternative version of the effective rate formula can be derived based on nominal rates of assistance. This is:

$$g = \frac{df - x.dm}{1 - x}$$

where df is the nominal rate of assistance; dm is the nominal rate of assistance on material and other inputs; and x is the input to output ratio expressed in unassisted prices. This form is often used in effective rate calculations.

APPENDIX M EFFECTS OF WORLD PARITY PRICING ON FARM REVENUES

M.1 Introduction

The analysis in Chapter 5 indicates that domestic prices, even allowing for some local preference for Australian leaf, are substantially above world levels.

In this appendix, the Commission analyses the potential effects of lower, world parity prices on the financial viability of tobacco farms. It deals, in particular, with the longer-term prospects and short-term carry-on capacity of farms. To do this, the study looks at the return on resources used and the cash surplus available to farms. The study uses three tobacco farms selected from the northern Queensland growing area of Mareeba-Dimbulah. These farms receive better than average prices for tobacco and are small, medium and large tobacco growing operations, respectively. The farms were selected on the basis that they would be amongst those that had a better than average chance of remaining profitable if world parity prices were received for tobacco leaf.

The analysis is intended to illustrate some of the financial effects of changes in tobacco prices and is not intended to provide forecasts of the size, structure or product mix of any future tobacco growing industry. In order to facilitate a comparison between the farms certain assumptions pertaining to the economic life of capital assets and the value of tobacco land have been made, rather than using the actual data for the three farms.

This appendix is set out as follows. Section M.2 provides details of the farms selected for analysis, the sources of information used and modifications adopted to allow for inter-farm comparability. Section M.3 discusses the valuation of tobacco assets and land, and provides an alternative asset structure incorporating land valued in its next best agricultural use. Section M.4 sets out the price scenarios to be analysed. Section M.5 gives the results of the Commission's analyses, while Section M.6 provides a summary of the impacts of world parity pricing on farm financial viability.

Annex M.1 defines the performance measures used in the analysis.

M.2 Case study farms, sources and methods

M.2.1 Case study farms

Comprehensive information regarding farm revenues and costs under world parity pricing is not available. In order to consider some of the financial implications, three case studies of different sized farms were undertaken. The farms selected were those that may have a better than average chance of succeeding under world parity pricing regimes. The three farms were chosen to have the following characteristics:

- each farm is of a different size so that a small, medium and large sized tobacco farm is represented;
- each farm has a price disadvantage less than the industry average; and
- each farm produces higher priced grades of tobacco.

The farms chosen are drawn from the group of growers with a price disadvantage ranging from 35 to 42 per cent. Growers in this group represent approximately 62 per cent of growers in northern Queensland (see Figure 5.3). The farms selected have selling entitlements of (approximately) 20 000 kilograms, 40 000 kilograms and 70 000 kilograms for the small, medium and large tobacco growing farms, respectively. Farms with smaller selling entitlements are the more common in northern Queensland. Based on selling entitlements for 1989–90, Queensland Department of Primary Industries (QDPI)/ACIL estimated that farms with a selling entitlement of between 10 000 and 21 000 kilograms represent 54 per cent of growers in northern Queensland (QDPI/ACIL 1990, Table 2.1). Farms with entitlements of more than 33 000 kilograms represent 13 per cent of growers in the same area. Since that time some farm consolidation has occurred raising the importance of the large farm group.

Data on farm costs and receipts were available for the five-year period 1988–89 to 1992–93. The data collected for each farm have been modified in a number of respects in order to standardise information on the individual farms and facilitate inter-farm comparison. Modifications to the original data are discussed below.

M.2.2 Revenue

Revenue from the production of tobacco on each farm over the five years 1987–88 to 1992–93 were decomposed and re-estimated on the basis of individual quota leaf sales by grade achieved in 1992–93 and domestic prices determined by the Australian Tobacco Marketing Advisory Committee (ATMAC) for each marketing year. This enables revenues to be decomposed and contrasted with other Commission information on domestic prices under the tobacco industry marketing arrangements, import parity prices and price disadvantages. ATMAC prices for 1988–89 were used as a proxy for 1987–88 prices to complete the five-year series. As would be expected, there are some variations between the reported data on receipts and the estimates adopted. The main reasons for year-to-year differences between imputed and actual revenue are:

- growers draw on on-farm stocks of leaf in some years to make up differences between production and quota;
- the tobacco marketing year does not correspond exactly to the accounting financial year; and
- the production grade mix may differ between years due to weather or other year-to-year growing condition differences.

Generally, the differences were small and averaging the imputed revenue transactions over five years substantially eliminates year-to-year fluctuations.

Revenue also includes receipts such as the diesel fuel rebate and rebates paid by the tobacco growers' co-operative.

M.2.3 Uniform adoption of 1994 input cost information

All information on input costs was revalued by QDPI to 1994 dollars in order to remove the effects of price change on input costs over the five-year period. Costs treated on this basis included all cash payments, rates and taxes, hired labour, materials, repairs and maintenance, administration and services. Once revalued, the costs were averaged over the five-year period to provide a typical set of input costs to tobacco farming for each of the farms.

M.2.4 Cost of owner/operator labour

An imputed value was assigned to owner/operator labour. Consistent with the Australian Bureau of Agricultural and Resource Economics (ABARE) farm surveys, owner/operator labour was valued at the weekly wage of a Senior Station Hand, Grade 3.[1] The 1992–93 value of $387 per week was used. It was assumed that each farm had one owner/operator year equivalent of labour. Additional owner/operator hours (for example, provided by either husband, wife or family) were valued at $9.50 per hour to be consistent with the hourly valuation of hired labour.

[1] Personal communication with ABARE Surveys Section.

M.2.5 Research and development levy

The research and development levy is included in farm costs. The levy for each farm was re-estimated in order to obtain total funding of $1.16 million from sales of 8.1 million kilograms of tobacco (ie 1994 quota sales). The $1.16 million control value represents the tobacco research and development expenditure in 1992–93 as administered by the Tobacco Research and Development Council. The levy payment estimate assumed that total funding and tobacco research and development would continue at this level.

M.3 Resources used in tobacco growing

M.3.1 Initial valuation of resources used

Resources used in tobacco production comprise fixed assets and land. Table M.1 shows the asset structure and value of land for each model farm in the current regulated environment.[2] Under the status quo applying over the period 1988–89 to 1992–93, land represents the largest single item in total farm assets and is the most important item in the standardised schedule of resources used. With respect to other items, there appears to be quite a difference between farms. In particular, the medium farm is heavily capitalised in buildings and sheds whilst the large farm has significant investment in irrigation and water supply plant.

M.3.2 Revised asset structure of tobacco growing properties

For the purpose of this analysis, the schedule of fixed assets (excluding land) has been revised for each farm to place the assets on an average age basis. This adjustment is necessary to enable comparisons to be made between farms. The original data showed assets of very different vintages, some very old (for example, 60 years) and others almost new. Inter-farm comparisons using those data could be distorted by the effects of different asset vintages.

[2] The base land values are taken before the cutback of quota (for 1994) and prior to any shift in prices toward import parity. The land prices therefore represent ‘status quo’ values.

Table M.1: **Reported value of farm assets, average for period 1988–89 to 1992–93**

		Farm type					
		Small		*Medium*		*Large*	
Farm Characteristics							
Selling entitlement	(kg)	20 000		40 000		70 000	
Area of farm	(ha)	89.10		40.50		106.70	
Area of tobacco[a]	(ha)	20.46		30.90		65.94	
Unit value of farm land[c]	($/ha)	4 489		5 877		5 623	
Unit value of holding[b,c]	($/ha)	6 093		13 639		12 528	
Resources Used (written down replacement cost)[c]		$	%	$	%	$	%
Land (total farm)[d]		400 000	74	238 000	43	600 000	45
Tractors/motor vehicles		33 553	6	45 718	8	108 881	8
Cultivation, spraying		2 763	1	22 572	4	36 140	3
Specialised tobacco equipment		10 284	2	29 578	5	31 340	2
Irrigation and water supply plant		32 925	6	59 816	11	355 687	27
Workshop equipment		118	0	4 125	1	5 897	0
Barns		35 228	6	71 867	13	113 683	9
Buildings, sheds		28 056	5	80 689	15	85 064	6
Total resources used (Land and improvements excluding owner's house)		542 927	100	552 366	100	1 336 692	100

a This represents the average area of land dedicated to tobacco production. For these farms, production is based on three-year rotation of land. Thus, one-third of the land reported is put aside for tobacco growing in any one year, whilst the other two-thirds are in fallow.
b The holding refers to land plus improvements (excluding owner's house).
c Value at constant 1994 prices. Unit values based on total farm land.
d Includes tobacco and non-tobacco farming land and land used for residence.
Source: Commission estimates based on data from three case study farms.

Consistent with the approach of ABARE farm surveys and the QDPI/ACIL study (QDPI/ACIL 1990), the diminishing value method of depreciation has been used in the revaluation of the assets. A model asset schedule was estimated for each farm type based on the machinery and equipment items reported, the replacement cost estimated by the grower for each item and the rates of depreciation provided. Asset lives were determined on the basis of the actual age of farm assets reported by each grower and the 'effective life' for taxation purposes. In the revised schedule the half life of each item corresponded to the year 1990–91. For example, for a machine with an estimated working life of 15 years, data for the eighth year was reported against 1990–91.

Examination of individual farm data showed that unit values for replacement items varied significantly. The variations were not consistent with farm size. The small farm valued the replacement cost of barns well above the estimated replacement costs of the other farms. It also reported five tractors including two that were 60 years old. The barns were revalued to the average of the replacement costs reported by the other farms and the two old tractors were deleted from the asset list. Apart from these special adjustments, the assets reported by the farms were accepted for the purpose of this study. The revised asset schedule is shown in Table M.2.

Table M.2: **Revised value of farm assets, average for period 1988–89 to 1992–93**

	Farm type					
	Small		*Medium*		*Large*	
	$	%	$	%	$	%
Land (tobacco land only, valued at opportunity cost)	59 932	20	90 513	20	193 152	19
Tractors/motor vehicles	56 754	19	59 561	13	135 062	14
Cultivation, spraying	4 081	1	24 659	5	44 887	5
Specialised tobacco equipment	24 484	8	25 650	6	26 816	3
Irrigation and water supply plant	49 646	16	65 395	14	374 972	38
Workshop equipment	967	0	7 845	2	3 869	0
Barns	69 954	23	79 131	17	142 822	14
Buildings, sheds	37 417	12	107 270	23	73 395	7
Total resources used (Land and improvements, excluding owner’s house)	303 234	100	460 023	100	994 974	100

Source: Commission estimates based on data from the three case study farms.

World parity prices would lower the revenue base of tobacco farms relative to the situation that prevailed over the five-year period to 1992–93. A world pricing regime could also lower the value attached to tobacco growing land. In order to consider the implications of different pricing regimes, and adopt a forward looking approach in the analysis, tobacco land has been valued at opportunity cost. The opportunity cost reflects the price land would attract if it were purchased for the next best alternative use to tobacco growing.

Information was provided by the Queensland Industry Development Corporation (QIDC) detailing the per hectare value of tobacco land sold recently in the Mareeba-Dimbulah area for alternative agricultural uses. The sale prices, representing the value of land and buildings, including the owner’s house, are shown in Table M.3. In order to reflect the opportunity cost of land, the average sale price data were amended to reflect the value of the land excluding the owner's house. The tobacco land of each model farm has been revalued from over $4000 per hectare to an average opportunity cost of around $2930 per hectare.[3]

Table M.3: **Some recent sales of tobacco properties in the Mareeba-Dimbulah area of northern Queensland**

Area (hectares)	*Sale price (dollars per hectare)*	*Proposed major use*
92	2 605	Poultry
59	3 544	Tomatoes
55	2 954	Tea tree
42	5 827	Poultry and other (prime location on premium soil)
61	3 258	Poultry

Source: Mareeba Branch, QIDC (Personal communication, 25 February 1994).

Table M.2 shows the effect of the revaluation of land at opportunity cost and revaluation of fixed assets on the value of farm resources used. Table M.2 reports the value of tobacco land, whereas Table M.1 reports the value of land for the whole farm.

Land has been valued at opportunity cost in all scenarios examined in this study. In practice, valuation of tobacco growing land will be influenced by longer-term marketing systems adopted by the industry (including contractual marketing entitlements negotiated by individual farmers) and the prices available for tobacco leaf.

The valuation of some of the fixed assets has been increased from that shown in Table M.1 because of the standardisation of asset lives between farms. For some other items, the values adopted have decreased for the same reason.

3 This method assumes a zero value for farm buildings other than the farmer's house. It therefore, if anything, overvalues land. An overvaluation of assets would lead to an understatement of the return to resources used reported below. That is, a conservative estimate of farm viability is reported.

M.4 The scenarios

The financial performance of the three model farms has been analysed under four scenarios. They are:

1. Current pricing;
2. Import parity pricing with a 10 per cent premium for local advantage;
3. Import parity pricing;
4. Export parity pricing.

In all scenarios land is valued at opportunity cost.

Current pricing: a benchmark scenario. This scenario reflects the current situation (ie average 1988–89 to 1992–93) based on sales of the existing crop at ATMAC scheduled prices. It allows for the comparison of other industry scenarios with the current situation.

Import parity pricing with a 10 per cent premium for local advantage. This scenario values the 1992–93 crop of each farm at import parity prices (average 1988–89 to 1992–93) plus a 10 per cent premium on those prices for local advantage. The concept of such a premium is discussed in Chapter 5. The 10 per cent advantage is based on evidence provided at the draft report hearings (Philip Morris, Transcript, p. 264)

Import parity pricing. This scenario values the 1992–93 crop of each farm at import parity prices (average 1988–89 to 1992–93). No local advantage is assumed.

Export parity pricing. The Commission has adopted $3.80 per kilogram as an indicative export parity price for Australian tobacco leaf (green leaf basis, Australian sales floor). This price is equal to the average import substitution price over the four-year period 1988–89 to 1992–93 of $4.26 per kilogram (Chapter 5) less an allowance for international freight and insurance costs of around 50 cents per kilogram. It assumes that domestic freight and processing costs in Australia would be at a par with those applying in export oriented tobacco producing countries. The export parity price adopted is:

- a longer-run price and does not reflect any discounting that may be necessary to gain entry into the world market for tobacco leaf;
- a price that reflects the average exchange rates that prevailed over the 1988–89 to 1992–93 period. An increase or decrease in the rate of exchange between the Australian and US currencies would affect the export parity price (for a discussion of the effects of exchange rates on industry assistance see Chapter 5);

- above the 'indicative export entry price' of $3.10 per kilogram (green leaf basis) suggested by the Tobacco 2000: Steering Committee (1993, p. 1). The indicative entry price is interpreted as a short-run price which may contain an element of market testing and discounting necessary to gain entry to world markets; and
- based on the run-of-crop prevailing under the current tobacco industry marketing arrangements. Adoption of an export oriented approach by the tobacco growing industry could lead to the marketing of higher priced grades of leaf. The marketing of such leaf may attract a higher price, in the longer run, for the Australian crop than indicated in this study.

M.5 Results

Table M.4 (over) is concerned with measures relating to general economic performance as reflected by net value added, and the productivity of capital and labour under the various scenarios. Measures directly related to farm financial performance are shown in Table M.5. It reports the average gross margin per hectare, farm cash operating surplus, return on resources used and rate of return on resources used. Definitions of the data concepts used are provided in Annex M.1.

The results are discussed below for each farm and an overall summary provided.

M.5.1 Small tobacco farm

This farm produces high value tobacco according to ATMAC's Grade and Minimum Price Schedule — the average unit values are the highest of the three farms considered. However, high unit costs of production result in lower returns than the other farms. The current marketing arrangements have supported positive returns on resources used. These returns become negative under each of the other scenarios based on import competition or export prices. Value added under current arrangements totals $8531 per hectare, falling to $4727 per hectare at import parity prices with an allowance for a premium for local sourcing (see Table M.4). Returns on resources used would decline from 6 per cent to a negative 3 per cent upon moving to the most favourable import parity price regime. Under the export parity pricing scenario, value added per hectare becomes a negative $360 per hectare — the lowest value added of all farm types and scenarios considered.

Table M.4 **Tobacco farm competitiveness and productivity by farm type, average for period 1988–89 to 1992–93**

		Farm type		
		Small	*Medium*	*Large*
Entitlement	(kg)	20 000	40 000	70 000
Average tobacco leaf price	cents/kg	680	620	631
			Current pricing	
Price disadvantage	(cents/kg)	174	181	169
	(%)	35	41	37
Net value added (nva) per hectare	($/ha)	8 531	11 796	10 938
Capital productivity	(nva/capital)	0.192	0.264	0.242
Labour productivity	(nva/persons)	24 789	44 542	44 878
			Import parity pricing with 10% premium	
Import parity price with premium	(cents/kg)	556	483	508
Net value added per hectare	($/ha)	4 727	6 456	6 771
Capital productivity	(nva/capital)	0.106	0.145	0.150
Labour productivity	(nva/persons)	14 006	24 813	28 251
			Import parity pricing	
Import parity price	(cents/kg)	506	439	462
Net value added per hectare	($/ha)	3 291	4 863	5 330
Capital productivity	(nva/capital)	0.074	0.109	0.118
Labour productivity	(nva/persons)	9 752	18 691	22 237
			Export parity pricing	
Export parity price	(cents/kg)	380	380	380
Net value added per hectare	($/ha)	-360	2 646	2 704
Capital productivity	(nva/capital)	-0.008	0.059	0.060
Labour productivity	(nva/persons)	-1 068	10 171	11 280

Source: Commission analysis.

The farm has significant investment in tractors/motor vehicles and barns and is heavily capitalised when compared to the other farms. The high capitalisation is reflected in the lower productivity of capital and lower rates of return on resources used than is the case for the other farms.

Table M.5 Indicators of farm performance, average 1988–89 to 1992–93

		Farm type		
		Small	*Medium*	*Large*
			Current pricing	
Gross margin per hectare	($/hectare)	8 871	12 064	9 698
Farm cash operating surplus	(cents/kg)	269	308	283
Return to resources used	(cents/kg)	86	177	188
Rate of return to resources used	(per cent)	6	15	13
			Import parity pricing with 10% premium	
Gross margin per hectare	($/hectare)	5 231	6 931	5 712
Farm cash operating surplus	(cents/kg)	145	172	159
Return to resources used	(cents/kg)	-39	39	63
Rate of return to resources used	(per cent)	-3	3	4
			Import parity pricing	
Gross margin per hectare	($/hectare)	3 796	5 339	4 271
Farm cash operating surplus	(cents/kg)	94	128	113
Return to resources used	(cents/kg)	-89	-4	18
Rate of return to resources used	(per cent)	-6	0	1
			Export parity pricing	
Gross margin per hectare	($/hectare)	144	3 122	1 645
Farm cash operating surplus	(cents/kg)	-31	68	31
Return to resources used	(cents/kg)	-215	-63	-64
Rate of return to resources used	(per cent)	-14	-5	-5

Source: Commission analysis.

Gross margin per hectare of tobacco growing land is positive under each scenario as is cash operating surplus (except at export parity prices). The positive values for these items indicate that this farm could carry-on at lower prices. However, the cost of new investment is unlikely to be met from the scenarios based on import parity pricing. A farm of this size specialising in tobacco growing, with the costs reported, is unlikely to be viable in the longer run even if it is able to maintain production of higher priced leaf grades.

M.5.2 Medium sized tobacco farm

The medium sized model tobacco farm, has the highest returns per kilogram of leaf sold and has received the most assistance under the current marketing arrangements. It has an average price disadvantage of 41 per cent which compares to 35 per cent and 37 per cent, respectively, for the small and large farms considered (see Table M.4).

Value added under the current arrangements is the highest of all farm types at $11 796 per hectare, however, this falls to $6456 per hectare at import parity prices with an allowance for local advantage (see Table M.4). Returns to funds employed have been substantial (around 15 per cent) under current marketing arrangements. These remain positive under import parity prices when a significant allowance is made for local advantage. However, if the allowance for local advantage was not available, returns could decline to around zero under prevailing cost conditions. If export parity prices prevailed, a large negative return to resources used would be expected (around -5 per cent).

The positive returns under the most favourable import parity price scenario indicates that a farm of this size has the potential to fund some new investment and refurbishment activity. Export activity would not support new investment under prevailing costs and expected prices.

The medium sized farm affords the highest cash operating surpluses of the farms considered. This is due to low average cash expenditures per unit of output relative to the other operations. The favourable cash operating surplus is not translated into higher returns due to the greater capital intensity of the operation, and hence depreciation costs, relative to the large farm.

The positive cash operating surpluses of this unit under all scenarios, combined with the positive returns on resources used under the more favourable import competing scenario, indicates that a holding of this size and cost structure has a substantial carry-on capacity.

M.5.3 Large tobacco farm

This farm appears to have the strongest longer-term prospects under the scenarios examined. It is advantaged by economies of scale as is evidenced by the increase in productivity of capital with farm size (see Table M.4). Despite its high net value added, the gross margin and cash operating surplus for the larger farm are consistently less than for the medium sized farm. This juxtaposition reflects the relatively higher cash payments (for hired labour) incurred by the large farm in comparison to the medium sized farm but lower depreciation charges per unit of output.

At import parity prices its current asset structure enables it to receive the highest returns to resources of all farm types. Rates of return are positive in each of the import competing scenarios considered although the economies of scale and the omission of the leaf quality premia it attracts under import substitution strategies do not support positive returns from export. The positive return to resources at import substitution prices indicates that new investment could be supported under an import parity price regime.

M.5.4 Overall findings

Overall, the results reported in Tables M.4 and M.5 indicate that:

- each of the farms studied has a carry-on capacity, if they remain specialised in the production of tobacco, and are able to retain full production while selling at import substitution (and possibly export) prices; and
- the larger farm puts in a better performance when capital costs are taken into account. The study illustrates that there could well be economies of scale in tobacco growing, and that consolidation of properties toward larger tobacco growing units is likely to improve productivity and financial performance.

The joint use of resources for tobacco and other farming activities to lower the resource commitment to tobacco growing would raise returns to resources used in tobacco growing. For example, Table M.6 shows the sensitivity of the rate of return on resources used to changes in the assets dedicated to tobacco growing. At import parity prices with a 10 per cent premium, average rates of return available to the large farm increase by around 1.5 percentage points, from 4.5 per cent to 5.9 per cent, if the value of resources used in tobacco growing is reduced by 25 per cent of the estimated value. Alternatively, if the valuation of resources used increased (for example, due to the revaluation of land without any changes in tobacco prices) by 25 per cent, returns to resources used declines by around 1 percentage point for the larger farm.

Table M.6: **Sensitivity analysis of rate of return to changes in value of farm assets, average 1988-89 to 1992-93** (per cent)

		Farm type	
	Small	*Medium*	*Large*
		Import parity pricing with 10% premium	
Value of farm assets plus 25%	-2.0	2.6	3.6
Estimated value of farm assets	-2.6	3.3	4.5
Value of farm assets less 25%	-3.4	4.4	5.9

Source: Commission analysis.

M.6 Conclusion

Growers who have been able to sustain production of the higher priced leaf grades over the last five years have achieved some high returns. When land is priced according to the value it is likely to attract in the next best use, the analysis also shows that positive returns, at lower, import parity prices, would be available to suitably sized and structured tobacco growing operations. Economies of scale are apparent in the farms analysed, indicating that higher returns to resources employed in tobacco growing can be obtained by larger farms.

As import parity prices become the benchmark for establishing farm revenue, there would be a strong incentive for tobacco farms to adjust their operations in favour of high priced, more internationally competitive grades of leaf and larger farms. For smaller farms not heavily in debt, there is a carry-on capacity based on positive cash operating surpluses.

Annex M.1

Definition of farm performance measures

In order to compare the economic performance of the model farms under the different scenarios, the following performance measures were used:

- *Net value added*: the difference between total revenue, and the cost of materials and services used in production and depreciation — that is, the net value added in the production process. (Depreciation is treated as a cost of production.) It represents the combined net contribution of land, labour and capital in the production process.
- *Capital productivity*: expressed as the ratio between output and the capital input as estimated by the written down value of fixed capital stocks and land. The more productive is capital, the smaller is the capital requirement to produce a unit of output.
- *Labour productivity*: expressed as the ratio of output to labour input (person years). The more productive is labour, the smaller is the labour requirement to produce a unit of output.
- *Farm cash operating surplu*s: the difference between total cash receipts and total cash costs. This measure gives an indication of farm cash flow and is frequently used to assess the carry-on capacity of farms growing individual crops.
- *Gross margin per hectare*: farm cash operating surplus plus fixed farm costs of production including depreciation, general rates and land taxes and interest per hectare of tobacco land. This measure is frequently used in analysis of the relative returns to land usage provided by alternative crops.
- *Return to resources*: farm cash operating surplus less depreciation and the imputed value of operator, partner or family labour plus land rent and interest paid. It represents the return produced by resources employed in the farm business to the entrepreneur (ie owner or supplier of land and finance where the property is not fully owned by the tobacco grower) of the farm after all operating costs are met. Because the measure includes interest payments, returns to the grower are influenced by the growers' equity in the tobacco farm.
- *Rate of return on resources used*: the ratio of return to resources used on the value of land and fixed capital, excluding the owner's residence. It is assumed that all capital assets are used for tobacco growing only. If a grower is able to diversify and use the assets for other activities, the grower's labour and capital costs attributable to tobacco growing are lowered, and returns from tobacco growing are raised.

The above measures reflect the productive potential of the resources land, labour and fixed capital employed in production. They provide an indication of the effects of changing tobacco industry marketing arrangements on the economic performance of different model farms. The results enable comparison across scenarios and with alternative agricultural activities.

APPENDIX N COMMONWEALTH EXCISE ON TOBACCO PRODUCTS

N.1 Introduction

Taxes on products can be levied according to the value of the product or according to some quantity measure.

A value basis is usually the preferred method because it provides for:

- uniform, or comparable, treatment between products; and
- uniform treatment of products within a product group.

These features of a value basis for taxation usually produce an outcome, in terms of consumption and production decisions, which is closer to a no tax situation than would occur for a quantity tax.

However, there are some circumstances in which a tax on quantity will produce an outcome similar to a value tax. For example, for a homogeneous product for which there are no close substitutes, and for which the relationship between quantity and value is fixed (such as petroleum), a tax based on volume or weight will have similar effects on consumption and production decisions as a value-based tax.

But for a heterogeneous group of products (such as cigarettes), quantity and value-based taxes will produce quite different outcomes. Whereas a value-based system is neutral with respect to the characteristics of the product, for a quantity-based system, consumer and producer decisions will vary according to the unit of quantity chosen. For example, if the number of units is the basis for the tax, there will be a bias in favour of more expensive units, and if weight is chosen as the tax basis, there will be a bias in favour of lighter units.

N.2 The current arrangements

The Commonwealth excise on tobacco products is currently levied according to the weight of the tobacco product. Under this system of excise, the market outcome in terms of consumption and production decisions can be expected to be biased in favour of light weight tobacco products. This expectation is confirmed by the evidence. All three domestic tobacco product manufacturers acknowledge that the weight-based excise system has influenced their production decisions in terms of their product ranges and technologies employed in the manufacturing process.

The weight-based excise system has provided an incentive for manufacturers to reduce the weight of cigarettes below the level it would otherwise have been. They have responded to this incentive by reducing the dimensions (length and diameter) of some of their products.

According to Wills (Sub. 31, p. 22), the weight of cigarettes has declined by over 10 per cent since 1983, coinciding with substantial increases in the weight-based excise. The company also commented:

> The weight-based system is *solely* responsible for Australia producing lighter weight cigarettes than anywhere else in the world. ...
>
> The net result of the weight-based system is that Australian cigarettes contain 25 to 30 per cent less tobacco than cigarettes in other countries. (Wills, Sub. 31, p. 20)

In order to reduce the weight of cigarettes, production processes and technologies used to manufacture cigarettes have changed. Technologies which 'expand' tobacco, so that the weight of a given volume of tobacco is reduced, have been developed and adapted, and weight measuring instruments have been installed. These developments have incurred costs. Wills advised the Commission that:

> Australian densities are the lowest in the world which, combined with the use of light weight cigarette paper, cork tipping and filters, make cigarettes difficult to manufacture. This has caused production inefficiencies that are masked by the excise gains.
>
> The technical difficulties in producing such cigarettes have resulted in local manufacturers being currently restricted to machines making cigarettes at about 5000 sticks per minute. This is obsolete equipment and has resulted in local manufacturers effectively missing out on a generation of technical improvements. ...
>
> Meantime making technology has now been moved to machines successfully producing international specifications at 16 000 sticks per minute. Trial of this equipment is currently not an option with Australian specifications. (Wills, Sub. 87, p. 2)

By influencing the range and size of cigarettes manufactured, and the production technologies employed, the weight-based excise system will have affected the type of tobacco used in the production process and the composition of imports. Clearly, the demand for tobacco amenable to 'expansion' will have been higher than otherwise would be the case, and since the weight-based excise has a bias in favour of tobacco used in the more expensive tobacco products, the demand for such tobacco will also have been higher than otherwise. The Commission notes that the most expensive tobacco used by domestic manufacturers is imported, primarily from the United States.

N.3 A sticks-based excise system

All three tobacco product manufacturers expressed views on a comment the Commission made in the draft report to the effect that it favoured an *ad valorem* basis, in preference to the existing weight basis, for the Commonwealth excise on tobacco products.

Wills strongly advocated a change from the present weight basis to a sticks basis, whereas Philip Morris and Rothmans preferred there to be no change. All three manufacturers opposed a change to an excise system based on the value of tobacco products.

A sticks-based excise system would levy a tax according to the number of cigarette products sold. A flat rate would apply to each ‘stick’, whether that be a large cigar or light weight cigarette. As with the current weight-based system, the amount of tax would be independent of the value of the product.

As outlined above, such a system would bias production and consumption decisions in favour of longer, fatter, and more expensive tobacco products than would be the case for both value-based and weight-based excise systems. In that event, production technologies, inputs, and product ranges would change in order to take advantage of that bias. In this respect, a move from the current system to a sticks-based system would simply represent a move from one set of distortions to another. There is no evidence that it would produce more efficient production or consumption outcomes.

N.4 Administration and revenue

Administration and collection

In principle, under all three alternative systems, an objective measurement of the excise base can be made: procedures exist to determine the excisable weight under the current system; information already obtained for the weight-based system includes the number of cigarettes and other tobacco products sold; and as all commerce is conducted on a value basis, several options are available to access value data which are already assembled for other purposes.

In practice, Wills described an extensive array of administrative procedures involved in ensuring excise is fully paid under the weight-based system:

> Cigarette manufacturers are required to determine the average weight of cigarettes by weighing samples taken from the production line in accordance with a Customs approved sampling procedure, multiply that weight by the number produced, adjust that measurement for moisture content, establish proper test procedures for moisture

> determination, and agree with Customs and other manufacturers the nature of that test procedure. (Sub. 31, p. 20)

For a sticks-based excise system it may be necessary to specify limits on the dimensions of tobacco products (perhaps with different limits for cigars and cigarettes) to prevent abuse of the system. Philip Morris (Sub. 57, pp. 17–18) suggested that: '... a tobacco rod longer than 90mm [millimetres] may be considered as two cigarettes for excise purposes; cigarettes heavier than, say, 1100 mg [milligrams] should be subject to a surcharge based on the excess weight'. In that case, administrative costs could become high if it is necessary to police regulations on length and weight of each cigarette on an ongoing basis.

Under a value-based excise system the alternative bases for valuation include the ex-factory price, the wholesale price, and the retail price. The Australian Customs Service drew attention to the vertical integration of tobacco product manufacturers into the distribution chain and advised that:

> An excise valuation provision should ... seek a transaction basis to establish the value rather than rely on 'constructions' which could be significantly manipulated. (Sub. 78, p. 2)

The Commission notes that the States and Territories (whose revenue from licence fees and taxes on the sale of tobacco products now exceeds Commonwealth revenue from excise duties) have *ad valorem* taxes on tobacco products and appear to be satisfied with the use of wholesale prices.

Commonwealth revenue and retail prices

In arguing the case against a value-based system, the tobacco product manufacturers claimed that the Commonwealth would raise less revenue under an *ad valorem* system than under the alternatives, and that there would be greater uncertainty as to the amount of revenue collected under an *ad valorem* system. Each of these claims can be shown to refer to the effects on Commonwealth revenue of changes in the wholesale price, rather than to a stable price situation.

In a static situation, an identical amount of revenue can be collected under any of the systems simply by adjusting the rate of tax. However, in a dynamic situation, a variety of factors will affect the amount of Commonwealth excise collected.

Under the present weight-based system, the real value of Commonwealth revenue from tobacco products excise has been eroded by the trend towards lighter cigarettes (encouraged by the system) and by inflation. Under a sticks-based system, revenue may similarly be eroded by a move towards larger cigarettes (the inflation problem has been addressed by the Commonwealth by indexing the excise to movements in the Consumer Price Index (CPI)).

Tobacco product manufacturers argued that under an *ad valorem* system their pricing decisions would affect Commonwealth excise revenue. Under the present weight-based system (and under a sticks-based system) their pricing decisions have no direct influence on the amount of excise collected. A one dollar increase in wholesale price is translated directly into a one dollar increase in retail price with no change in the amount of excise. Under an *ad valorem* system, (assuming a rate of excise similar to State taxes on cigarette products — that is, 100 per cent) a one dollar price increase at the wholesale level translates into a two dollar retail price increase, the extra dollar accruing to the Commonwealth in the form of excise.

It was the converse of the above example which the manufacturers used to argue their case. It was claimed that reductions in the wholesale price, whether achieved through input cost reductions or fierce price competition, would generate unacceptable outcomes in terms of the level and stability of Commonwealth revenue. From the above example, each one dollar reduction in wholesale price would reduce Commonwealth revenue by one dollar. Alternatively, half of each two dollar reduction in price at the retail level would by financed by a reduction in excise. As Price Waterhouse argued:

> If the proportion of the *ad valorem* tax to the final retail price is 50 per cent or greater, a reduction in the wholesale price through a reduction in the product markup for example, would largely be paid for by the reduction in the *ad valorem* tax component. Manufacturers/suppliers would have a direct incentive to reduce prices knowing that the multiplier effect of the *ad valorem* tax effectively ensured that the public purse paid for part of the price reduction offered. (1994, p. 4 attached to Sub. 64)

An important consideration in evaluating the merits of the above argument is the reason the Commonwealth levies such high excise duties on tobacco products. If it is to generate a certain amount of revenue, experience shows that excise rates can be adjusted to achieve that end. The indexing to the CPI of the weight-based excise provides an example. Alternatively, if the reason for a high excise on tobacco products is to discourage consumption through a high retail price, any price war financed by reducing wholesale margins is likely to be self-defeating if the Commonwealth retaliates with an increase in the excise rate. In this case, an *ad valorem* excise system could provide a very stable and predictable amount of revenue through stable prices. There would be a strong disincentive to use the system to finance reductions in retail prices, and because of the multiplier effect of the excise on the retail price, there would be a strong disincentive to raise the wholesale price.

N.5 Effects of a change to a value-based excise

N.5.1 Effects on growers

Growers are affected by the quantity and the quality of tobacco leaf demanded by the manufacturers under the alternative excise systems. Under the weight-based system, demand for tobacco leaf declined when manufacturers reduced the density and size of their products.

Wills argued that considerable resources have been devoted to reducing excise liability through weight reductions and as a result, the income of growers has declined. Wills said:

> As cigarette densities have decreased over the years in Australia, the reduction in demand for leaf has adversely affected growers.
>
> The industry in 1992 used some 20 per cent less tobacco than in 1975. At current prices of $6.13 per kilo, this decline represents lost income to tobacco growers of $17.4 million. Total cigarettes sold on the Australian market have actually increased from 25.8 billion in 1975 to 33.2 billion in 1992. (Sub. 31, p. 20)

Wills (Transcript, pp. 624–5), Philip Morris (Sub. 57, p. 14) and Rothmans (Sub. 64, p. i) claimed that an *ad valorem* system would discriminate against the Australian tobacco grower because an *ad valorem* system would force all manufacturers to reduce costs. Philip Morris also argued that a move to *ad valorem* taxation would mean that growers would suffer:

> ... as manufacturers seek to cut leaf usage and leaf costs to leverage the tax. Leaf purchasing decisions become increasingly focussed on cost and therefore lower priced and quality overseas leaf becomes increasingly attractive to manufacturers. ... Consumers also become victims as the drive to produce a range of quality products becomes subsumed by the drive to cut costs and reduce overheads. (Sub. 57, p. 14)

The Commission is not convinced by these arguments.

Whatever excise system is in place, manufacturers could be expected to minimise the costs of production and to make price-quality trade-offs. Under any excise system there will be a demand for a wide variety of qualities at a variety of prices. Under an *ad valorem* system cheaper cigarettes would not be penalised as much as they are under the weight-based system, and this may result in an increased demand for a different mix of tobacco leaf qualities. However, the product range would continue to reflect the preference of consumers given the price-quality choices they face.

N.5.2 Effects on tobacco product manufacturers

Tobacco product manufacturers' strong objections to a change to a value-based excise system is a reflection of the extent to which the current weight basis for excise has influenced their production and marketing decisions.

Equipment used to manufacture tobacco products in Australia has been installed and adapted to take maximum advantage of the weight-based excise system. Rothmans said:

> The domestic manufacturers have adapted their production and related processes to the weight specific method of excise determination. (Sub. 64, p. 14)

As mentioned earlier, Wills claims that this has led to production inefficiencies relative to tobacco product manufacturing in other countries.

A change to a value-based excise system may make some existing equipment obsolete and could involve changes to production processes. In the long run, the adoption of different technologies could make tobacco product manufacture in Australia more efficient. In the short run, the cost of any changes on the production side would most likely be small relative to the cost of repositioning brands in the market in response to changed price relativities.

For the tobacco products which are currently marketed in Australia, a change from weight to an *ad valorem* basis for excise would change the relative prices of the different products. There would be a wider range of prices with existing low priced products becoming cheaper, and high priced products becoming more expensive. This would impact differentially on the three manufacturers.

At present, each of the three manufacturers has a range of products which sell in different segments of the market at a variety of prices. There is a wide variation of ranges of products between manufacturers in terms of the market segments they have targeted. As Price Waterhouse said:

> ... not all manufacturers have adopted the same weights for their directly competing brands of cigarettes. It is this difference in the weight content of individual competing brands and the conditions of strong competition (but not perfect competition) that create an environment where the process of movement from a weight specific excise system to an *ad valorem* system will significantly penalise some manufacturers and directly benefit others. (1994, p. 5 attached to Rothmans, Sub. 64)

Public submissions received by the Commission indicated that an immediate change to an *ad valorem* system would disadvantage Rothmans (Sub. 79, pp. 2–3) relative to the other manufacturers. Rothmans supplies a greater proportion of the higher value end of the market and has invested more heavily in weight reducing manufacturing technology. Wills (Transcript, pp. 622–623) said that it would be marginally favoured by change relative to the other manufacturers.

N.6 Summary

The weight-based excise system has distorted the production decisions of domestic tobacco product manufacturers in terms of their product ranges and technologies employed in their manufacturing processes. It has provided an incentive for them to reduce the weight of cigarettes below the level it would otherwise have been. As a consequence, the weight-based system will have affected the type of tobacco used in the production process and the composition of imports.

An excise system based on the number of tobacco products (a sticks-based system) would provide an incentive to produce larger cigarettes. A change from weight to number as the basis for excise would thus represent a change from one set of distortions to another.

An *ad valorem* excise system is neutral with respect to the characteristics of the tobacco product and would produce an outcome, in terms of production and consumption decisions, closer to a no tax situation than would either of the other alternatives canvassed. An *ad valorem* system should present no administrative difficulties.

Although there is a strong case to change the basis for levying excise, an immediate move from weight to value would be disruptive and would impact differentially on the three domestic tobacco product manufacturers. For this reason, it may be advisable to give advance notice of such a change so that manufacturers would have the opportunity to reposition their ranges of products in the market.

APPENDIX O STUDIES OF THE DEMAND FOR TOBACCO PRODUCTS

O.1 Introduction

A number of factors affect the demand for tobacco products. These include prices, incomes, socio-economic factors, advertising, bans on smoking, health information, levels of addiction/dependence, and education.

This appendix provides an overview of some of the econometric studies from Australia and overseas on the demand for tobacco products. These studies have focussed primarily on estimating a demand function for cigarettes. Relevant to this inquiry, and the focus of the following discussion, are the effects that prices, incomes, information and regulations have had on the demand for cigarettes.

There are difficulties assessing the relative importance of the various factors which affect demand. It is often hard to separate the impacts of factors from each other, particularly when the importance of factors changes over time.

For this reason, the results of the econometric studies are varied, even when a study is repeated for a different time period. This may be because of increased education and awareness of health issues. Moreover, the econometric techniques differ between studies, and cultural and social attitudes are not similar in the different countries studied.

While there are differences, it is still possible to group results and give an indication of the range of probable values for most factors.

O.2 Price

As discussed in Chapter 6, taxes will discourage smoking to the extent that tax increases are passed on to consumers in the form of higher retail prices. Therefore, the impact of taxation changes on demand depends on the responsiveness of tobacco consumers to changes in price. This price sensitivity or price ‘elasticity’ is influenced by a number of factors. These include age, gender and income/socio-economic status.

Results for elasticities depend significantly on what other explanatory variables are included in the estimating equation and it is possible that a number of these studies have not been specified correctly. For example, Alchin (Sub. 1) suggests that some of the studies presented in his submission (which have been cited in this appendix) showed signs of omitted variable bias, multicollinearity and a general lack of information. In almost all cases it is also not clear how much of the decline in consumption following a price increase is attributable to a decline in the number of cigarettes (or quantity of tobacco) consumed per smoker, and how much to a decline in the number of smokers.

O.2.1 General result

Australian studies have found that tobacco consumers are generally unresponsive to price changes over a considerable price range. They report price elasticities ranging from -0.1 (Johnson 1986) to -0.59 (McLeod 1986) (see Table O.1).

In a recent study by Bewley in 1993 (commissioned by Philip Morris) the long-run price elasticity estimate given was -0.345 (Philip Morris, Sub. 39, p. 30). This means that for a 1 per cent rise in the price of cigarettes relative to prices of other goods and services there would be a 0.345 per cent fall in cigarette consumption in the long run.

There is evidence to suggest that the price elasticity of demand for tobacco products has changed over time. Johnson recorded a price elasticity of -0.1 in 1961–62, and in 1982–83, using the same method, he recorded an elasticity of -0.22.

Table O.1: **Estimated price elasticities of demand: Australia**

Author	*Price Elasticity*
Koutsoyannis (1963)	-0.36
Clements, McLeod and Selvanathan (1985)	-0.2 to -0.3 [a]
Johnson (1986)	-0.1 (1961–62); -0.22 (1982–83)
McLeod (1986)	-0.47 to -0.59 [b]
Bewley (1991)	-0.34 (1984–85) to -0.43 (1988–89) [c]
Alchin (1992a)	-0.47
Bewley (1993)	-0.345

a Reasons for range not identified in source
b Range due to different forms of the estimating equation
c Range identified for social groups
Sources: Viscusi 1992, Alchin (Sub. 1), Philip Morris (Sub. 38).

A number of studies of the demand for tobacco products have been undertaken in the United States (US) (see Table O.2 over). The majority of estimates of the price elasticity of demand fall within the range from -0.25 (Schoenberg 1933) to -0.81 (Ippolito *et al.* 1979). There are, however, estimates outside of this range, and two of the important factors are whether the focus is on the short run or the long run and the age group of the population. Three recent studies in 1991 suggest that a 1 per cent increase in price would reduce cigarette consumption by about 0.3 per cent (Chaloupka, Wasserman *et al.* and Keller *et al.*).

Lewit and Coate (1982) analyse the effect of a price increase on the quantity of cigarettes smoked and the number of smokers (the participation rate). Their results suggest that a doubling of the federal excise, resulting in a 11.5 per cent increase in the retail price of cigarettes, would result in a fall in cigarette consumption of 4.8 per cent. They report that an increase in the price of cigarettes would reduce cigarette consumption primarily through reductions in the smoking participation rate, while having a much smaller impact on the quantity of cigarettes smoked per smoker.

If the studies from recent years are compared, Australian and New Zealand estimates are not dissimilar (see Table O.3). The New Zealand elasticity estimates also fall within a relatively narrow range from -0.13 (Evans and Meads 1991) to -0.46 (Salter 1984).

In the United Kingdom (UK) the majority of estimates lie in the range from -0.17 (Witt and Pass 1983) to -0.66 (Russell 1973) (see Table O.3), although some which are outside this range are significantly different. The most recent estimate recorded was -0.37 (Jones 1989). On the basis of their elasticity estimate of -0.32 in 1981, Witt and Pass estimated that price would need to increase between 100 and 200 per cent in real terms in 1981 for cigarette consumption to decline significantly.

In contrast to most other studies, the results from McGuinness and Cowling in 1975 suggested that the demand for cigarettes in the UK was price elastic. Their models produced elasticity estimates of around -0.9 in the short run and unity in the long run.

Table O.2: **Estimated price elasticities of demand: US**

Author	*Price Elasticity*
Schoenberg (1933)	-0.68; -0.25 [a]
Maier (1955)	-0.31 to -1.48 [a]
Sackrin (1962)	-0.4 to -0.6 [a]
Koutsoyannis (1963)	-0.94
Lyon and Simon (1968)	-0.51
Vernon, Rives and Naylor (1969)	-0.43
Houthakker and Taylor (1970)	-0.46 (short run); -1.89 (long run)
Laughhun and Lyon (1970)	-0.81
Hamilton (1972)	-0.51
Schmalensee (1972)	-0.32 (short run); -1.09 (long run)
Schnabel (1972)	-0.85 (short run)
Warner (1977)	-0.51
Ippolito, Murphy and Sant (1979)	-0.81
Fujii (1980)	-0.48 to -0.63 (short run); -0.71 to -0.93 (long run)[c]
Schneider, Klein and Murphy (1981)	-1.22 (cigarettes); -0.95 (tobacco)
Warner (1981)	-0.37 (short run)
Lewit, Coate and Grossman (1981)	-1.44 (teenage population)
Lewit and Coate (1982)	-0.03 to -1.40 [b]
Young (1983)	-0.33 (short run)
Grossman, Coate and Lewit (1983)	-0.76 (teenage population)
Sumner and Alston (1984)	-0.29
Bishop and Yoo (1985)	-0.4 to -0.64 [c]
Sullivan (1985)	-0.66
Baltagi and Levin (1986)	-0.22 (short run)
Porter (1986)	-0.05 to -0.29 [a]
Baltagi and Goel (1987)	-0.11 to -0.92 [d]
Kao and Tremblay (1988)	-0.5 to -1.02 [d]
Becker, Murphy and Grossman (1988)	-0.5 (short run); -0.75 (long run)
Russo (1989)	-0.57
Chaloupka (1991)	-0.37 to -0.27
Wasserman, Manning, Newhouse and Winkler (1991)	-0.28 (1988) to 0.06 (1976) [a]
Keller, Hu and Barnett (1991)	-0.35 (pretax); -0.65 (post-tax)
Sweanor (1992)	-1.0 (12–17 year olds)

a Reasons for range not identified in source
b Identifies age ranges
c Range due to different estimation techniques
d Range due to different forms of the estimating equation
Sources: Viscusi 1992, Alchin (Sub. 1).

Table O.3: **Estimated price elasticities of demand: UK, New Zealand and Organisation for Economic Co-Operation and Development (OECD)**

Author	*Price Elasticity*
UK	
Stone (1954)	-0.48
Sumner (1971)	-0.13 to -0.83 [a]
Russell (1973)	-0.50 to -0.66 (male consumption) [a]
Atkinson and Skegg (1973)	0.0 to -0.41 (male consumption) -0.17 to 0.48 (female consumption)
Atkinson and Skegg (1974)	-0.01 to -0.62 (male consumption) [a]
Peto (1974)	-0.37 to -0.64 (male consumption) [a]
McGuinness and Cowling (1975)	-0.99 (short run) -1.05 (long run)
Witt and Pass (1981)	-0.32
Witt and Pass (1983)	-0.17 to -0.35 [b]
Townsend (1983)	-0.05 to -1.25 [c]
Radfar (1985)	-0.23
Townsend (1987)	-0.23 to -1.26 [c]
Jones (1989)	-0.37
New Zealand	
Salter (1984)	-0.46
Harrison and Chetwynd (1990)	-0.3
Evans and Meads (1991)	-0.13
OECD	
Laugesen and Meads (1991)	-0.19

a Reasons for range not identified in source (other than those stated)
b Range due to different forms of the estimating equation
c Range identifies different socio-economic groups
Sources: Viscusi 1992, Alchin (Sub. 1).

O.2.2 Age

The evidence from the US suggests that teenagers are more sensitive to price changes than adults. This may be because they are less able to afford cigarettes and face regulations precluding their access to them.

Lewit, Coate and Grossman (1981) found that price elasticities for teenagers were large. They report a price elasticity of the quantity smoked of -1.4 and a smoking participation price elasticity of -1.2. They explain the large price elasticities for adolescents by the fact that they may incorporate income and substitution effects. As no accurate measure of their income is used, the estimated price effect shows more than a pure (utility-constant) price effect. However, they report that the price elasticity of the number of cigarettes smoked by teenagers is relatively small (ranging from -0.01 to -0.45).

Viscusi (1992) reports that a recent study by Sweanor in 1992 found that adolescents (aged 12 to 17 years) would reduce their cigarette consumption proportionately to any increase in cigarette price.

In summary, there is some evidence from these studies to suggest that price has a greater effect on the teenage population than on older people, by influencing the decision to smoke. According to Lewit *et al.*, increasing excise taxes is an effective policy to reduce teenage smoking and aggregate smoking levels in the future:

> ... it is quite possible that the cohort of young smokers who never began to smoke as a result of the tax increase would never become regular smokers. As a consequence, over a period of several decades, aggregate smoking and its associated detrimental health effects would decline substantially. (1981, p. 568)

Lewit and Coate also remark:

> ... an excise tax increase, if maintained in real terms, might continue to discourage smoking participation by successive generations of teenagers and young adults and gradually impact the smoking levels of older age groups as the smoking-discouraged cohorts move through the age spectrum. (1982, p. 143)

O.2.3 Gender

Some econometric studies have observed that the response of individuals to price changes is influenced by their gender, though the evidence is mixed.

In the UK, Atkinson and Skegg (1973) have found that women are more responsive than men to cigarette price changes. However, the evidence from the US provided by Lewit and Coate in 1982 suggests that men are more sensitive than women to price changes. For 20 to 25 year olds, they report a price elasticity for the quantity smoked of -1.4 for males and -0.3 for females.

O.2.4 Income/socio-economic factors

Generally, lower income earners are more sensitive to price changes than higher income earners. According to the evidence, tobacco consumers on low incomes are no exception.

A study in the UK by Townsend (1987) analysed the response of different social groups (identified by profession) to changes in the price of tobacco products. The results suggested that smokers in lower paid work were more sensitive to price changes than those in higher paid work. The price elasticity for professional men was -0.15, while unskilled working men had a price elasticity of -1.26.

Alchin (Sub. 1, p. 10) reports that these findings are similar to those reported for New Zealand by Evans and Meads (1991) and the OECD study by Laugesen and Meads (1991).

O.3 Income

The consumption of tobacco products in Australia generally rises with income, but at a less than proportional rate to the change in income. The income elasticities range from 0.1 (Alchin 1992a) to 0.86 (McLeod 1986) (see Table O.4). According to Alchin's recent estimate, a 1 per cent increase in income would only induce a 0.1 per cent increase in tobacco consumption.

Although several studies have found that income is a statistically significant determinant of demand, if the demand for tobacco weight is estimated rather than the demand for cigarettes, income elasticity estimates have been insignificant (Clements *et al.* 1985 and McLeod 1986).

Table O.4: **Estimated income elasticities of demand: Australia**

Author	*Income Elasticity*
Johnson (1986)	0.71
McLeod (1986)	0.55 to 0.85 [a]
Bewley (1991)	0.25 (1984–85); 0.23 (1988–89)
Alchin (1992a)	0.10

a Range due to different forms of the estimating equation
Source: Alchin (Sub. 1).

According to Bewley (1991), 'managers and administrators' and 'professionals' have a lower probability of purchasing cigarettes compared to the 'not employed' and 'labourers and related workers'.

Most estimates of the income elasticity of demand in the US fall in the range from 0.05 (in 1976) (Wasserman *et al.* 1991) to 0.82 (Hamilton 1972) (see Table O.5). However, some estimates for recent years show negative elasticities (Baltagi and Levin 1986; Porter 1986 and Wasserman *et al.* 1991) — that is, as an individual's income increases they purchase fewer cigarettes. This change in income elasticities may suggest that tobacco is losing its status as a normal good and increasingly acquiring the status of an 'inferior' good.

Table O.5: **Estimated income elasticities of demand: US**

Author	*Income Elasticity*
Gottsegen (1940)	0.81
Tennant (1950)	0.46
Maier (1955)	0.29 to 0.60 [a]
Sackrin (1962)	0.50
Koutsoyannis (1963)	0.34
Vernon, Rives and Naylor (1969)	0.77
Laughhun and Lyon (1971)	0.42
Hamilton (1972)	0.73 (1954) to 0.82 (1965) [b]
Schmalensee (1972)	0.32 (short run); 1.11 (long run)
Schnabel (1972)	0.35 (short run)
Ippolito, Murphy and Sant (1979)	0.74
Fujii (1980)	0.22 to 0.34 (short run); 0.33 to 0.50 (long run)[b]
Schneider (1980)	0.4 to 1.4 [a]
Schneider, Klein and Murphy (1981)	0.46
Lewit and Coate (1982)	0.08
Young (1983)	0.27 (short run)
Sumner and Alston (1984)	0.11
Bishop and Yoo (1985)	0.86 to 1.1 [b]
Baltagi and Levin (1986)	0.00
Porter (1986)	-0.1 to -0.17 [a]
Kao and Tremblay (1988)	0.74 to 1.48 [b]
Russo (1989)	0.07
Wasserman, Manning, Newhouse and Winkler (1991)	-0.04 (1988) to 0.05 (1976) [a]

a Reasons for range not identified in source
b Range due to different forms of the estimating equation
Sources: Viscusi 1992, Alchin (Sub. 1).

In general, the estimates for the UK (see Table O.6) range from 0.0 (Russell 1973) to 0.65 (Sumner 1971).

Table O.6: **Estimated income elasticities of demand: UK**

Author	*Income Elasticity*
Stone (1954)	-0.13
Sumner (1971)	0.27 to 0.65 [a]
Atkinson and Skegg (1973)	0.17 to 1.34 [a]
Russell (1973)	0.0
Atkinson and Skegg (1974)	0.09 to 0.36 [a]
Peto (1974)	0.14 to 0.49 [a]
McGuinness and Cowling (1975)	0.31 (short run); 0.33 (long run)
Witt and Pass (1981)	0.13
Witt and Pass (1983)	0.13 to 0.32 [b]
Townsend (1983)	0.34 to 0.39 [a]

a Reasons for range not identified in source
b Range due to different forms of the estimating equation
Sources: Viscusi 1992, Alchin (Sub. 1).

O.4 Habit/addiction[1]

Few studies have incorporated the influence of habit/addiction in their models. Most studies assume a linear demand curve. However, given the addictive nature of tobacco consumption, Scitovsky (according to Young 1983) suggests that this may not be appropriate. It is likely that addicts will respond more to a price fall than to a price rise. Young (1983) supports this conclusion. He reported that a 1 per cent increase in the price of cigarettes would reduce cigarette consumption by 0.33 per cent, while a 1 per cent price fall would increase consumption by 0.49 per cent.

In Australia, Alchin (1992a) attempted to capture the influence of habit by including per capita consumption in the previous period as an explanatory variable. He concluded that habit had a positive and statistically significant effect on consumption. Alchin (Sub. 1, pp. 18–19) reports that this result is consistent with studies conducted in the US by Sackrin (1962), Houthakker and Taylor (1970) and Doron (1979).

1 According to Alchin (Sub. 1, p. 18), with regard to tobacco consumption ‘habit’ and ‘addiction’ refer to the same behavioural action.

O.5 Information

The provision of information may either promote or discourage tobacco use. Smokers and non-smokers alike may be influenced by cigarette advertising and/or anti-smoking information, such as health information and education programs.

O.5.1 Advertising

The econometric evidence suggests that cigarette advertising has not had a significant effect on the demand for cigarettes in Australia. Johnson (1986) found no statistically significant evidence that advertising expenditure had a positive effect on demand and concluded that the only effect of advertising was on brand sales (this finding is also supported in Johnson 1988). Johnson re-estimated a previous model used by Clements *et al.* in 1985, but used cigarettes produced in Australia as the dependent variable to proxy cigarette consumption.[2]

Alchin (1992a) also found that both total advertising expenditure and electronic and print media advertising had positive, but statistically insignificant, effects on the demand for cigarettes.

Despite these results, there is evidence to suggest that cigarette advertising has influenced teenage smoking in Australia. Armstrong *et al.* (1990) report that studies by Fisher and Magnus in 1981 and Chapman and Fitzgerald in 1983 have found that children usually smoke those brands which are subjected to the greatest degree of advertising. They also report that in Western Australia, the results of the 1987 National Secondary Schools survey showed that the most heavily advertised brand at the time (Peter Jackson) was the one which tended to be favoured by those starting to smoke.

Several studies conducted in the US have found that advertising has had little effect on the demand for tobacco products. Hamilton (1972, 1977), Schneider, Klein and Murphy (1981), Bishop and Yoo (1985), and Baltagi and Levin (1986) have found that advertising does not have a statistically significant effect on the demand for cigarettes. Schneider *et al.* (1981) suggested that the only effect of advertising was on brand sales.

However, according to Alchin (Sub. 1, p. 12), Schnabel, in 1972 reported a statistically significant impact of advertising expenditure on cigarette demand.

2 He considered the number of cigarettes consumed was a better measure of smoking levels (the weight of tobacco consumed in Australia has increased by 48.3 per cent over the 1958–59 to 1982–83 period, while total cigarette consumption has increased by 121 per cent, a significant part of the increase would be due to population increases).

A recent report by the United States Surgeon General into adolescent smoking has also found that cigarette advertising has appeared to increase adolescents' propensity to smoke.

Econometric studies conducted in the UK have also suggested that advertising has had a significant effect on tobacco consumption. Accounting for the lagged effect of advertising, McGuinness and Cowling (1975) found that advertising had a significant effect on tobacco consumption, despite health publicity. Atkinson and Skegg (1973) also found that advertising had a significant impact on consumption. According to Alchin (Sub. 1, p. 13) however, these studies were criticised by Schneider (1980) and Johnston (1980), while the Metra Consulting Group (1979) using more recent data than McGuinness and Cowling found that advertising did not significantly affect consumption.

Witt and Pass (1981) estimated that for a 1 per cent increase in expenditure on press and television advertising, cigarette consumption would increase by 0.07 per cent. However, they found that because manufacturers did not increase advertising expenditure in real terms to counter the effects of publicised health warnings, cigarette consumption actually declined.[3]

For New Zealand, Alchin (Sub. 1, pp. 14–15) reports that Evans and Meads (1991) and Chetwynd *et al.* (1988) both show that a 1 per cent increase in expenditure on cigarette advertising would increase cigarette consumption by 0.07 per cent, while Harrison and Chetwynd (1990) also support the view that advertising has a positive impact on cigarette consumption.

The mixed results in this area may be due to the problems of measuring advertising. Alchin (Sub. 1, p. 12 and p. 24) reports that Chetwynd *et al.* (1988) and Godfrey (1986b) have suggested that different time periods, definitions of advertising, data sets and validity of models could explain the discrepancy in the results.

O.5.2 Health information

Although no information on the impact of health information is available for Australia, the evidence from the US and UK indicates that health information has some influence — generally in the short to medium term. It may also have a continuing influence by discouraging some people from starting to smoke. However, this latter effect has not been measured by econometric studies.

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3 This study suggested that advertising expenditure would have needed to increase twofold in 1962, 1963, 1971 and 1972 and threefold in 1964 and 1965 to offset the effects of health warnings in these years.

In the US, health warnings by the Surgeon General have been broadcast (under the provisions of the so-called 'Fairness Doctrine') to counter the effects of cigarette advertising. Hamilton (1972) found that the 1964 Surgeon General's Report caused a significant fall in tobacco consumption. Hamilton estimated the initial fall in consumption to be 9 per cent.[4] Bishop and Yoo (1985), however, found no significant impact of health information on consumption.

Lewit *et al.* (1981) found that the Fairness Doctrine had some impact on the quantity smoked by teenagers in the US, but that the decline in the smoking participation rate diminished at a lesser rate after the first year of broadcasting of anti-smoking messages.

In the UK, Witt and Pass (1981) studied the effects of three major health warnings: the First Report by the Royal College of Physicians (1962), the United States Surgeon General's Report 1964 and the Second Report by the Royal College of Physicians (1971). They reported that: the 1962 health warning resulted in a 4 per cent fall in cigarette consumption during that year and in the following year; the 1964 warning resulted in falls of 7 per cent in 1964 and 1965; and the 1971 warning resulted in a 3 per cent decline in consumption in that year and the following year.

Sumner (1971) found that the 1962 report led to only a 4 per cent decline in consumption after 5 years and Atkinson and Skegg (1973) found that the report only had a significant impact in the year of broadcasting. McGuinness and Cowling (1975) reported that the 1962 health warning helped to offset the impact of pro-cigarette advertising on tobacco consumption.

O.5.3 Education programs

The impact of health education in schools in Australia has been investigated by Chapman (1981). Chapman used data from a sample of Sydney school children who were exposed to an educational program. He found that the advertising awareness program had no significant effect in reducing smoking among school children. He does not say, however, whether this education stops teenagers from starting to smoke. He recommends that the program be implemented in schools, which could suggest he believes it has this latter influence.

Also in 1981, Armstrong *et al.* studied the effect of a trial school-based education program on year seven students, with a follow-up survey in 1982. The program was designed to increase the students' knowledge of the effects of smoking and to teach them to resist the temptations to smoke.

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[4] Fujii (1980) revised the reduction in consumption to be 3–4 per cent.

Two versions of the program were trialed. The study found that the teacher-led program was effective in discouraging male and female students from starting to smoke. However, the peer-led program was ineffective in discouraging males from starting to smoke and less effective than the teacher-led program in discouraging females.

O.6 Regulation

Regulations aim to reduce the level of smoking in the community and the exposure of non-smokers and young persons to smoking. The evidence suggests that both advertising bans and regulations prohibiting smoking in certain locations have been an effective means of achieving these objectives.

O.6.1 Advertising bans

The first econometric model used to analyse the effect of advertising bans on tobacco demand in Australia was conducted by Clements *et al.* (1985). Using annual data from 1953–54 to 1981–82 to estimate the per adult demand for tobacco (specified by tobacco weight), they found that the radio and television bans on advertising had a significant effect on tobacco consumption — reducing consumption by 2–3 per cent per annum.

Extending the work of Clements *et al.* (1985), McLeod (1986) found the effect of the advertising ban was an immediate reduction in cigarette consumption of up to 6 per cent (measured in sticks and by weight).

Johnson (1986), however, reported that the advertising ban did not have a significant effect after re-estimating the Clements *et al.* (1985) study using cigarettes produced in Australia instead of tobacco weight as the dependent variable — perhaps because a weight based excise system resulted in a decline in the amount of tobacco used but an increase in the number of cigarettes produced.

The evidence from other countries is also mixed. Some studies from the US have suggested that banning advertising has had little effect on cigarette consumption (Schneider *et al.* 1981 and Bishop and Yoo 1985), while in the UK, Atkinson and Skegg (1973) suggest that bans on radio advertising have had an impact in reducing tobacco consumption.

O.6.2 Bans on smoking in certain locations

The bans on smoking imposed in certain locations aim to protect non-smokers from environmental tobacco smoke (see Chapter B2). Nevertheless, they could have an impact on smoking levels in Australia.

In 1990, Borland *et al.* conducted a study of the introduction of the workplace smoking ban in the Australian Public Service (APS). A total of 2113 APS employees were surveyed both before and six months after the ban was imposed.

Between the introduction of the ban and the follow up survey there was a 1 per cent decline in the number of smokers in the sample. This represents the average yearly reduction in smoking prevalence for Australians. Therefore it is not clear that the bans had an effect on the participation rate above the normal community rate.

However, the bans did produce a decline in cigarette consumption. Within the workplace, smokers reduced their average cigarette consumption by seven cigarettes per day (which was only slightly compensated by increased smoking while outside, and before and after work). When divided into categories of smokers: light smokers did not change their pattern of consumption; moderate smokers reduced their consumption by an average of 29.1 per cent (5.4 cigarettes per day); and heavy smokers reduced their consumption by an average of 26.6 per cent (7.9 cigarettes per day).

A similar study was conducted in 1991 by Hocking *et al.* on the effects of a total workplace ban on smoking in Telecom Australia. Surveys were conducted prior to the 1988 ban and 6 and 18 months after. The surveys found that workplace cigarette consumption fell on average by 3–4 cigarettes per day. Although there was no change in the number of smokers 6 months after the ban, the follow-up survey 12 months later found a 5 per cent reduction in the number of smokers over the previous 2 years. This is more than double the annual rate of reduction of smokers in the Australian community. Around 25 per cent of the recent ex-smokers acknowledged that the bans had contributed to their decision to stop smoking.

Hocking *et al.* also refer to other studies which have found a reduction in cigarette consumption following workplace bans in: hospitals (Beiner *et al.* 1989), corporate businesses (Peterson *et al.* and Pitchford 1988) and industrial workplaces (Martin *et al.* 1988). Reductions in the number of smokers have been reported in hospitals (Andrews 1983), corporate businesses (Peterson *et al.* 1988) and in government workplaces (Millar 1988).

APPENDIX P SELECTED COMMONWEALTH AND STATE GOVERNMENT ASSISTANCE AND DEVELOPMENT PROGRAMS[1]

Table P.1: **Commonwealth labour market programs**

Program	*Nature of assistance*	*Eligible recipient*	*Effect on resource flows*
Jobstart	Wage subsidy	Employers and unemployed persons	Price of labour
Jobtrain	Training	Long-term unemployed, unemployed youth at risk, unemployed aged 50-64 years	Quality, occupational mobility, locational mobility
Special Intervention	Information, counselling	Disadvantaged job seekers[a]	Occupational mobility, locational mobility
Accredited Training for Youth	Training	Long-term unemployed young people	Quality, occupational mobility, locational mobility
Jobsearch	Training	Persons registered with CES as unemployed for more than 3 months	Quality, occupational mobility, locational mobility
Job Clubs	Information, training	As above	Quality
Mobility Assistance	Fares or petrol subsidy, relocation assistance, post placement fares assistance, immediate minor assistance	Unemployed job seekers travelling to an interview or taking up an offer of permanent employment	Locational mobility

1 The programs descibed in this appendix are only those which may to be relevant to adjustment in the tobacco growing regions. It is not a complete review of available State and Commonwealth programs.

Table P.1: **Commonwealth labour market programs** (continued)

Program	*Nature of assistance*	*Eligible recipient*	*Effect on resource flows*
New Enterprise Incentive Scheme (NEIS)	Self employment assistance, includes provision of information, job placement, training subsidy, capital subsidy and income support	Unemployed over 18. Business proposal subject to a number of criteria	Employment opportunity, occupational mobility
Contracted Placement	Job placement by employment agencies contracted by the CES	Persons unemployed for 3 years or more	Employment opportunity
Post Placement Support	Counselling	Formerly long-term unemployed persons	
Disadvantaged Young People Services	Training subsidy	Unemployed young persons	Quality, occupational mobility, locational mobility
Landcare and Environment Program	Training, capital subsidy	Unemployed persons	Quality
Skillshare	Training, information	Long-term unemployed (12 months +) and other disadvantaged job seekers	Quality, occupational mobility
Workplace Literacy	Training grants	Employers	Quality
Jobskills	Training and work experience, usually within government and community organisations	Long-term unemployed (12 months +)	Quality, occupational mobility, locational mobility

a Defined by DEET as Aboriginal and Torres Strait Islander people, job seekers with a disability, older workers more than 50 years of age, the homeless, ex-prisoners, spouses of those receiving Newstart Allowance and youth at risk.

Source: Industry Commission 1994b.

Table P.2: **State labour market programs: New South Wales**

Program	*Objective*	*Nature of assistance*	*Eligible recipient*	*Effect on resource flows*
Australian Traineeship System	To improve training outcomes	Provision of 12 month traineeships (4000 placements in 1992–93); funding of wages for trainees taken on by government departments; payroll tax rebates; payment of workers compensation premium.	Unemployed trainees and the Government departments and authorities and private firms which employ them	Price of labour, quality
Skills Gap Program	To improve employment outcomes	Provision of short courses	Sponsor organisations	Quality
Workplace Community Based Employment and Training (Youth)	To improve employment and training outcomes	Provision of placement, counselling, training, referral and post-placement support services	Community organisations	Quality
'First Chance' Enterprise Training for Youth	Improve employment and training outcomes	12 month on-the-job training and retail skill centre providing off-the-job training	Young unemployed	Quality
Group Training Program	To increase training and skills within small firms	Provision of grants to offset the cost of on-the-job training	Small firms	Quality
Intensive Training for Out of Trade Apprentices	To encourage out-of-work apprentices to complete their training	Training through 'Intensive Training Centres' and work-based training projects	Unemployed apprentices	Quality
Vocational Training Assistance Scheme	To encourage young people to take up apprenticeships in country areas	Payment of accommodation subsidy ($10.50 per day) and travel allowance (8 cents per km)	Young people	Locational mobility
Government Group Apprenticeship Program[a]	To provide apprenticeship positions in government departments and authorities	Payment of 50% wage subsidy	Retrenched apprentices and government employers	Price of labour

Table P.2: **State labour market programs: New South Wales** (continued)

Program	*Objective*	*Nature of assistance*	*Eligible recipient*	*Effect on resource flows*
Training Opportunities Placement Services	To find apprenticeship positions for out-of-work apprentices	Provision of placement services	Unemployed apprentices	Employment
Self Employment Development Program	To maintain employment in existing small firms and create employment through start up of new firms	Provision of 'Business Enterprise Centres' which provide advice and counselling services to small businesses. Also includes a six week full-time small business training course	Small businesses and unemployed people	Quality
Community Based Employment and Training (Mature Workers)	Improve employment prospects of unemployed mature workers	Training, counselling, job placement and post-placement services	Unemployed people over 40 years of age	Quality
Industry Skills Training Program	To improve training outcomes	Provision of financial assistance for industry-based training infrastructure such as skill training centres and aids	Firms	Price of capital
Industry Training Development	To promote improved industry training	Funding of projects which assist implementation of training and modernisation of training administration especially of apprentices	Firms	Price of capital
Outplacement and Retraining Assistance Scheme	To improve employment and training outcomes of ex-public sector employees	Provision of retraining and placement services	Retrenched public sector staff	Quality, employment

Table P.2: **State labour market programs: New South Wales** (continued)

Program	*Objective*	*Nature of assistance*	*Eligible recipient*	*Effect on resource flows*
Aboriginal Employment and Training Schemes	To improve employment and training outcomes	Public sector employment strategy, local government employment strategy, placement, vocational training, counselling and post placement support services	Aboriginal unemployed	Quality, employment
Migrant Employment and Training Schemes	To improve employment and training outcomes	Development, coordination and promotion of information and counselling services, training, retraining, bridging and employment programs	Migrant unemployed	Quality
Retrenched Workers Retraining Project	To improve employment opportunities through training	Up to 12 months assistance in vocational counselling, payment of training fees, trade tools, trade/skill certification and licensing	Retrenched public sector workers	Quality, Price of labour

a No new apprentices will commence under the Government Group Apprenticeship Program after 30 June 1993. A new program, the NSW Public Sector Trade Training, has been introduced along similar but more stringent guidelines.

Source: Industry Commission 1994b.

Table P.3: **State labour market programs: Victoria**

Program	*Objective*	*Nature of assistance*	*Eligible recipient*	*Effect on*
Job-Link	To increase employment prospects of long-term unemployed adults	Job and training placements	Long-term unemployed adults	Quality, employment
Skill-Link	To improve employment prospects of workers retrenched from private industry	Skills identification, job placement and training services	Retrenched workers	Quality, employment
Workstart Victoria	To increase employment prospects of unemployed youth	Job and training placements and subsidies (Targeted Apprenticeship Access Program and Local Authorities Traineeships)	Long-term unemployed aged 15-24 years	Quality, employment
Traineeship[a]	To improve training outcomes	Wage subsidies of up to $3000 for 12 month traineeships	Young unemployed aged 16-19 years and the firms which employ them	Price of labour
Restaurant and Catering Project[a]	To improve training outcomes in the restaurant and catering industries	Wage subsidies	Unemployed young people and the firms which employ them	Price of labour

a Programs under the previous 'Priority Victoria' package.
Source: Industry Commission 1994b.

Table P.4: **State labour market programs: Queensland**

Program	*Objective*	*Nature of assistance*	*Eligible recipient*	*Effect on resource flows*
Funded Training Program	To improve employment outcomes	Includes ‘employment orientation’, skill training, and placement assistance for disadvantaged youth	Unemployed 15-21 year olds	Quality
Public Sector Apprenticeships and Traineeship Subsides	To increase the number of young trainees	Wage subsidies for disadvantaged young job seekers	Young job seekers and the firms which employ them	Price of labour
Job Training and Placement Projects	To improve employment outcomes	Community-based projects, provides advice and grants up to $45 000	Community groups	Price of labour, quality
Employment and Enterprise Facilitation[a] (under review)	To tackle local unemployment problems	Provides a sliding scale of grant assistance over 3 years (80%, 50%, 20%) with grants of up to $40 000 in the first year	Enterprise development agencies and local government authorities	Price of labour, quality
Self-Employment Venture Scheme	Job creation by encouraging the establishment of small enterprise developments and self employment	Provides advice and loans of up to $6000 per participant; complemented by the Commonwealth NEIS program which offers training and income support over a 12 month period	Unemployed persons	Price of capital, quality

a This program also provides grants for enterprise development.

Source: Industry Commission 1994b.

Table P.5: **Selected State and Commonwealth regional development programs**

Program	*Objective*	*Nature of assistance*	*Recipient*
STATE GOVERNMENT			
Victoria			
Investing in Country Victoria (nine point plan)	Promote balanced development for the entire State by boosting business development and investment in country Victoria.	Grants to offset State taxes, infrastructure/training costs, and relocation, establishment and expansion expenses; investment facilitation services; subsidies for consultancies; and export promotion schemes.	Firms
Rural Counselling Program	Assist farmers to survive economic hardship.	Joint funding from the Commonwealth, State and local community for counselling services for farmers faced with economic hardship.	Farmers
Rural Enterprise Victoria	Help local communities in small rural towns to develop new enterprises and expand existing firms.	Provides small businesses with training in business skills and other information services.	Firms
Regional Infrastructure Support Program	Provide assistance with infrastructure development in advance of demand.	Grants to councils and other government agencies for the provision of infrastructure necessary to service industrial and commercial sites.	Councils and regional development bodies
Strategic Regional Firms Assistance Program	Provide financial assistance to firms which are strategically important to their regional economies.	One-off grants to assist firms increase exporting or import replacement activities; undertake additional investment; adopt new technologies; enhance their research and development programs and train personnel.	Firms and some regional development bodies
Regional Development Organisations	Assist regional centres to adopt a coordinated approach to industry attraction and development	Contribution towards running expenses.	

Table P.5: **Selected State and Commonwealth regional development programs** (continued)

Program	*Objective*	*Nature of assistance*	*Recipient*
Queensland			
Regional Economic Development Program	Assist regional communities realise their sustainable economic potential.	Grants for organisational development, completion of regional economic development strategies, identification of development opportunities and project support and promotion.	Regional development organisations and firms
Regional Projects Investment Program	Encourage new investment projects in non-metropolitan Queensland.	Grants for pre-feasibility studies and feasibility studies of major new investment opportunities to targeted domestic and overseas investors.	Firms
Major Projects Incentive Scheme	Encourage the establishment of significant business and investment in Queensland.	Refunding of certain State taxes for a limited period and direct financial assistance for establishment and relocation expenses.	Firms
COMMONWEALTH GOVERNMENT			
DPIE business assistance and marketing programs[2]	Assist rural businesses and producers to identify and develop strategies for new product development.	Primarily off-farm programs providing grants, information services and export assistance.	Rural businesses and producers.
Rural Adjustment Scheme	Encourage structural adjustment in rural industries.	Interest subsidies and grants to modernise and rationalise	Primary producers
OLMA regional labour adjustment packages	Improve the skills and employment base of particular regions, industries or enterprises undergoing structural change by assisting individuals affected by those changes.	Employment creation, training, provision of information, job matching	Region-based community groups around Australia.

Source: Industry Commission 1994a.

2 These programs are administered in conjunction with various related State programs. Further information on these programs is provided in the “Rural Business and Marketing Guide” available on request from the DPIE.

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POSTSCRIPT

On 30 June 1994, the day after this report was signed, the New South Wales Government announced a plan to wind down the tobacco growing industry in New South Wales. The text of the relevant media release is reproduced below.

TOBACCO INDUSTRY WINDS DOWN

The Minister for Agriculture and Fisheries, Ian Causley MP, and the Minister for Health, Ron Phillips, today announced a $850 000 Government plan to wind down tobacco growing in NSW.

Mr Causley said that under the plan tobacco growers will be offered a payout related to their current production and a premium paid for immediate retirement from the industry.

‘The State Government is acting to discourage tobacco leaf production in NSW’, he said.

‘Tobacco growing in NSW is becoming uneconomical and growers are being offered this once-only opportunity to get out of tobacco growing before their financial position becomes worse.’

Mr Causley confirmed NSW participation in a national industry deregulation scheme which will come into force from 1st October next year.

Mr Phillips said the State Government’s anti-smoking policies and programs were a matter of high priority.

‘Today’s announcement is consistent with the Government’s policy to discourage smoking and to discourage tobacco production’, he said.

Mr Causley said the Government initiative, together with the repeal of the Tobacco Leaf Stabilisation Act and winding up of the Tobacco Leaf Marketing Board, would virtually mark the end of tobacco production in NSW by the end of 1995.

‘The grant of $850 000 approved by the Treasurer, Peter Collins MP, will offset the impact of the Government’s anti-smoking policies on growers while they were pursuing a deregulation target’, he said.

‘This one-off decision does not establish a precedent for other primary producers or industries affected by deregulation.’