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COMMISSION

RAW MATERIAL PRICING FOR DOMESTIC USE

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INDUSTRY COMMISSION

1 April 1992

The Honourable J. Dawkins, M.P.
Treasurer
Parliament House
CANBERRA ACT 2600

Dear Treasurer

In accordance with Section 7 of the *Industry Commission Act 1989,* we have pleasure in submitting to you the report on Raw Material Pricing for Domestic Use.

Yours sincerely

Keith J. Horton-Stephens
Presiding Commissioner

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Associate Commissioner

COMMISSIONER

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CONTENTS

OVERVIEW

This report is about the pricing of raw materials produced and used in Australia.

The inquiry was prompted by concerns that further processing in Australia is being hindered because raw materials are being priced higher in the domestic market than in the export market.

The Commission has examined many raw materials: only wool was specifically excluded by the terms of reference. It has given greatest attention to pricing issues raised by inquiry participants and undertaken four case studies - on refined copper, feedstock for steel pipe and tube, pulpwood, and raw and refined sugar.

In assessing current pricing practices, the Commission's main concern has been whether they are limiting sales of raw materials to domestic processors.

Generally speaking, the 'right' quantity of production and consumption will be encouraged when products are priced to all buyers at the marginal cost of efficient production. Prices above this benchmark may deter worthwhile purchases, while lower prices are likely to lead to company failure and encourage consumption in excess of the socially desirable level.

For many raw materials, the domestic price is higher than the export price. That is not surprising. Exporters invariably have little scope to influence prices but must meet the price set by international competition. In the domestic market, sellers often have some ability to influence prices.

If domestic prices of raw materials are higher than export prices, that does not necessarily mean that resources are not being used efficiently. The test is whether lower domestic prices would stimulate additional profitable sales. Evidence before the Commission suggests that, by and large, this is not the case. There are a number of reasons for this:

- Often producers selectively set prices so as not to foreclose demand. They offer rebates to assist domestic customers to export, meet import competition, or both.

- For some processed products the cost of the raw material is only a small proportion of total cost and even a large reduction in the raw material price would have very little impact on the end product's total cost.

- The difference between the domestic and export price can be quite small (eg about 2 per cent in the case of refined copper). This limits the scope for price reductions.

The Commission concludes that the pricing policies of raw material producers are generally consistent with promoting an efficient use of resources. While there was some evidence of inefficient practices from the four case studies, potential losses to the economy as a whole were estimated to be very small.

All the same, significant export and import-competing opportunities can arise from small initiatives, and it is important that producers' pricing flexibility extend to cover such situations. One manufacturer commented that a potential export order may not be of sufficient volume to qualify for the full export rebate, with the consequence that the order may be lost.

In the Commission's view, the role for governments regarding pricing practices is to encourage maximum competition within the economy. The higher the level of domestic or foreign competition, the less discretion producers have to price inappropriately. It follows that government action should be directed at removing impediments to competition and promoting reforms that will allow greater competition.

In terms of specific impediments, the Commission has found in its other inquiries that the existence of statutory marketing arrangements can restrict competition. In its submission to this inquiry AUSTRADE observed that:

> ... the sector where most statutory authorities exist (or have existed) to influence domestic raw material prices, is exactly that sector - the food sector - which has undergone little change in the value adding export structure. On the other hand, the mining and metals sector, where institutional influences on raw material pricing are fewer, has demonstrated an already clear trend to value adding exports (sub. 70, p. 3).

The Federal and State Governments have moved to encourage better pricing practices by marketing authorities, but there is a long way to go - not least in the sugar industry.

The Commission has examined certain features of the *Trade Practices Act* and the Prices Surveillance Authority process which can bear on pricing practices, and is proposing certain changes in their regard.

More generally, competition can be encouraged in a number of ways:

- Foreign competition can be enhanced by reducing import tariffs and ensuring that the anti-dumping process is not used as a substitute for assistance to import-competing industry in Australia, as well as by continuing the reforms to reduce port, waterside and overseas shipping costs.

- Domestic competition can be increased by reforms in road, rail and coastal shipping. Reforms have begun: the need now is to press ahead.

The Commission considers that governments should not introduce industry-specific measures likely to detract from an industry's ability to set prices on a commercial basis. In particular, governments should not attempt to keep domestic prices artificially low in order to encourage more value-adding in Australia. A comment by the Australian Molasses Pool has broader application:

> [The Pool] operates in a free market with no government controls, intervention or assistance and we firmly believe it should continue to operate in this environment. For either the Federal or State Governments to pass legislation which effectively attempts to control price, would cause interference with market forces and either the producer or consumer would be adversely affected (sub. 53, p. 4).

Finally, while it is clear that the appropriate pricing of raw materials is important in shaping the efficient use of Australia's resources, this inquiry serves to confirm that other factors are of far greater significance in determining whether more value-adding is going to occur in Australia. Many submissions emphasised this point and stressed the need to improve energy supply and labour productivity, and to minimise the disincentives of taxes on business and individuals. The Commission strongly agrees.

FINDINGS AND RECOMMENDATIONS

1 On the evidence available, the pricing policies of raw material producers are generally consistent with promoting an efficient use of resources.

2 Where inefficient practices were identified, potential losses to the economy overall were estimated to be very small.

3 Governments can best promote appropriate pricing by encouraging effective industry competition. They should not attempt to keep domestic prices artificially low in order to encourage further processing in Australia.

4 The Federal and State Governments should continue reforms of statutory marketing arrangements. (Attention is drawn to the Commission's report on the Australian sugar industry.)

5 The Federal Government should continue its tariff reduction program and ensure that the anti-dumping process is not used as a substitute for assistance to import-competing industry.

6 The Federal Government should consider the relevance of section 49 of the Trade Practices Act by examining how efficiency objectives and competition policy generally can best be reconciled.

7 If forestry authorities remain as government business enterprises, they should be placed on an appropriate commercial footing and made subject to the Trade Practices Act.

8 The Federal Government should consider discontinuing the surveillance of prices of feedstock for steel pipe and tube by the Prices Surveillance Authority.

9 The Federal and State Governments should press ahead with reforms to Australia's internal transport system, ports, and coastal and overseas shipping.

The Commission draws attention to its comments on:

- the pricing of pulpwood - current practices and principles (appendix E); and
- the Petroleum Resource Rent Tax for Bass Strait (appendix G).

Terms of Reference

Raw Material Pricing for Domestic Use

I, PAUL JOHN KEATING, in pursuance of my powers under Section 7 of the Industry Commission Act 1989, hereby:

1. refer the pricing of locally produced raw materials for domestic use for inquiry and report within twelve months of the date of receipt of this reference;

2. specify that the term "raw materials" excludes wool, but is to be interpreted broadly to encompass a wide range of other materials including, but not limited to : basic shapes of ferrous and non-ferrous metals; processed minerals; oil and gas feedstocks; semi-processed timber products including wool chips; meat, grains, fruit, dairy, nuts, seafood and other agricultural produce for further processing and natural fibres including cotton;

3. specify that the Commission report on the relationship between the export prices of raw materials and the prices at which they are available to domestic users; and

4. specify that the Commission report on institutional, regulatory or other arrangements subject to influence by governments in Australia which lead to inefficient resource use and advise on courses of action to remove or reduce inefficiencies.

P.J. KEATING

(Treasurer)

9 May 1991

1 THE INQUIRY

The price Australian processors pay for locally produced raw materials is one factor influencing their competitiveness. This inquiry examines whether the domestic pricing of raw materials is consistent with efficient resource use and, if not, the role for governments.

1.1 Terms of reference and scope of the inquiry

The Commission has been asked to inquire into the pricing of locally produced raw materials, including the relationship between export prices of raw materials and the prices at which they are available to domestic users. The terms of reference (see facing page) further ask that the Commission examine and advise on institutional, regulatory or other arrangements subject to influence by governments in Australia which lead to inefficient resource use.

The inquiry has arisen in the context of the Government's program of structural reform, which is aimed at improving the performance of the economy and increasing the welfare of the Australian community as a whole. Underlying the current inquiry is the issue of whether the pricing of locally produced raw materials is inhibiting the competitiveness of Australian industry and detracting from the efficient use of resources.

The terms of reference state that 'raw materials' are to be interpreted broadly to encompass a wide range of materials. Only wool is specifically excluded. Included are both unprocessed (raw) materials and those that have undergone some processing. The nature of the inquiry is not such as to require a precise definition, although one consideration was at least to include raw materials in their basic exportable form to enable the Commission to report on the relationship between export and domestic prices. Materials not exported nevertheless fall within the scope of the inquiry.

Although by no means exhaustive, a listing of basic commodities by the Australian Bureau of Agricultural and Resource Economics (ABARE 1990a) provides a guide to the inquiry's potential coverage. The main commodity groupings in this listing are livestock, grains and oilseeds, other crops, horticulture, fisheries, forest products, energy, and minerals. Data relevant to products within these groupings are shown at appendix A. The listed commodities account for about 15 per cent of Australia's gross domestic product, and about 67 per cent of their production (by value) is exported.

1.2 Inquiry approach and process

The Commission was not in a position to examine the pricing practices associated with every raw material under reference. Rather, the approach adopted was to assess in general terms whether practices raised in submissions to the inquiry were consistent with promoting an efficient use of resources. In addition, the Commission examined certain materials in greater detail to provide further insights into the efficiency of the practices on the sales of raw materials to domestic processors.

Materials selected for detailed examination were refined copper, feedstock for steel pipe and tube, pulpwood, and raw and refined sugar. The Commission understands that industry complaints to the Government about domestic pricing practices, especially in respect of copper and steel, were an important reason for initiating the inquiry. Participants raised particular pricing issues on each of the four materials studied. Each study also allowed the Commission to address the question in the terms of reference concerning export and domestic price relationships.

The inquiry process is outlined in appendix B. It includes the names of individuals, companies and organisations who provided a submission to the inquiry or attended the public hearings.

Many inquiry participants provided information on a confidential basis because of its commercial sensitivity. This constrained to some extent the public aspects of the inquiry process.

The Commission appreciates the cooperation of inquiry participants in providing information.

1.3 Report structure

The report considers first whether the pricing practices raised in submissions are efficient and consistent with promoting an efficient use of resources (chapter 2). The findings of the four case studies, which focus on welfare losses arising from potentially inefficient pricing practices, are summarised in the next chapter (chapter 3). The final chapter identifies impediments to efficient pricing practices and the scope for governments to promote international competitiveness (chapter 4).

The individual case studies are included as appendices. The Commission has attempted to provide as much relevant information as possible in the studies, consistent with the confidential nature of much of the information submitted.

2 CURRENT PRICING PRACTICES

Raw materials are sold in the domestic market at prices that range from below to above the export price. Where domestic prices are higher, there is evidence of producers providing price or other concessions to assist the international competitiveness of downstream processors. Other evidence, however, suggests there is scope for greater flexibility in raw material pricing.

From an economy-wide perspective, flexible case-by-case pricing by raw material producers can reduce the losses sometimes inherent in setting domestic prices above export prices.

Prices play an important role in Australia's market economy. They signal both the value buyers place on products and the sellers' cost of production, and so influence the allocation of the nation's resources.

Australia's raw material producers set prices in a variety of ways. While pricing can be expected to be rational from the producer's point of view, the purpose of this chapter is to assess whether the various practices are in the best interests of the broader community. This is done by assessing individual pricing practices against the benchmark of efficient pricing.

Pricing is a complex matter. For example, there will rarely be a single export price. Differences can reflect factors such as spot versus long-term contract prices, export destinations and seasonal variation. This chapter abstracts from much of this complexity to provide a simplified guide to the important factors that bear on efficient pricing.

2.1 What is efficient pricing?

Pricing is efficient if it promotes the best use of the community's resources. Hence the pricing of a product is efficient when it results in the 'right' quantity of production and consumption of that product.

Generally speaking, the 'right' quantity of production and consumption will be encouraged when products are priced to all buyers at prices that just cover the marginal cost of efficient production. Prices above this benchmark may deter worthwhile purchases while lower prices are likely to lead to company failure and encourage consumption in excess of the socially desirable level.

Prices will be efficient in perfectly competitive markets because entry (or the threat of entry) of new firms tends to ensure prices equal the marginal cost of efficient production. If markets are less

than fully competitive, suppliers are able to set prices above the marginal cost of efficient production.

Even in less than fully competitive markets, however, it may be possible to achieve optimal consumption. This can be achieved if, rather than charging a uniform price to all buyers, producers are prepared and able to offer prices down to the marginal cost of efficient production, for those buyers whose demand is curtailed at higher prices. This approach recognises that for most products some buyers are prepared to pay a higher price than others.

Where products are sold in the domestic and export markets, the efficient domestic price is the export price, even if this is above the marginal cost of efficient production. It would not be in the seller's interest to set the domestic price below the export price as to do so would entail a lower profit. It would also mean the diversion of some sales from the export to the domestic market to meet demand generated by the lower domestic price. This would mean a loss of export earnings and a reduction in Australian welfare, unless the diversion of raw materials from the export market creates more wealth than the loss of export earnings. If the potential to create more wealth by further processing exists, processors could afford to pay the full export price.

Circumstances can arise where the domestic price is below the export price. These are where domestic markets are competitive and additional export sales are not possible, for example, because of overseas quota restrictions.

The practice of charging different prices for the same product is known as 'price discrimination'. The term 'discrimination' merely refers to the practice of charging different prices and does not imply a judgment that the practice is unfair or detrimental to the efficient use of resources. Price discrimination differs from price differentiation; under the latter, different prices reflect differences in the cost of similar products for reasons such as quality or frequency of supply.

Compared with the situation of pricing all sales at the cost of efficient production, perfect price discrimination should result in the same level of sales and hence promote efficient resource use. The main difference between the two approaches is that under price discrimination there is a transfer of income from buyers to the seller, but no adverse effect on economic efficiency.

For the seller, price discrimination involves assessing the degree to which individual buyers or groups of buyers value a product, and setting an appropriate price for each. It is a rational approach for profit maximising firms. However, it has practical limitations which stem mainly from the cost of obtaining reliable information about the value of the product to individual buyers or groups of buyers, and the possibility that the product bought at a low price will be on-sold to other buyers paying a higher price.

Price discrimination between the export and domestic markets is generally easier than discriminating within the domestic market, because overseas transport and associated costs provide a natural barrier between the two markets.

Box 2.1 summarises the criteria relevant to an assessment of efficient pricing which are adopted in this report.

Box 2.1: Criteria for assessing efficient pricing

- If a single price is set across all markets, that price should approximate the product's marginal cost of efficient production. For products sold in competitive world markets, the efficient domestic price is the export price.
- If the domestic price is higher than the export price, the seller should also price discriminate within the domestic market to exhaust mutually beneficial sales with buyers prepared to pay at least the export price.

2.2 Identified pricing practices

Submissions to the inquiry provided information on the pricing practices for a range of products covering minerals (eg copper, aluminium, coal), agriculture (eg sugar, wheat, molasses), oil and gas, forestry, and semi-processed products (eg chemicals, feedstock for steel pipe and tube).

General practices

Most products about which information was provided are sold into both the export and domestic markets and, for such products, it is clear that export prices are largely determined in highly competitive world markets. That Australian exporters have little or no ability to influence the prices they receive in overseas markets is confirmed in the following excerpts from submissions:

> Australian [primary metal] producers have no control or influence over [London Metal Exchange] prices and as in the current climate, must face the harsh realities which such markets impose from time to time (CRA sub. 25, p. 4).

> The price we receive for our exports [of molasses] depends on the ruling US Gulf price or the European Rotterdam price, less freight and handling charges. ... We have virtually no control over our export price and are price-takers in the world market place (Australian Molasses Pool sub. 53, p. 3).

> BHP Steel produces less than 1% of the world's raw steel make and about 1% of steel traded internationally. Subsequently, BHP is a price taker and must meet the ruling international price at the time of the export sale (BHP Steel sub. 6, p. 9).

In contrast, suppliers often have some ability to influence price in the domestic market. The domestic price can be below, equal to, or above the export price, as indicated in the following comment:

> Mining companies attempt to maximise returns by obtaining the best possible prices for their products, be they in the domestic or international markets. It is in the nature of those markets which will determine whether or not the domestic price is higher or lower than the international price (CRA sub. 25, p. 2).

An example of the range of practices actually employed is reflected in Esso Australia's description of its pricing policy. The company stated that its practices vary depending on the product: for propane, the price is based on import parity (see box 2.2); for butane, the price to petrochemical manufacturers is at export parity (see box 2.2) while other domestic users pay between import and export parity.

Box 2.2: Pricing reference points

- Import parity is the landed cost of sourcing a product from overseas. It includes the producer's selling price, the cost of overseas transport and associated charges, and import duties.
- Export parity is the price the Australian seller receives at the point of production (eg farm gate, refinery, factory) for the exported good. It attempts to place the domestic and export price at a common point of sale in order to facilitate comparisons. It therefore normally excludes internal transport costs and always the cost of overseas transport and associated charges.

An example of pricing below export parity was provided by CRA Limited (CRA):

> ... the intense competition in most parts of the domestic steaming coal market keeps those prices below those obtained in the international markets (sub. 25, p. 2).

Examples of import parity pricing were prevalent in submissions. The Queensland Sugar Corporation indicated that the domestic raw sugar price is set at parity with the cost of importing sugar from overseas:

> ... sales of raw sugar in the domestic market have been made on terms which are competitive with raw sugar available from other origins. Prices are negotiated with an eye to set at import parity levels ... (sub. 22, p. 2).

Similarly, Australian Synthetic Rubber Co Ltd (ASR) stated:

> The basis used to set domestic prices is that of un-dumped import parity and considerable effort on the part of ASR and its customers goes into defining exactly what the precise parity prices are at any time (sub. 60, p. 1).

A number of chemical users referred to the practice by the Australian chemicals industry of setting its prices using an import parity formula. Another example of a formula approach relates to the pricing of non-ferrous metals, which relies on prices established on international exchanges (eg the London Metal Exchange) and consequently results in prices that approximate import parity.

Some products are sold at prices above export parity although not necessarily at a price related to import parity. BHP Steel, for example, adopts a policy of relative price stability for the domestic market; given the fluctuations in world steel prices, this policy results in domestic prices which on occasions will be either above or below import parity.

In summary, the evidence shows that:

- at least one product is sold in the domestic market below the export price (eg some coal);
- some products are sold in both markets at about the same price (eg some coal, butane); and
- many products are sold in the domestic market at a higher price than for export (eg refined copper, feedstock for steel pipe and tube, sugar, synthetic rubber, chemicals).

On the basis of the criteria outlined in section 2.1, the practices in the first two cases can be regarded as consistent with promoting an efficient use of resources. At first sight, practices in the third category may not be consistent with this objective, although they may well be if sellers exercise price discrimination not only between the export and domestic markets, but also within the domestic market. This is discussed below.

Price discrimination

Submissions to the inquiry provided evidence of price discrimination within the domestic market, exercised in a variety of ways. These include providing price rebates and volume discounts. In addition, the cost of a product to a buyer can be influenced by other factors such as the basis of delivery charges as well as non-price terms and conditions of sale.

Price rebates

Producers provide various types of rebates.

First, some producers offer a rebate on the price of raw materials used in producing goods for export, but not if the materials are used in producing goods to be sold domestically.

Exports of value added products may only be viable if the price of raw material inputs is below the price normally charged for domestic use, where this is above the export parity price. Export

demand is usually more responsive to price than domestic demand, so that additional sales generated by reducing the export price increases the profitability of raw material producers. In contrast, domestic markets are usually less responsive to price and a price reduction in that market may simply result in lower revenue for the producer.

Providing rebates is a rational approach for the raw material producer where this results in sales that would otherwise not occur. For example, it can provide an indirect means of exporting the raw material (through its incorporation in a processed product) when direct exports are impeded by, for example, the protectionist policies of other countries.

Both BHP Steel and ASR stated that they offer rebates to assist their domestic customers to export, while the NSW Government indicated that:

> In general, the [NSW Forestry] Commission is willing to negotiate lower prices for export production if the consequence is increased total revenue through higher volume of sales, downstream advantages in terms of forest growth, or strategic decisions to promote a particular industry seen as desirable in filling a particular log market niche (sub. 61, p. 5).

Further, AGL Gas Companies said that several industries in New South Wales had negotiated special export gas prices, including the nitrogenous fertiliser industry. In response to the Draft Report, it indicated that:

> ... it is intended to continue special pricing arrangements where benefits accrue both to the raw material supplier (AGL) and the customers involved (sub. 76, p. 1).

Shell Chemical (Australia) Pty Ltd (Shell) stated that one reason for providing rebates is excess global supply and hence depressed world prices:

> ... when there is excess global supply of polypropylene, domestic products manufacturers will sometimes have difficulty matching competition from overseas firms purchasing polymer on the international spot market. Shell does therefore provide price support for product which is exported using its polypropylene (sub. 55, p. 3).

Second, producers offer rebates to meet import competition. They are usually offered to prevent a loss of market share when the cost of imported raw materials falls below the domestic producers' price. They are also offered when their customers face competition from imported products.

BHP Steel stated that it provides rebates in both cases:

> ... assistance to Australian steel users to combat direct and indirect imports as well as to support and enhance their export capabilities (sub. 6, p. 9).

ASR and Shell made similar comments:

> Import Replacement rebates are offered where possible to customers to target specific import competition (ASR sub. 60, p. 3).

> With the introduction of new capacity at the Clyde refinery, this policy of export support is also being extended to import competition, where manufacturers can demonstrate they are being disadvantaged by the access that overseas firms have to lower cost sources of polymer (Shell sub. 55, p. 3).

Third, some producers offer a fixed, rather than negotiated, export rebate. In this case, all buyers who meet the criteria set by the producer receive the same rebate.

An example of this practice was provided by the Queensland Sugar Corporation which:

> ... provides a rebate to domestic manufacturers of products containing sugar for export. ... The scheme is designed to ensure Australian manufacturers are not at a competitive disadvantage to overseas producers who may have access to duty-free world free-market priced sugar (sub. 22, p. 3).

Volume discounts

Producers can exercise price discrimination through volume discounts by offering reductions which do not match the cost differences associated with different order quantities. Volume discounts are sometimes provided in response to the market power of high volume purchasers.

An example of volume discounts was provided by BHP Steel which offers a discount on purchases that exceed a set volume over specified periods for a range of its products. The Commission had insufficient information to judge whether the discounts reflect cost savings associated with supplying the various quantities.

Delivery charges

When products are sold on a 'delivered into customer store' basis (as distinct from an 'ex-factory' basis), producers have scope to exercise price discrimination. This arises if the transport component of the price does not reflect the actual transport cost to individual buyers; instead, some other approach is used, such as averaging the transport cost across buyers. In these circumstances, some buyers (usually those located closest to the centre of production) pay more than the actual cost of transporting the raw material to their site, while other buyers pay less than the actual transport cost.

CRA stated that, with regard to aluminium, the company has a policy of charging users a uniform capital city price, and noted that:

> This represents a significant cost saving to users who would otherwise face significant variation in transport costs and thus profitability (sub. 25, p. 6).

BHP Steel described its domestic pricing policy by saying that:

> ... prices in our published schedule are generally quoted on [a free-into-store] capital city freight equalised basis. There are some exceptions, as in the case of long standing large volume customers who produce products allied to the steel industry. In these instances an ex-works pricing arrangement applies (sub. 6, p. 8).

Uniform capital city prices were encouraged by governments in the past as a means of stimulating decentralisation and development in less populous States. This may have allowed firms to develop value-adding opportunities in locations that would not have been viable if full transport costs had been included in the price.

Uniform prices may also be the outcome of competition. A producer may adjust prices to remain competitive with other sources of supply, including imports.

Other terms and conditions of sale

Raw material producers may offer particular customers favourable terms and conditions, for example, by granting an extended period for payment or agreeing to meet some special packaging requirement. In so doing, producers reduce the effective price of raw materials.

A specific example was provided in confidence by M.I.M. Holdings Limited (MIM). While the company does not offer price rebates, it said that it does offer domestic producers assistance in other ways to help them with exports. Two ways mentioned were currency hedging and payment terms, but the value of such assistance could not be quantified by the Commission.

Users' views

As outlined above, evidence from raw material producers indicates that price discrimination within the domestic market does occur. Equally, however, raw material purchasers provided comments on the absence of pricing flexibility by some producers.

For example, purchasers of polymers from the chemicals industry said that producers consistently charged import parity prices which made downstream production uncompetitive to export. Gadsden Rheem Packaging Group, for example, stated that due to the adoption of import parity pricing by local suppliers:

> ... Gadsden Rheem suffers a cost disadvantage for raw materials compared to overseas packaging manufacturers (sub. 18, p. 3).

BTR Nylex Limited stated that:

> The Chemicals Industry has no desire to compete with "dumped" price competition. It says it cannot because of the costs of its inputs coupled with the cost of producing polymers in Australia.
>
> If it cannot, or will not, then price differentials between "dumped" and "non-dumped" polymers can and will continue to be very substantial (sub. 28, p. 11).

With regard to the pricing of wood for wood panel production, the Australian Wood Panels Association stated:

> The use of administrative formulae for wood pricing does not allow for or recognise the dynamic nature of supply and demand which forms the basis of the everyday transactions of normal commercial markets (sub. 29, p. 2).

A number of users of refined copper stated that pricing by local refiners is inflexible. Extruded Metals Pty Ltd, for example, stated that it has:

> ... in the past sought special pricing arrangements for copper in respect of goods destined for export, however no significant cost advantage was granted (sub. 45, p. 2).

Similarly, the Australian Electrical and Electronic Manufacturers' Association Limited stated that:

> AEEMA has had no direct discussions with MIM, but all members who purchase from MIM have attempted without success to negotiate lower prices.
>
> It appears that MIM have an assured export market and therefore have no commercial reasons to offer local users any concessions over what are perceived to be that dictated by "market conditions" (sub. 64, p. 2).

In some cases, claims of inflexibility by purchasers were disputed by suppliers. For example, Orlando Wines Pty Ltd submitted that:

> Despite our numerous entreaties, the Wine Grapes Marketing Board, during the vintage season 1990 in particular, set prices which were substantially above the known market price for similar types of grapes in other regions (sub. 34, p. 2).

In reply, the Wine Grapes Marketing Board noted that:

> ... if the generally more generous terms of payment set for MIA grapes compared with other regions, and grape delivery subsidies paid by the wineries in other regions are taken into account, Orlando has generally received MIA grapes delivered to their Griffith winery at a substantially lower cost than that incurred in other regions (sub. 63, p. 2).

Assessment of price discrimination practices

In the Commission's view, the various practices described in this section are valid approaches by producers attempting to maximise revenue from sales in the domestic market. Most effective, however, are practices that contain an element of flexibility rather than a rigid formula approach which may overlook opportunities for further profitable sales in the domestic market.

By way of example, the fixed rebate available to exporters of products containing sugar may not be necessary in all cases for the processors to win export sales. In such cases the rebate is simply a transfer of income from the Queensland Sugar Corporation to the processors[1]. However, it militates against the possibility that larger rebates to some processors could result in increased exports of processed product.

Free-into-store pricing may be inefficient if purchasers do not have the option of organising the transport of their raw materials. While in some cases it may be more efficient for the producer to

1 Of course, the Corporation has itself received a transfer from processors by virtue of its acquisition (monopoly purchasing) powers.

include this service in the sale contract, in others the buyer may be in the best position to tailor the service to its particular requirements. The most efficient arrangement is likely to result if the decision is left to the commercial judgment of the buyer.

Capital city pricing or similar transport cost averaging approaches have no economic merit as they can distort decisions on where to invest. However, uniform pricing may be a reflection of competition where the raw material producer has to meet the price of other producers able to supply the user at a lower cost. For example, suppliers in Sydney may have to lower their price to meet competition in Perth from alternative suppliers with lower transport costs.

The practice of varying the terms and conditions of sale of a raw material is efficient because potentially it decreases the likelihood of foreclosing demand due to the increased scope for cost adjustment.

While there is clear evidence that raw material producers have price discrimination policies, evidence from buyers suggests that in practice not all suppliers are flexible in their pricing approaches. This perception is not always valid; often producers may correctly judge that lower prices would not result in increased sales but merely transfer income from the producer to the processor.

Another reason for perceived inflexibility may stem from the fact that many raw materials are sold under medium or long-term contracts. Although term contracts offer benefits to both buyers and sellers, in some cases (eg pulpwood) binding clauses on price adjustments may limit the degree of price flexibility in dynamic market circumstances such as those claimed to exist currently in the wood panel market. Such aspects, however, are part of the normal commercial arrangements that need to be considered when terms and conditions of contracts are being negotiated.

2.1 Conclusions

The evidence available to the Commission indicates that the pricing policies of raw material producers are generally consistent with promoting an efficient use of resources. If domestic prices of raw materials are higher than prices for export, that does not necessarily mean that resources are not being used efficiently. The test is whether lower domestic prices would stimulate additional profitable sales.

Evidence from purchasers suggests that in practice a more flexible pricing approach by some producers could improve their international competitiveness, and perhaps lead to further value-adding opportunities.

Whether limitations on pricing flexibility do, in fact, detract from efficient resource use depends on whether more effective discrimination would result in higher sales without loss of profitability.

This is difficult to judge in general terms, but is addressed in the next chapter in the context of particular case studies.

3 CASE STUDY FINDINGS

The four case studies - on refined copper, feedstock for steel pipe and tube, pulpwood, and raw and refined sugar - show that, despite some potentially inefficient pricing practices, losses to the economy are small.

Pricing practices that are potentially inconsistent with efficient pricing criteria were identified in chapter 2. These include setting domestic prices higher than the cost of efficient production (or the export price) in conjunction with limited pricing flexibility.

Whether such practices in fact detract from economic efficiency depends on whether lower prices would result in increased value-adding opportunities. Addressing this question is informationally demanding, which precludes its examination across a broad range of products. The question is, however, considered in the four case studies, which are appended to this report and summarised here.

3.1 Refined copper (see appendix C)

The pricing of refined copper (electrolytic cathode copper) both internationally and in Australia is largely based on prices established on the London Metal Exchange. The available evidence shows that Australian copper refiners sell in the export market at lower prices than in the domestic market, by a margin of about 2 per cent. The domestic price appears to approximate import parity, but be below what it would cost domestic users to source from overseas having regard to the advantages of local supply.

Australian copper refiners tend not to depart from their formula-derived prices, although Southern Copper Limited is understood to provide price rebates for fabricated copper exports. The dominant producer, MIM, does not offer price rebates on refined copper, nor does it offer volume discounts. It sets its domestic price on an ex-refinery basis and provides buyers the option of arranging their own or using the company's transport. MIM stated that it is willing to assist customers win export orders in ways other than price reductions, but buyers considered such assistance to be of minimal value; the value could not be quantified by the Commission.

At first sight, the practices outlined above are not generally consistent with efficient pricing practice. Whether they in fact detract from economic welfare depends on whether pricing all sales at export parity, or by price discriminating in the domestic market, would improve domestic sales and value-adding opportunities.

Evidence by copper users on this question was mixed. A number commented that a fall in copper prices alone, even in the order of 20 to 30 per cent, would have little or no effect on enhancing

export ability. Such users tended to be those for which the cost of copper is not a significant component of overall costs.

Other users, however, commented that lower prices would provide opportunities for greater export volumes. For such users, copper tended to represent a major proportion of production costs. Users made little attempt to quantify the impact of lower prices. Those that did assumed price reductions of 10 per cent or more, which are very much higher than the 2 per cent that the Commission estimates to be potentially available.

In respect of the domestic market, users commented that lower copper prices would enable them to compete more effectively against imported copper-based products. Most users provided information which showed that, for a range of their products, a significant share of the domestic market is supplied by imports. This suggests that, potentially at least, scope exists for increased value-adding.

MIM said that, although it is prepared to consider requests for assistance, it is rarely convinced that copper price reductions would enable increased value-adding. It believes that other factors, particularly import barriers in overseas markets, are greater impediments to increased exports. Trade barriers do exist in many overseas markets, particularly in Asia, the region likely to be of most interest to Australian exporters. Nevertheless, evidence from Australian refined copper users indicates that significant proportions of their domestic production are being exported, notably to Asia.

Whether current pricing practices are foreclosing value-adding opportunities is difficult to judge. In the Commission's view, prospects of a significant increase in value-adding activity arising from lower refined copper prices appear minimal, mainly because of the small proportionate reduction potentially available. If domestic prices were generally reduced to export parity, the Commission has estimated the national gain to be negligible. Nevertheless, good grounds may well exist for individual firms to negotiate a lower copper price in order to pursue particular export opportunities.

3.2 Feedstock for steel pipe and tube (see appendix D)

Steel pipe and tube is manufactured predominantly from hot rolled coil of which BHP Steel is the only domestic manufacturer. While the company is unable to influence prices internationally, it is able to do so in the domestic market.

BHP Steel's pricing policy for feedstock is to charge stable domestic prices rather than closely follow a benchmark such as the price it can obtain for exports or the cost to users of importing comparable product. To some extent this may be influenced by the requirement that the company obtain the approval of the Prices Surveillance Authority for price increases.

Because of movements in world prices, the margin between export and domestic prices varies over time. Data provided by BHP Steel show that for the first half of 1991 the average realised ex-works price for hot rolled coil was 23 per cent higher than its average export return. On occasions, the company's domestic prices are above import parity, suggesting that purchasers are prepared to pay a premium for sourcing locally.

BHP Steel's domestic pricing policy includes the payment of price rebates, negotiated on a case-by-case basis. Rebates are provided for feedstock used in the manufacture of exported product, and to offset the threat of specific import shipments of low priced steel pipe and tube. The company also indicated that it assists its customers on non-price aspects (such as frequency of supply) and offers volume discounts. One manufacturer commented, however, that potential export orders may not be of sufficient volume to qualify for the maximum export rebate, with the consequence that such orders may be lost.

BHP Steel's pricing approach appears consistent with efficient pricing practices but the test is whether further price reductions to around export parity would evoke additional demand and hence value-adding.

According to pipe and tube manufacturers, a fall in the price of pipe and tube made possible by lower feedstock prices would stimulate domestic demand and replace imports and substitute products. Views varied on the impact of lower feedstock prices on export demand for pipe and tube.

The Commission has estimated that lowering domestic feedstock prices to export parity would have only a small impact on steel pipe and tube production.

The Commission concludes that the domestic pricing of feedstock does not appear by and large to be inhibiting downstream value-adding opportunities, and that BHP Steel's pricing of feedstock is basically efficient. Nonetheless, the potential exists for the company to extend its pricing flexibility to feedstock for domestic use and to low volumes of feedstock destined for processing for export.

Under more buoyant market conditions the incentive for BHP Steel to price flexibly may be reduced. Were this to occur, the efficiency losses would still be relatively small but would nevertheless detract from the competitiveness of downstream processors.

3.3 **Pulpwood** (see appendix E)

Pulpwood is hardwood or softwood timber that is processed into woodchips or pulp for wood-based panels, paper and paper products. It is sourced predominantly from State forestry authorities.

Pulpwood is sold under long-term agreements, generally of 20 or more years duration. Base prices are established on a case-by-case basis in negotiations between State forestry authorities and

pulpwood users. Over the life of a contract, base prices are usually adjusted in accordance with a specified formula to ensure prices reflect increases in prices generally. In addition, most agreements allow for periodic price review and the establishment of new prices through negotiation or other means such as arbitration.

The case-by-case approach to establishing base prices results in different prices among domestic buyers, and between buyers in the domestic and export markets. Information available for New South Wales and Victoria shows that pulpwood for the domestic market is priced above that destined for the export market. In Tasmania, the reverse is the case, although this is as much a result of legislative constraint on domestic prices than a deliberate pricing practice by the Tasmanian Forestry Commission.

Over the past few years, forestry authorities appear to be taking a more flexible approach to pricing although evidence suggests that the degree of flexibility varies from State to State. Price adjustment formulae in some contracts appear to limit the degree of flexibility in respect of timber already contracted for sale.

On the question of whether current pricing practices are inhibiting further value-adding, users' views generally were that lower prices for pulpwood would enable them to displace imports and, in some cases, improve export performance. For pulp and paper manufacture, pulpwood prices constitute a very small proportion of total costs. Quantitative assessments by the Commission suggest that demand for pulpwood for pulp and paper manufacture is largely unresponsive to price, and that any change in prices would have only a small impact on the quantities of pulpwood consumed by these industries.

For wood panel manufacture, log prices are of greater significance (around 10 per cent of total cost). Hence changes in prices could be expected to have a considerably greater impact on pulpwood demand, although it has not been possible to quantify the effect.

The general approach by forestry authorities of negotiating pulpwood prices on a case-by-case basis, and the expressed willingness to be flexible in pricing export-destined wood and quantities greater than minimum contracted amounts, are consistent with efficient pricing principles.

However, two aspects of current pricing practices are of concern. First, without detailed knowledge of efficient production costs (including environmental costs), forestry authorities may supply wood at prices above or below socially optimal levels. Second, the apparent lack of flexibility inherent in the formulae-based approach for adjusting prices in existing agreements may lead to inefficient pricing and resource use.

With regard to the first aspect, there is a clear need for forestry authorities to determine their efficient production costs if efficient pricing is to be undertaken with any degree of certainty. Nevertheless, the increasing prevalence of private plantations may well indicate that current prices at least cover efficient production costs.

On the aspect of inflexibility in price adjustments, the onus is on log purchasers to establish a case to the relevant forestry authority that lower pricing will lead to increased pulpwood sales and profits, and is mutually beneficial. Commercially oriented forestry authorities will recognise such opportunities and respond accordingly. State forestry authorities should therefore be placed on an appropriate commercial footing. (The benefits of corporatisation and/or privatisation have been examined in several recent reports of the Commission, including its 1990-91 Annual Report.)

3.4 Raw and refined sugar (see appendix F)

The domestic price of raw sugar is set by the Queensland Sugar Corporation at about import parity, which is significantly above its export price. The Corporation offers export rebates to refiners of raw sugar to pass on to food processors who export products containing sugar. The rebate is equal to the developing country tariff on imported raw sugar, which results in a domestic price still above the export price.

The potential efficiency loss from pricing raw sugar above export parity is determined by the amount of demand it forecloses. Lower raw sugar prices could stimulate increased demand by refiners to satisfy export opportunities and additional sales of refined sugar to food processors (if lower raw sugar prices were passed on).

There are currently minimal exports of refined sugar suggesting that the export rebate for raw sugar, although only one factor, is insufficient to encourage the refined sugar industry to export. It is not clear whether the industry would export significant quantities if it could obtain raw sugar at export parity levels. However, in anticipation of more favourable pricing arrangements, refiners have been investigating the possibility of establishing a large-scale export refinery in Queensland. Refined sugar is priced domestically at about its import price. It is not clear by how much this price exceeds the efficient price benchmark. Unlike raw sugar, refined sugar is not an export-oriented industry and the efficient price benchmark is likely to be somewhat higher than an export price of refined sugar.

While the international competitiveness of food processors is likely to increase if they could obtain refined sugar at lower prices, quantitative assessments by the Commission indicate that the potential efficiency loss represents only a small fraction of the domestic sales value of raw sugar.

The Commission concludes that, while the pricing of raw and refined sugar is generally not consistent with promoting an efficient use of resources, the loss of benefit to the nation from pricing inefficiency is small in practice. Nevertheless, if improvements can be obtained at a net gain to the economy, it is worth considering taking the necessary steps. In this regard, the Commission notes that abolition of compulsory acquisition powers (and, as a result, a weakening of

the dominant position of the Queensland Sugar Corporation in the domestic raw sugar market) is a necessary precondition for encouraging competition in both the raw and refined sugar markets.

3.5 Conclusions

The four case studies reveal that, while some inefficient pricing practices exist, potential losses to the economy overall are very small. Pricing raw materials down to export parity would be unlikely to increase value-adding in Australia significantly.

Nevertheless, where pricing efficiency can be improved and there is a consequent net gain to the economy, the appropriate steps should be taken to realise that gain. The role of government in promoting efficient pricing is discussed in the following chapter.

4 GOVERNMENT INTERVENTIONS

> *Governments can and should promote efficient pricing by encouraging maximum competition within the economy. Impediments to competition that stem from government interventions need to be removed. This applies to areas such as statutory marketing authorities in the agricultural sector, internal and international transport, and tariffs. The prospects for more value-adding in Australia will be further enhanced by improvements in other areas such as energy supply and labour productivity, and by minimising the disincentives of taxes on business and individuals.*

The terms of reference require the Commission to report on institutional, regulatory or other arrangements subject to the influence of governments which lead to an inefficient use of resources. Inefficient pricing practices owe their existence to a lack of competition. Effective competition eliminates or reduces the scope for firms to price inefficiently, and has the added outcome of promoting efficient production practices. This applies to all goods and services, whether or not they are exported.

The role for governments in promoting efficient pricing therefore is to encourage effective industry competition. The higher the level of domestic or foreign competition, the less discretion producers have to price inappropriately. It follows that government actions should be directed at removing impediments to competition and promoting reforms that will allow greater competition.

Of prime concern to this inquiry are impediments to competition that stem from government interventions, such as statutory marketing arrangements in the agricultural sector. Other government influences include those that bear generally on the degree of competition such as the costs of domestic transport, and tariffs or similar measures that influence the price of overseas products. Additionally, there are influences arising from legislation such as *the Trade Practices Act and the Prices Surveillance Act.*

Each of these factors is discussed in this chapter.

4.1 Statutory marketing arrangements

A wide range of products are covered by statutory marketing arrangements. At the Commonwealth level there are statutory marketing authorities (SMAs) for dairy products, dried fruits, honey, meat, tobacco, wheat, wine and brandy, and wool. There are also some 90 State SMAs covering a wide

range of commodities. A full list of SMAs is shown *in Statutory Marketing Arrangements for Primary Products* (IC 1991a, pp. 173-93).

Governments established SMAs to regulate the marketing of particular primary products. SMAs generally have powers such as the ability to set prices, license producers and compulsorily acquire produce.

In regard to the Queensland Sugar Corporation, CSR Limited (Refined Sugars Group) stated:

> The Corporation is a monopoly seller of Queensland raw sugar on the domestic market. ... Because of the compulsory acquisition powers of the Corporation, CSR and Bundaberg refineries are precluded from sourcing raw sugar directly from their own mills and thus from having vertically integrated milling/refining operations like those in NSW (sub. 4, p. 1).

The Australian Tomato Processors Association submitted that the Tomato Processing Industry Negotiating Committee (established under the Tomato Processing Industry Act 1976) sets tomato prices in Victoria above competitive levels, claiming that:

> This Act, which relates only to tomatoes grown and processed in Victoria, fixes not only the prices paid to growers in Victoria but also, in practice, determines the price Victorian processors pay for tomatoes bought in other States...[and]... negotiated price levels [are] substantially above world price levels (sub. 48, p. 5).

AUSTRADE examined changes over a five-year period in the proportion of product exported at various stages in the value-adding chain. It made the observation that:

> ... the sector where most statutory authorities exist (or have existed) to influence domestic raw material prices, is exactly that sector - the food sector - which has undergone little change in the value adding export structure. On the other hand, the mining and metals sector, where institutional influences on raw material pricing are fewer, has demonstrated an already clear trend to value adding exports (sub. 70, p. 3).

In the case of sugar, the Queensland Sugar Corporation justified being regulated as the single seller of Queensland raw sugar (comprising some 75 per cent of domestic sales) as follows:

> The world sugar market is dominated by a few large and powerful trade houses. Moreover, the domestic market for raw sugar is heavily concentrated on the buying side - almost 90 per cent of the Corporation's domestic sales are to one buyer, CSR Limited. The statutory marketing arrangement enables the Queensland Sugar Corporation to counter the market power of traders and other large buyers that are customers for Queensland raw sugar (sub. 22, pp. 6, 7).

The Commission recently examined the efficiency of statutory marketing arrangements. It concluded that giving powers of compulsion to SMAs (enabling producers to exercise domestic market power) generally reduces, rather than improves, the efficiency of resource use:

> Statutory marketing arrangements significantly raise domestic prices to users of many agricultural products. These price increases are transferred to producers by increasing the prices they receive. ... Through their effects on prices, statutory marketing arrangements alter quantities and qualities of commodities produced and used, and this in turn gives rise to changes in the values of resources and the efficiency of their use (IC 1991a, pp. 75-77).

The Commission found that the greatest efficiency gains are potentially available from modifying or terminating those arrangements where domestic price effects are greatest, and those that control marketing outlets, prices or production. The evidence before this inquiry supports that finding.

The Commission considers that, where industry specific interventions impede competition, steps should be taken to remove such impediments. The Federal Government has already moved in this direction in a number of areas (eg deregulation of the domestic marketing of wheat, abolition of the reserve price scheme for wool and removal of the price equalisation scheme for the dried vine fruits industry). Most remaining areas are within the province of State Governments. Some progress has been made (eg removal of price fixing controls on wine grapes and some citrus industries in Victoria) and a number of State Governments are currently undertaking reviews of their SMAs.

The Commission's report on its separate inquiry into the Australian sugar industry (IC 1992) recommends the deregulation of the industry which, apart from achieving the structural improvements outlined in that report, should encourage more efficient pricing practices.

4.2 Government provision of goods

Involvement by government in the provision of goods can also limit the degree of competition. The supply of timber is one example, with virtually all of Australia's native forests and the majority of plantations in public ownership.

In its case study into pulpwood (see appendix E), the Commission found that more recent approaches to pricing by State forestry authorities are generally consistent with efficient pricing principles. However, it was not possible to relate prices to costs. Pulpwood forms part of the broader forestry and timber industry and the Commission has not endeavoured to determine an appropriate operating environment for the industry. This task has been before the Resource Assessment Commission which has recently presented its final report to the Government.

Should forestry authorities remain as government business enterprises (as is currently the case in a number of States), the Commission considers that they should be subject to the *Trade Practices Act*. The Commission has discussed application of the *Trade Practices Act* to government authorities and businesses in a number of its recent reports; for example, on statutory marketing

arrangements for primary products (IC 1991a), energy generation and distribution (IC 1991b) and rail transport (IC 1991c).

The Commission has examined the issue of the public provision of goods (as well as services) in a number of recent inquiries (such as those mentioned in the previous paragraph). The underlying conclusion of these inquiries was that the monopoly powers generally associated with such provision are conducive neither to efficient production, nor to efficient pricing. In each case, the recommended course of action was for changes that would allow a greater measure of competition in the provision of the good or service or, if that was not possible, to put the operation on as commercial a footing as possible.

4.3 Tariffs

Many raw materials already have low or zero tariffs. In respect of the remainder, virtually all rates are scheduled to be phased down to 5 per cent by 1 July 1996. Exceptions are sugar, tobacco and certain vegetable and dairy products, for which tariff rates are being phased down more slowly.

Lowering tariffs reduces the wedge between export and import parity prices and hence the extent to which producers can raise domestic prices above export parity levels. The Commission's study into feedstock for steel pipe and tube (see appendixÿD) concludes that, while BHP Steel is currently pricing below import parity to win additional orders, it may not have the same incentive to do so in more buoyant economic conditions. Lowering tariffs, and making overseas shipping, ports and waterside services more efficient, reduces the scope for domestic firms to depart from efficient practices.

4.4 Anti-dumping

Anti-dumping actions provide Australian raw material producers with protection from `dumped' imports, that is, imports priced below their normal selling price in their country of origin and which injure (or threaten to injure) local producers.

There was a significant increase in the number of anti-dumping investigations initiated in 1990-91 compared with the preceding five years. The chemical and petroleum products industries accounted for nearly 60 per cent of cases initiated in 1990-91.

A number of submissions referred to the misuse by raw material suppliers, particularly in the chemical industry, of the anti-dumping process. It was claimed that the process is being used as a means of maintaining high prices of raw materials to the detriment of user industries' international competitiveness. As tariffs continue to decline and competitive pressures increase, the incentive for firms to instigate anti-dumping action may be expected to rise.

In its 1989-90 Annual Report, the Commission (IC 1990a, p. 217) commented:

> ... whenever anti-dumping action is taken, domestic producers are necessarily protected from import competition. While the system benefits a select few, as with all forms of protection, it imposes costs on other Australian industries and consumers.

The recent inquiry of the Senate Standing Committee on Industry, Science and Technology (1991) had its focus on 'quicker, cheaper and easier' access to the anti-dumping system for domestic industries. In the Government's response on 5 December 1991, Senator Button made the point that:

> Although the [Anti Dumping] Authority is independent, its Act requires it to have regard to the Government's intention that anti-dumping duties should not be a substitute for assistance to import competing industry in Australia. Nor should they be used to shield industry from the need to adjust to changing economic conditions (Minister for Industry, Technology and Commerce 1991).

The Commission agrees that the anti-dumping process should not be used as a substitute for assistance to import-competing industry in Australia.

4.5 Trade Practices Act

Anti-competitive or restrictive trade practices in Australia are regulated by the provisions of Part IV of the *Trade Practices Act.* Section 49 of Part IV of the Act prohibits a supplier from practising price discrimination between purchasers of like products (those of the same grade or quality) if this results in a substantial lessening of competition, either from the magnitude of the price discrimination or the risk of such behaviour reoccurring. Price discrimination is not prohibited where it has a pro-competitive effect, is undertaken to match the price of a competitor, or is reasonably related to the cost of supply.

As discussed earlier, in markets that are not fully competitive, efficient pricing of raw materials requires that a supplier be able to price discriminate. Section 49 may inhibit raw material suppliers from adopting such an approach for fear of contravening the Act. The Trade Practices Commission advised that section 49 has been little used in the past and that, while there may be some scope for dealing with anti-competitive price discrimination under section 46 of the Act, this is not precisely defined and remains largely untested. The *New Zealand Commerce Act 1986* does not contain a specific prohibition of price discrimination, and therefore relies on its equivalent to section 46 to regulate this practice.

Section 46 prevents a corporation with a substantial degree of market power, either as a supplier or consumer of a product, from using this power to undermine competition in any market. The provision covers conduct designed to:

- eliminate or substantially damage a competitor in that or another market;

- prevent the entry of a person into that or another market; or

- deter or prevent competitive behaviour in that or another market.

Thus, any firm with a substantial degree of market power would contravene section 46 if it used that power either:

- as a seller to charge different prices to different buyers; or

- as a buyer to extract concessions from a seller;

in order to achieve any one of these three proscribed purposes.

In comparison with section 49, the application of section 46 to price discrimination is broader in some ways and narrower in others. Whereas section 49 applies only to the activities of sellers, section 46 applies to the activities of both buyers and sellers. However, unlike section 49, it is not enough to establish price discrimination and a resultant substantial lessening of competition: the intent to achieve one of the proscribed purposes also must be proved.

It has been argued that the requirement to prove intent or purpose considerably undermines the effectiveness of section 46, and that therefore there is a need for prohibitions of specific practices such as price discrimination.

But since the *effects* of discriminatory pricing are so often ambiguous as to whether they promote or undermine efficiency, it is the *purpose or intent* behind the actions that confers the offensive element of any alleged misuse of market power. The proscribed purpose is more difficult to establish and places a higher burden of proof on those seeking to show anti-competitive purpose.

Further, the courts in recognising the problems of establishing purpose have significantly mitigated the onus of proof. With the aid of section 46(7), there has been a willingness to draw an inference of improper purpose if, for example, there was no other feasible commercial explanation for the actions.[1] In addition, in a submission to the recent Cooney Committee Inquiry (1991, p. 86), the Attorney-General's Department suggested that any remaining difficulties with the need to prove purpose may be addressed by a rebuttable presumption of intent in defined circumstances - that is, placing the onus on the firm to show that relevant activity was undertaken for some legitimate purpose. If necessary, price discrimination could be included as one such circumstance.

In view of the inhibiting potential of section 49 to efficient pricing, the Commission questions the relevance of section 49 and concludes that consideration should be given as to how efficiency objectives and competition policy generally can best be reconciled. The expected Independent Review of the *Trade Practices Act*, which was agreed to by State Premiers in November 1991, provides an opportunity for this to occur.

1 *Queensland Wire Indurtires Pty Ltd V Broken hill Pty Co Ltd, (1989)* 63 ALJR 181

4.6 Prices Surveillance Authority (PSA)

A major statutory function of the PSA is to consider notifications of proposed price increases from companies declared under the *Prices Surveillance Act*. The key criteria in the Government's selection of companies for declaration are the lack of effective competition and the pervasiveness of industries in the economy. All companies declared under the Act are required to give notice to the PSA before increasing prices of notified goods and services. BHP Steel, for steel mill products, is one of these companies.

The Commission examined the effects of the PSA process on the pricing efficiency of feedstock for steel pipe and tube in its case study (see appendix D). It considers that the process may reduce economic efficiency in various ways. For example, if there is a capacity constraint (that is, demand is greater than supply), the process may preclude increases in prices to ration the scarce supply efficiently. Further, were it to restrain price increases by BHP Steel, the PSA process might reduce the incentive for entry into the supply of feedstock by other firms. In addition, there are always administrative and compliance costs in the PSA process.

In general, competitive pressures are relied on to provide incentives for industries to produce at least cost and for prices to be competed down to this level. Australian governments have introduced policies aimed at increasing competitive pressures (eg tariff reductions) and microeconomic reforms aimed at achieving cost efficiencies. In the case of feedstock for steel pipe and tube, further pressures arise from substitute materials such as aluminium, wood and plastic.

Even if there were considered to be benefits from the PSA process, the test must be whether the gains exceed the costs of intervention. In view of the potential drawbacks of the PSA process, and the increased competitiveness in BHP Steel's operating environment, the Commission concludes that consideration should be given to discontinuing the surveillance of feedstock prices by the PSA. In its submission responding to the Draft Report, the PSA said it:

> ... agrees that the continuing relevance of surveillance needs to be reassessed, for example, in the light of changes in industry competitiveness as a result of tariff reductions (sub. 82, p. 13).

The Commission notes that other raw materials (eg some other steel, petroleum products, premixed concrete, cement, float glass) are also subject to PSA surveillance. Pricing issues in respect of these materials were not generally raised during the inquiry. While the NSW Government's Office of Energy suggested that the Commission might examine various aspects of the oil industry (including price determination) as part of this inquiry, the Commission only received comments on the Petroleum Resource Rent Tax (see below) and decided not to undertake a more detailed study of the oil industry.

4.7 Petroleum Resource Rent Tax (PRRT)

As explained more fully in appendix G, a number of inquiry participants criticised the recent move to a PRRT for Bass Strait petroleum in respect of its application to natural gas and ethane. While generally not opposing the concept of a PRRT replacing excise and royalty, natural gas and ethane users argued that the producers should bear the burden of the PRRT and that its incidence on customers should be no higher than the previous royalty.

A resource rent tax obtains for the community all or part of any 'above-normal' profits earned by producers as a result of being granted access to a public resource. It is not intended to be, nor should it be regarded as, an impost to be passed on. If, however, producers are able to pass on the PRRT in order to maintain previous profit levels, they are clearly exercising monopoly power and there is in fact scope for those producers to increase prices to their customers regardless of whether a resource rent tax is in place.

In the Commission's view, the PRRT should be a more efficient means of generating a community return than the system it replaced. As such, it could be expected to lead to greater economic efficiency and a better use of resources.

The impact on users of the switch to a PRRT cannot be assessed at this stage as the question of its pass-on to users and related matters are still subject to negotiations between the parties involved.

4.8 Other government interventions

Governments can increase competitive pressures on raw material producers by improvements in Australia's internal transport system - be this road, rail or coastal shipping. Prices may differ between localities because of transport costs involved in getting goods to markets. Reducing such costs should mean that those raw material producers which enjoy geographic monopolies as a result of high transport costs between regions will have their ability to influence price reduced. Examples of industries characterised by a number of geographically dispersed suppliers include copper refining and forestry. Governments have begun reforms to improve Australia's internal transport system, but there is a long way to go.

In addition, competition from overseas suppliers can be enhanced by reducing the cost of importing raw materials. While this would not necessarily result in changed import levels, the lower cost alternative will apply competitive pressure on domestic producers. Import costs can be reduced by increasing the efficiency of shipping to Australia, and of port operations. Ocean freight and handling charges are generally a relatively high proportion of the value of raw materials and can act as a significant barrier to import competition. Initiatives have been taken to increase the efficiency of shipping and the waterfront, and the need now is to press ahead.

The Commission considers that governments should not introduce industry-specific measures likely to detract from an industry's ability to set prices on a commercial basis. In particular, governments should not attempt to keep domestic prices artificially low in order to encourage further processing in Australia. A comment by the Australian Molasses Pool has broader application:

> [The Pool] operates in a free market with no government controls, intervention or assistance and we firmly believe it should continue to operate in this environment. For either the Federal or State Governments to pass legislation which effectively attempts to control price, would cause interference with market forces and either the producer or consumer would be adversely affected (sub. 53, p. 4).

Apart from raw material prices, the competitiveness of value-adding industries is influenced by many other factors. Many submissions referred to them, often adding that they were of greater significance. For example:

> The NSW Government recognises that other factors such as power costs, transport costs, infrastructure costs, industrial relations and environmental considerations can be equally as important in influencing the extent of secondary processing in Australia (NSW Government sub. 61, p. 2).

> ... [the fasteners industry] has no control over the pricing of raw materials nor over the significant range of other imposts on industry - notably, payroll tax, workers' compensation premiums and administration, annual leave loading, superannuation, occupational health and safety requirements, work practices, tax rates, transport costs, delays on the waterfront (particularly in Melbourne) and electricity pricing (Fasteners Institute of Australia sub. 69, p. 2).

> It has been argued that Australia should be more heavily involved in further processing of raw materials and that the current price of those raw materials is an impediment to such developments. In contrast, it is the view of CRA that the major impediments to further processing lie in some of the negative ingredients of the Australian economy namely: work practices, industrial stoppages, construction costs and coastal shipping charges (CRA sub. 25, p. 14).

This inquiry, together with other work undertaken previously by the Commission, serves to confirm that such factors are of far greater significance than the domestic pricing of raw materials in determining whether more value-adding is going to occur in Australia.

APPENDIX A: RAW MATERIALS - SELECTED STATISTICS

This appendix provides information on Australian commodities. As a guide to the raw materials that fall within the scope of the reference, the Commission utilised the commodity listing provided in ABARE (1990a). The main commodity groupings are livestock, grains and oilseeds, other crops, horticulture, fisheries, forest products, energy, and minerals. Available information is shown in table A1 and key points are highlighted below.

Australian production

In 1989-90, the value of production of these commodities totalled about $54 000 million, which represents about 15 per cent of Australia's gross domestic product. In terms of their contribution to total production value, most commodities contributed well under 5 per cent. In order of significance, commodities that contributed 5 per cent or more were coal (12 per cent), wool (11 per cent), meat (10 per cent), crude oil (8 per cent), alumina (7 per cent), natural gas (6 per cent), gold (6 per cent), wheat (5 per cent) and aluminium (5 per cent). In total, these commodities represented nearly 70 per cent of total production value.

Exports

Exports of raw materials were valued at around $36 000 million or 67 per cent of the total value of raw material production in 1989-90. Australia's major export earners were coal (16 per cent of total exports by value), wool (12 per cent), meat (7 per cent), alumina (7 per cent), gold (7 per cent), wheat (7 per cent), iron ore (6 per cent) and aluminium (6 per cent). Together, these commodities represented about 68 per cent of the total value of exports.

Significance of Australian production

Domestic production as a proportion of world production is low for most of the commodities. The few exceptions are mineral sands (48 per cent), bauxite (42 per cent), diamonds (41 per cent), alumina (33 per cent) and wool (33 per cent). Of less significance are lead ore (20 per cent), zinc ore (17 per cent), uranium (12 per cent), iron ore (11 per cent) and gold (10 per cent).

Table A1: **Australian commodities - selected statistics, 1989-90**

Commodity		*Value of Production ($million)*	*Value of exports ($million)*	*Domestic production as a proportion of world production (per cent)*
LIVESTOCK				
Wool		6142	4298	32.7
Meat		5416	2728	na
Dairy products		2180a	682	na
GRAINS & OILSEEDS				
Wheat		2838	2420	2.6
Coarse grains		1102	635	0.9
Rice (paddy)		135	179	0.3
Oilseeds		179	42	0.4
Grain legumes		335	202	2.3
OTHER CROPS				
Sugar		1403	1050	3.5
Cotton		568	540	1.8
HORTICULTURE		1414b	308c	na
FISHERIES		776	628	na
FOREST PRODUCTS		517	396	na
ENERGY				
Coal		6550d	5840	4.7
Crude oil		245	990	na
Natural gas		3364	334	na
Uranium		303	76	12.0
MINERALS				
Aluminium	- bauxite	na	na	42.3
	- alumina	3599	2696	33.3
	- aluminium	2830	2112	6.3
Copper	- ores & concentrates	296	187	na
	- refined	919	479	2.9
Gemstones	na	467	40.7	de
Gold	- ores & concentrates	na	na	na
	- refined	3355	2601	10.3
Iron ore	- ore & concentrate	2429	2150	11.2
	- pig iron	na	748f	na
	- crude steel	na	na	0.8
Lead	- ores & concentrates	283	75	20.0d
	- bullion	227	212	na
	- refined	203	160	4.5
Manganese		291	222	8.0
Mineral sands		625	554	48.3
Nickel (refined)		385	880	7.3
Salt		141	121	3.4
Silver	- mine	na	na	7.8
	- refined	86	6	na
Tin	- mine	87	81	4.7
	- refined	6	2	na
Zinc	- mine	519	667	17.0
	- refined	679	497	5.3
ALL		54427	36465	

a: milk only
b: ABS Cat. No. 7503
c: ABS Cat. No. 5424
d: ABS Cat. No. 8405 for the year 1988-89
e: diamonds only
f: iron and steel
na: not available

Source: Based on ABARE (1990a) unless otherwise indicated

APPENDIX B: INQUIRY PROCESS AND PARTICIPANTS

Following receipt of the reference in May 1991, discussions were held with a range of interested individuals, companies and organisations (see list B1).

Submissions were invited through national press advertisements, and an issues paper was released to assist inquiry participants in the preparation of their submissions. Seventy submissions from fifty-nine participants were received. Public hearings were held in Melbourne on 8 and 9 October 1991 to allow discussion and elaboration of submissions.

Following the release in February 1992 of a draft of this report, a further twelve submissions were received. A public hearing to discuss the draft was held in Canberra on 19 March 1992.

List B2 shows participants who The studies into refined copper, steel pipe and tube feedstock, and pulpwood required specific information beyond that provided in submissions. Much of this information was provided on a confidential basis. Firms that participated in each of the studies are listed in an attachment to the respective studies (shown at appendices C, D and E).

List B1: Individuals, companies and organisations with whom discussions were held

Alcoa of Australia Limited

Atco Controls Pty Ltd

AUSTRADE - Australian Trade Commission

Australian Bureau of Agricultural and Resource Economics

Australian Chamber of Manufactures

Australian Mining Industry Council

Australian Paper Manufacturers

Australian Petroleum Exploration Association Limited

BHP Steel

Bunge (Australia) Pty Ltd

Bureau of Industry Economics

Coca-Cola Amatil Limited

Confectionery Manufacturers of Australia Limited

CRA Limited

Crane Enfield Metals Pty Ltd

CSR Softwoods

Department of Industry, Technology and Commerce

Department of Primary Industries and Energy

Enterprise Metals (Division of CRA)

IBM Australia Limited

Kimberly-Clark Australia Pty Ltd

Metal Manufacturers Ltd

Metal Trades Industry Association of Australia

M.I.M. Holdings Limited

MM Metals

National Association of Forest Industries Ltd

Nestle Australia Limited

Pulp & Paper Manufacturers Federation of Australia Ltd

Resource Assessment Commission

Southern Copper Limited

Toby International Holdings Ltd

Trade Practices Commission

List B2: Participants who made written submissions to the inquiry

	Submission number
AGL Gas Companies and AGL Petroleum Limited	16
AGL Gas Companies	56, 76
Alcoa of Australia Limited	10
Altona Petrochemical Company Ltd*	2, 49, 75

Armstrong-Nylex Pty Ltd	14
Associated Pulp and Paper Mills	27, 35
Atco Controls Pty Ltd*	42
AUSTRADE - Australian Trade Commission	8, 70
Australian Dairy Industry Council Inc.	39
Australian Electrical and Electronic Manufacturers' Association Limited	64
Australian Forging Group	46
Australian Lot Feeders' Association*	33
Australian Molasses Pool	53
Australian Newsprint Mills Limited*	40, 58, 78
Australian Petroleum Exploration Association Limited	13
Australian Synthetic Rubber Co. Ltd	60
Australian Tomato Processors Association	48
Australian Wheat Board	21
Australian Wood Panels Association*	29, 73
B T R Nylex Limited	28, 41, 79
BHP Steel*	6
Chemplex Australia Limited*	20, 65, 80
Commercial Polymers Pty Ltd	62
CRA Limited*	25
CSR Limited (Refined Sugars Group)	4
Department of Conservation & Environment (Victoria)	51
Department of Primary Industries and Energy	37, 50
Dickinson, Sir Ben	15, 72
Esso Australia Ltd	11, 54
Extruded Metals Pty Ltd*	45
Fasteners Institute of Australia	69
Forestry Commission of NSW	68
Forestry Commission Tasmania	67
Gadsden Rheem Packaging Group	18

Gas and Fuel Corporation of Victoria	57
Harnischfeger of Australia Pty Ltd	38
Henderson D & R Pty Ltd	+
Hoechst Australia Limited	66
ICI Plastics	52
Incitec Ltd	44
Laminex Industries*	74
M.I.M. Holdings Limited*	9, 59, 71
National Association of Forest Industries Ltd	36
Neumann Associate Companies Pty Ltd*	19
NSW Government	61
NSW Forest Products Association Ltd	5
Orlando Wines Pty Ltd	34
Palmer Tube Mills Limited	24
Portland Development Committee Incorporated	3
Prices Surveillance Authority	82
Queensland Government	17
Queensland Stockfeed and Grain Users' Association	31
Queensland Stockfeed Manufacturers' Association	30
Queensland Sugar Corporation*	22, 47, 81
Richardson Pacific Ltd	1
Shell Chemical (Australia) Proprietary Limited	55
Smorgon Flexipack	12
Tasmanian Government	26
The Institute of Steel Service Centres of Australia Inc.	7
The Victorian Gas Users Group*	32
Tubemakers of Australia Limited*	43
Tycan Australia Pty Limited	23, 77
Wine Grapes Marketing Board	63

* Appeared at the public hearing
\+ Oral submission at Canberra hearing

APPENDIX C: THE PRICING OF REFINED COPPER

CONTENTS

Attachments

Figures

Boxes

This appendix examines the pricing of Australian refined copper (ie high-grade electrolytic cathode copper). It aims to provide insights into factors that influence such pricing, and the effects on users of refined copper and the economy generally.

Domestic users of refined copper have complained in the past, and did so during this inquiry, about the high domestic price of Australian refined copper compared with its export price.

The study is based largely on information provided in response to a questionnaire sent to the major refiners and a number of significant users of refined copper. Respondents are listed in attachment C1. As much of the data submitted is of a confidential nature, it could be reported only in general terms.

C1 Market characteristics

World production of refined copper is approaching 9 million tonnes per annum, of which Australia's output is around 300 000 tonnes (or about 3 per cent). The world's largest producers are the United States, Chile and Japan, which between them account for about half of the world's production.

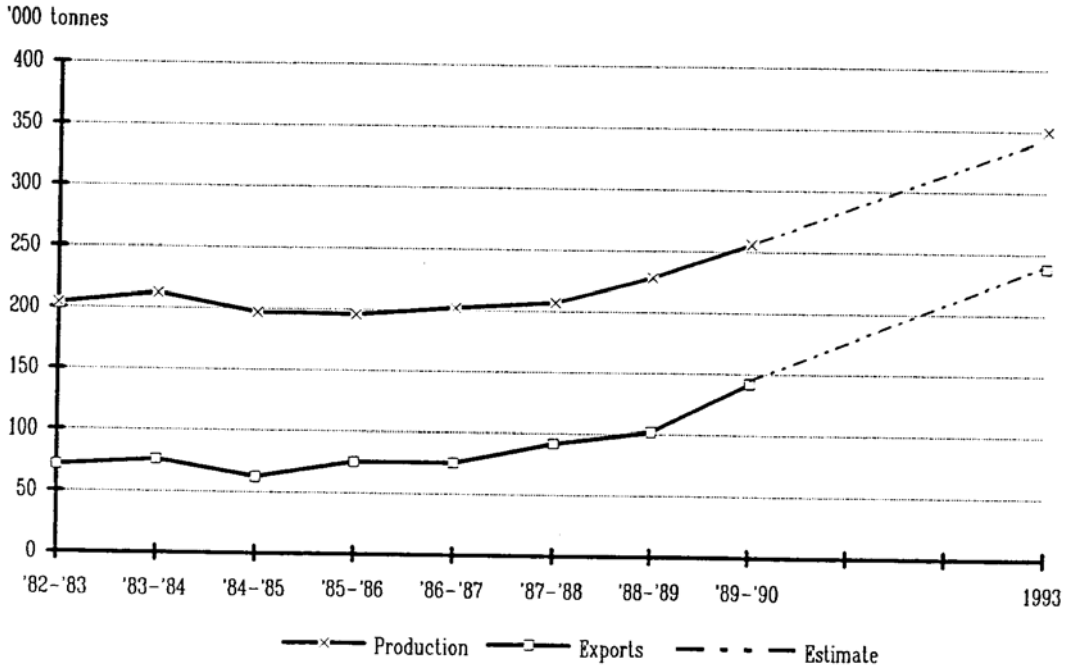
Australia's output of refined copper comes from four producers. They are M.I.M. Holdings Limited (MIM), by far the largest of the local refineries with about 65 per cent of Australia's annual output, followed by Southern Copper Limited (SCL) and Olympic Dam Pty Ltd (each with about 15 per cent) and Gunpowder Copper Ltd (less than 5 per cent).

Domestic production of refined copper is expected to increase to around 350 000. MIM sub. 9, p. 2] A major influence on this expansion is SCL's current doubling of capacity to 80 000 tonnes per annum.

Australia's copper refineries are geographically dispersed and, with the exception of SCL at Port Kembla, are distant from the main domestic markets of Sydney and Melbourne. MIM's refinery is located at Townsville, Olympic Dam's operation is about 500 km north of Adelaide in South Australia, while Gunpowder Copper is located in Queensland near Mt Isa.

A major and growing proportion of Australia's production of refined copper is exported. In 1989-90, the proportion was 55 per cent, an increase from 35 per cent in 1982-83 (see figure C1). With completion of the refinery expansion programs, some 65 per cent of domestic production is expected to be exported by 1993. MIM and Olympic Dam each export over half of their production. SCL intends to export most of its additional production.

Figure C1: **Australian production and exports of refined copper, 1982-83 to 1989-90, and estimate for 1993**



Source: ABARE 1990a and Commission estimates.

Australia's main export markets in 1989 were the United Kingdom (35 per cent of total refined copper exports), other European Community countries (31 per cent) and Japan (28 per cent) (see attachment C2, table C2). The Commission understands that since 1989, Europe's importance as an export destination has declined relative to that of Japan and other East Asian countries.

Domestic consumption of refined copper stood at 129 000 tonnes in 1989-90, which was little different from levels in the preceding seven years. Virtually all demand has been met by domestic refiners, with low, sporadic imports of refined copper (see attachment C2, table C3).

The main influence on the demand for refined copper is the level of activity in user industries, such as electricity generation and distribution, electrical component production, general and industrial engineering, and building and construction. According to MIM, domestic consumption has fallen significantly since 1989-90, and is estimated at 100 000 tonnes for 1991-92. The decline is attributed to the closure of a major copper user as well as a depressed Australian economy during this period. MIM considers growth prospects are limited because of Australia's declining

manufacturing base and the reduction in Australia's tariff barriers on manufactured goods containing copper.

C2 Pricing

C2.1 Pricing practices

International pricing

The common benchmarks for copper pricing around the world are the London Metal Exchange (LME) and the Commodity Exchange of New York (COMEX) quotations. LME quotations are the basis of Australian pricing. (COMEX quotations are directed more to the United States domestic market, although they are closely related to LME quotations).

LME prices (in pounds sterling) are established and published daily. They relate to the copper shape known as Grade A electrolytic cathode copper, and are on an ex-LME warehouse basis. LME copper warehouses are situated at a number of European ports and in Singapore.

In addition, it is usual for producers of high-grade refined copper which have their brands registered with the LME or COMEX to charge a 'brand premium' to reflect, among other things, quality above the LME standard. For 1991, the premium was 15 pounds sterling, or around $A35.

LME prices fluctuate considerably, even on a daily basis. Over the twelve months to August 1991, the LME price (in Australian dollars) ranged from a low of about $2800 to a high of $4200, and averaged around $3200.

Domestic pricing

MIM, Australia's largest copper refiner, establishes a daily 'MIM Australian price' for refined copper which closely reflects the daily LME quotation plus brand premium. Apart from being in Australian currency, the MIM Australian price differs from the actual LME quotation plus brand premium in two respects.

The first is that it includes a premium for customers who buy on a spot basis. Those customers who are prepared to enter into annual contracts are offered rebates or discounts. The company stated that contracts, which specify monthly delivery quantities, benefit users by assuring supply while assisting MIM's production planning.

The second difference is that the LME quotation is adjusted by a formula designed to smooth the volatility in the LME price. The formula involves a moving ten-day average of the LME quotation, with the MIM price only being changed in discrete steps to avoid minor daily fluctuations. MIM

advised that this approach is discussed periodically with its customers, which to date have not sought any change in the approach.

The domestic price is further smoothed by the practice of charging for sales in a particular month at the average of daily MIM Australian prices for that month.

The close relationship between the LME and MIM's Australian price is evident from figure C2. Because MIM prices include both the brand and spot sales premiums, these above the LME prices except where large upward price movements on the LME cause MIM's moving average price to lag the LME price.

Sales are on an ex-refinery basis, with purchasers meeting the cost of transport from the Townsville refinery to their own works. This cost averages about $60 to $80 per tonne for users in the Sydney and Melbourne markets.

Payment terms are generally seven days from the date of loading at Townsville.

SCL uses a pricing basis similar to that of MIM but stated that it charges a further premium of about $45 per tonne to reflect its proximity to the main user markets. The two remaining copper refiners are understood to set prices to be competitive with MIM on a delivered basis. SCL stated that:

> The large integrated mining/smelting/refining operations located in Queensland and in South Australia are the price setters in the Australian refined copper market, with SCL as a price follower (sub. 25, p. 14).

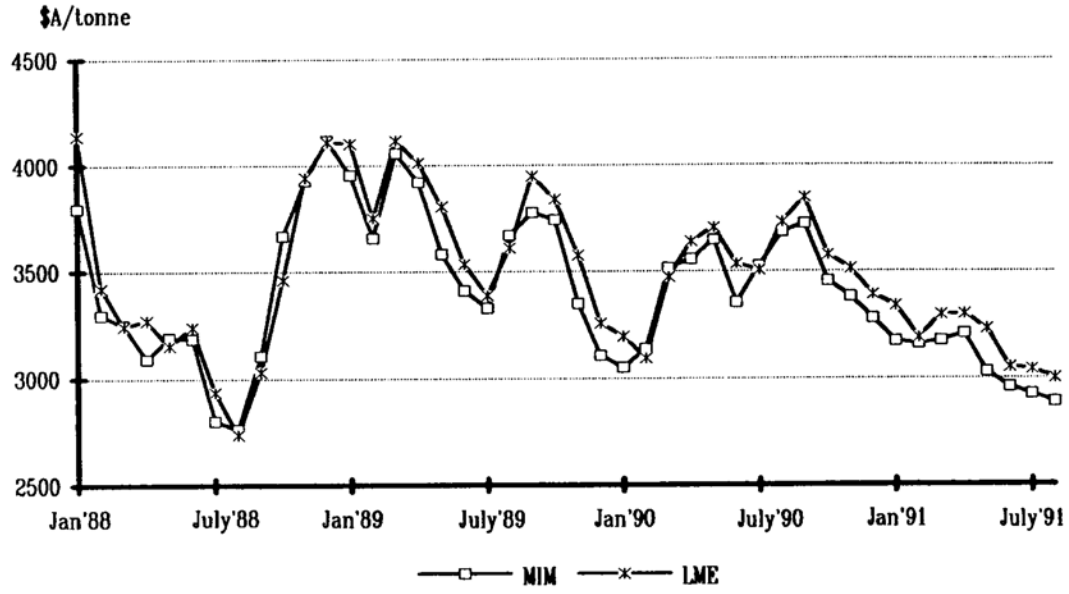
Cost-into-store information supplied by users which source from each or a number of the local refineries clearly shows prices being set so that the delivered cost of refined copper to the buyer is virtually identical, irrespective of the domestic source. Users expressed a preference for sourcing from a number of suppliers to minimise risk of supply disruption.

Export pricing

Australia's copper refiners are unable to influence the world price because of their small role in world copper trade. As noted earlier, the benchmark price for international sales is the LME quotation plus brand premium. Sales in the export market are on a 'delivered overseas port' basis so that for sales delivered to LME designated ports, the Australian refinery price (ie at the point comparable to that of domestic sales) is the LME quotation plus brand premium, less costs associated with transporting from refinery to the overseas port.

For export markets not in close proximity to LME designated ports (such as North Asia), the price of export sales can be higher than indicated by the above calculation. A transport premium, over and above the LME price plus brand premium, can be obtained in such markets reflecting their remoteness from an LME warehouse port.

Figure C2: **LME and MIM Australian prices for refined copper, monthly averages for January 1988 to August 1991**



Source: MIM

Payment terms range from payment at the time of loading to about 30 days, depending on the export destination.

Pricing practices are summarised in box C1.

Box C1: Refined copper pricing practices - summary

- Internationally, the pricing of refined copper is substantially institutionalised, being based on the daily quotations of the LME or COMEX (for North America). Producers of high-grade refined copper charge a `brand' premium.
- Australia's price leader, MIM, bases domestic prices on a `smoothed' LME quotation plus brand premium. The price is `ex-refinery' and payment terms are seven days.
- At a comparable point (refinery gate), the export price of Australian refined copper is the LME quotation plus brand premium, less the cost of transport from the refinery to the overseas port. Payment terms range from at the time of loading to about 30 days, depending on the export destination.

C2.2 Prices

A number of aspects of domestic refiners' prices are of particular interest.

Pricing flexibility

The first relates to the degree, if any, of flexibility adopted in the prices charged.

MIM does not offer volume discounts on refined copper sales. For copper used in products destined for export, the company offers customers the option of buying on a direct conversion of the LME monthly average price instead of the LME formula-based Australian price. MIM advised that a number of large customers exercise this option. However, a number of users stated that this approach was of little consequence. For example, the Australian Electrical and Electronic Manufacturers' Association Limited (AEEMA) said it was not aware of any of its members taking up this offer, and that "... all members who purchase from MIM have attempted without success to negotiate lower prices" (sub. 64, p. 2).

MIM stated that other "... pricing and currency options have been granted in order to assist customers in successfully winning export orders" (sub. 9, p. 3), and provided a confidential example of specific measures negotiated under a recent contract. Because of the nature of the measures, it is difficult to assess their value to the buyer. With regard to the Japanese and South East Asian markets, Tycan Australia Ltd stated that it "... can confirm MIM's preparedness to assist in pricing relating to the penetration of these export markets" (sub. 77, p. 1).

The Commission understands that SCL provides price rebates for fabricated copper exports. As the company is seeking export markets to absorb production from its expanded capacity, this practice provides an indirect approach to building up export sales.

The extent to which copper suppliers are able to offer discounts largely depends on the difference, if any, in prices being obtained between the export and domestic markets.

Domestic and export price comparison

Specific information on the relationship between export and domestic prices was not provided by inquiry participants, but the Commission has made its own broad estimates.

Using MIM's pricing policy as an assessment, it appears that the export price would be lower than the domestic price at a comparable point of sale. This is because, ignoring the 'smoothing' of domestic prices, MIM sells in both markets at the LME quotation plus brand premium. However, as export sales are on a 'delivered overseas port' basis, its nominal export price needs to be reduced by the cost of transport from the Townsville refinery to the overseas port (resulting in its 'export

parity' price). This cost will vary depending on the overseas destination and shipping arrangements. For the purposes of the assessment, an average of $60 per tonne has been used.

In some overseas markets (eg North Asia), copper exporters are able to obtain a transport premium because of the remoteness of those markets from LME ports. Such premiums, which the Commission understands to be $20 to $30 per tonne, would reduce the estimated gap between domestic and export prices. Having regard to the destination of MIM's exports, the Commission estimates that the $60 per tonne difference referred to above would reduce, on average, to about $50 per tonne.

A further consideration in making comparisons of this nature is the need to ensure that like products are being considered. MIM's electrolytic copper cathode is a homogeneous product and hence any differences in the domestic and exported product would derive from associated services such as payment terms, the provision of technical advice or refinery stockholding costs.

Factors such as these act both to increase and decrease initial estimates of differences between export and domestic prices. For example, on average, payment terms are more favourable to overseas than domestic buyers and hence serve to increase the difference. On the other hand, the provision of technical services may well be greater to domestic customers and so would operate in the reverse direction. Domestic customers have some flexibility in departing from contracted monthly quantities thereby entailing stockholding costs for MIM; equally, however, MIM may incur financing costs while awaiting shipload quantities for export. The Commission has not attempted to assess the net impact of such factors but believes them to be relatively small.

For Australian refiners other than MIM, the difference in price between the export and domestic markets is likely to be larger than that estimated for MIM. SCL, for example, could be expected to achieve a similar export price to that of MIM but stated that it adds a premium of $45 per tonne to the domestic price of its refined copper. The extent of this price difference is evident from the following comment by MM Metals in its response to the questionnaire:

> MM Metals ultimate parent, BICC plc, purchase copper cathode from Australia and load it into their rod plant at Prescott, England at a cheaper price than MM Metals can obtain cathode into its rod plant, even from their next door neighbour Southern Copper at Port Kembla.

Olympic Dam, with its refinery remote from an export port, would incur significant costs in transporting copper from refinery to port. This effectively reduces its return from the export market, increasing the difference between comparable export and domestic prices.

In the absence of detailed information, it is difficult to arrive at a precise estimate of the price difference between the export and domestic markets for the Australian refined copper industry. Nevertheless, having regard to relative market shares of the Australian refiners, the Commission estimates this to be around $70 per tonne.

Because of the high unit value of refined copper, the estimated difference between export and domestic prices represents only a small proportion of the product's value. Assuming a price of $3000 (LME price plus brand premium), a difference of $70 per tonne represents about 2 per cent. This estimate is of the same order as that provided by AEEMA, some of whose members undertook a similar assessment in late 1990.

Domestic price limits

Another area of interest is the potential range of domestic prices, and where actual prices sit within that range.

As mentioned earlier, Australia is a small participant in world trade in refined copper and hence it cannot influence prices in the export market. The export parity price is the lower bound of the price range that domestic refiners would rationally accept from sales in the domestic market; otherwise, profits could be increased by redirecting domestic sales onto the higher priced export market.

The upper bound of the price range for the domestic market is the price at which refined copper can be imported (the 'import parity' price) plus any further margin that reflects the value purchasers place on sourcing locally (called 'local supply advantage'). One significant benefit of sourcing locally is the almost immediate availability of refined copper, thereby avoiding stockholding costs associated with sourcing from overseas. At an estimated daily financing cost of around $1 per tonne, a stockholding of two to three months supply could add in the order of $60 to $90 per tonne to a purchaser's cost of sourcing overseas. Further, AEEMA acknowledged that the quality of Australian copper is high and is one reason why Australian purchasers do not wish to source overseas.

The virtual absence of imports in recent years prevents the direct determination of an import parity price. However, it appears that the into-store price of domestic sales approximates import parity. MIM sells its refined copper at an internationally based price and the cost of transport from Townsville to the main Australian markets appears to be about the same as it would cost to ship refined copper to Australia. On this basis, the domestic price of refined copper appears to be below the maximum that could potentially be charged by the extent of the local supply advantage.

A summary of the various prices discussed above is provided in box C2.

Domestic and overseas users' copper cost comparisons

A final matter relates to the into-store cost of copper for Australian firms relative to overseas buyers. AEEMA and other participants claimed that overseas purchasers obtain refined copper at a considerable advantage over Australian firms. In contrast, MIM stated that when "... account is

taken of premiums, inventory costs and freight, MIM's domestic customers' costs of refined copper are similar to the costs incurred by copper fabricators overseas" (sub. 9, p. 4).

Box C2: Indicative relative prices of refined copper

(Prices based on an LME quotation plus brand premium, totalling $3000 per tonne)

• Export parity price, ex-Australian refinery ($3000 less $70 for cost of transport and associated charges from refinery to overseas port)	$2930
• Domestic price ex-Australian refinery for contract sales (LME quotation plus brand premium)	$3000
• Cost-into-store for domestic buyers of Australian refined copper (domestic price plus average $70 for cost of land transport)	$3070
• Import parity price (LME quotation plus brand premium, plus $70 for cost of transport and associated charges from overseas refinery to customer store)	$3070
• Cost to domestic user of importing refined copper (import parity price plus other considerations such as higher stockholding costs, estimated at $75 per tonne)	$3145

Source: Commission estimates.

Undertaking comparisons of this nature is difficult as it requires information not available to the Commission. However, some comments can be made.

Purchasers of refined copper in East Asian countries face the following costs:

- LME price plus brand premium;
- land transport from port to customer's store;
- transport premium ($20 to $30 per tonne);
- financing costs during transit; and
- stockholding costs.

By comparison, Australian purchasers basically incur only the first two components. Because of the remoteness of Australian domestic markets from most refineries, the land transport component is likely to be higher here than overseas. This may offset the remaining costs identified, in which

case the into-store cost of refined copper in Australia would be similar for buyers in East Asian countries without domestic refined copper production.

C3 Assessment of pricing

The available evidence shows that Australian copper refiners sell in the export market at lower prices than in the domestic market, by a margin of about 2 per cent. The domestic price appears to be no higher than import parity, and below what it would cost domestic users to source from overseas having regard to the advantages of local supply.

Reasons why domestic prices are below potentially achievable prices could include competition amongst domestic refiners or the price of substitute materials such as aluminium. However, an overriding consideration is likely to be the relative simplicity of following an LME-based pricing approach. Being an international approach, it is also likely to be more easily justified to customers and thus aids in overall customer relations. Acknowledgement by other refiners of MIM's price leadership role, facilitated by the publication of the daily MIM Australian price, appears to lead to a general conformity in pricing across the industry.

In broad terms, pricing is efficient if consumption approximates that in a fully competitive market, that is, when price equals the marginal cost of efficient production. For export-oriented industries the efficient domestic price is the export price, even if this is above the marginal cost of efficient production (see chapter 2 of the report).

The Commission received no information on the costs of producing refined copper in Australia. However, for homogeneous products of export-oriented industries, the export price can be a proxy for efficient marginal cost. As discussed above, current domestic prices are above the export price.

This raises the question of whether the domestic pricing practices of refiners are efficient. The answer depends on whether additional demand would be stimulated by pricing down to the export price. If additional demand were not stimulated, lower prices would simply transfer revenue from copper refiners to existing copper purchasers with no resultant improvement in economic efficiency. Responses by copper users were mixed on this aspect.

A number of users commented that a fall in copper prices alone, even in the order of 20 to 30 per cent, would have little or no effect on enhancing their export ability. Such users tended to be those for which the cost of copper is not a significant component of overall costs.

Other users, however, commented that lower prices would enable local producers to compete more effectively against imported copper-based products, and provide opportunities for greater export volumes. For such users, copper tended to represent a major proportion of production costs. Users

made little attempt to quantify the impact of lower prices, but those which did assumed price reductions of 10 per cent or more, which are very much higher than the Commission's estimates show to be potentially available.

In respect of improved domestic market competitiveness, MM Metals stated in its questionnaire response that lower prices:

> ... would in the first instance enable local copper mills to compete more effectively with imported copper products and imported alternative materials particularly as import tariffs reduce.

Another user, John Richmond Manufacturing, said that the bulk of the company's increased production over the last few years had been gained at the expense of imports, but that the remaining import share is "... very difficult for us to win, mainly due to the prices our overseas competitors purchase their raw materials". Most users provided information which showed that, for a range of their products, a significant share of the domestic market was supplied by imports. This suggests that, potentially at least, scope exists for increased value-adding.

MIM said that, although it is prepared to consider requests for assistance, it is rarely convinced that copper price reductions would enable increased value-adding. It believes that other factors, particularly import barriers in overseas markets, would prevent increased exports. Trade barriers exist in many overseas markets, particularly in Asia, the region likely to be of most interest to Australian exporters (see, for example, ABARE 1991, p. 241-53). Nevertheless, users indicate that significant proportions of domestic production are being exported, notably to Asia. Tycan Australia Ltd, for example, describes itself as "... a significant exporter of copper wire, particularly to Japan and South East Asia" (sub. 77, p. 1). Official statistics confirm that Asian countries are important export destinations, particularly for copper tube and pipe (see attachment C2, tables C4 and C5).

The Commission's analysis using its ORANI model of the Australian economy revealed that a reduction in the price of refined copper of a magnitude many times that potentially available would basically have no impact in terms of additional value-adding. The ORANI model is insufficiently disaggregated, however, to show the potential impact for specific copper fabricating activities.

The Commission also estimated the maximum potential efficiency gain that might result from reducing the domestic price of refined copper to the export parity price. Using a price elasticity of -0.5 (ie a 1 per cent reduction in price will lead to a 0.5 per cent increase in demand), the efficiency gain was estimated to be negligible, particularly compared with the revenue from domestic sales of refined copper.

C4 Non-price issues

A number of questionnaire respondents commented on factors other than the price of copper which they regard as inhibiting exports of copper-based products. MM Metals, for example, stated that factors "... inhibiting expansion of such sales by artificially adding to costs include the Australian domestic transport infrastructure, high wage rates relative to our trading partners, restrictive practices on our wharves, and non-flexible, high cost export shipping". Other factors mentioned include Australia's high exchange rate and the absence of export incentives. No indication of the relative significance of these factors as impediments to exporting was provided.

Factors such as these also have a bearing on the cost of refined copper to domestic users. Users are best able to minimise their raw material costs if they have ready access to alternative sources of supply. Minimising the costs associated with both importing and domestic transport would assist in achieving this objective.

The need to minimise internal transport costs was raised by CRA in regard to SCL's operations. Being dependent on bought-in ores for its copper production, "... it is difficult for SCL to compete for sea-borne copper concentrates from interstate sources such as Golden Grove (WA) and Thalanga (Qld) when coastal freight charges make Japan a cheaper destination than Port Kembla" (sub. 25, p. 12). Similarly, the improvement of transport services and lower costs of rail freight from mine to smelter would bring benefits to the Australian economy.

A further issue raised, though only by a few participants, related to the Federal Government's removal in early 1990 of the embargo on exports of copper-based scrap. This was said to have resulted in increased exports of scrap, leading to domestic shortages and higher prices.

The Commission considers that the use of artificial means (such as an export embargo) to reduce the domestic price of copper scrap relative to world prices is likely to reduce national economic welfare as Australia would forego the higher returns available from sales on the export market. An efficient use of resources will be promoted by domestic users of scrap basing their production decisions on prices that reflect the underlying value of their raw material inputs.

C5 Conclusions

It is rational for Australian copper refiners to sell in whatever market they can at the best possible price. Selling at a price in the domestic market above that in the export market is part of normal commercial behaviour to maximise overall profitability. Whether the pricing practices of Australian refiners are in the national interest is another question. If domestic pricing at above

export parity were to foreclose value-adding opportunities, national economic welfare would be below that potentially available.

However, this inquiry has shown that the scope for reduction in the domestic price of refined copper is small, and that the major refiner, MIM, considers the opportunities for further value-adding are limited. This is not the view of copper users, many of which see opportunities for replacing existing imports of copper-based products and building on current exports.

The Commission concludes that the most appropriate role for government is to ensure that an environment conducive to efficient pricing is promoted in which both buyers and sellers, through the pursuit of their own business interests, also further the interests of the wider economy. In the Commission's view, such an environment can best be created by ensuring maximum competition within the refined copper industry.

There are no industry specific impediments within the influence of government that limit competition in copper refining. Competitive pressures can, however, be fostered in a number of ways. One is the general phasing down of tariffs, including those on products incorporating copper. The consequent increase in competitive pressure on domestic producers of such products may erode the domestic market for refined copper, which could in turn prompt a somewhat more flexible pricing approach by copper refiners.

Further competitive pressure can be engendered by minimising the cost of importing refined copper, in areas such as shipping and port charges, while increasing the efficiency of land transport should heighten competition amongst the geographically dispersed domestic refiners. Improving the efficiency of such services increases users' access to alternative sources of supply and hence promotes not only pricing but also productive efficiency. It also reduces the cost of exporting, thereby enhancing copper fabricators' competitiveness on international markets.

As discussed in the Commission's latest annual report (IC 1991d), the Federal and State Governments have commenced the process of improving the performance of Australia's economic infrastructure. Reforms have begun in areas such as land transport, shipping and the waterfront. It is essential that the work under way in these areas be maintained and accelerated if Australia's international competitiveness is to keep pace with continuing improvements overseas.

ATTACHMENT C1: STUDY PARTICIPANTS

The following companies provided information in response to the Commission's questionnaire for this study:

Copper refiners

CRA Corporate Services (on behalf of Southern Copper Ltd)

M.I.M. Holdings Limited

Refined copper users

ACL Bearing Company

Australian Defence Industries Ltd

Australian Electrical and Electronic Manufacturers' Association Ltd

Consolidated Extrusions Pty Ltd

Crane Enfield Metals Pty Ltd

Davey Products Pty Ltd

Extruded Metals Pty Ltd

John Richmond Manufacturing

KSB Ajax Pumps Pty Ltd

MM Metals

Pirelli Cables Australia Limited

Pope Electric Motors

Rheem Australia Limited

Tycan Australia Pty Ltd

Westral Insulated Products Pty Ltd

Table C1: Australian supply, disposal and prices of refined copper, 1982-83 to 1993

Item	*Unit*	*1982-83*	*1983-84*	*1984-85*	*1985-86*	*1986-87*	*1987-88*	*1988-89*	*1989-90p*	*1993e*
Production										
Refined	kt	204	212	197	196	202	207	228	256	350
Primary	kt	173	166	166	163	171	185	211	245	
Secondary	kt	31	46	31	33	31	22	17 s	11 s	
Exports[a]										
Refined[b]	kt	71	76	62	75	75	92	102	142	230
	$Am	114	126	109	146	156	275	367	479	
Consumptionc	kt	118	123	120	119	119	123	130	129	
Prices[d]										
Refine[d]	$A/t	1606	1662	1750	1952	2127	2989	3598	3373	

a Value of metal contained in host mine and smelter products is not available separately and is included in the value of the mineral product or metal in which it is exported.
b Refinery shapes, unworked.
c Refined copper, domestic despatches and imports.
d Export unit value.
e Commission estimate.
p Preliminary.
s ABARE estimate.

Source: ABARE 1990a.

53

Table C2: Australian exports of refined copper, by destination, 1982 to 1989

(kt)

Destination	*1982*	*1983*	*1984*	*1985*	*1986*	*1987*	*1988*	*1989*
United Kingdom	9.1	33.1	27.1	34.8	29.1	29.1	33.6	43.3
Japan	4.1	0.0	15.8	16.4	24.7	28.4	37.0	34.7
European Communitya	27.2	42.5	29.1	16.7	12.6	20.5	18.0	37.8
New Zealand	0.1	0.5	0.9	1.5	0.3	1.4	1.7	3.1
Korea, Republic of	1.0	1.6	0.8	0.5	0.0	2.2	1.7	0.5
Saudi Arabia	3.2	0.0	0.0	0.5	0.0	0.0	0.0	0.0
Other	1.5	0.0	1.8	1.1	0.1	0.0	0.7	4.4
All	45.2	77.6	75.5	71.5	66.8	81.6	92.7	123.8

a Excluding the United Kingdom.

Source: ABARE 1990a.

Table C3: Australian imports of refined copper, 1988-89 to 1990-91

Year	*Quantity (tonnes)*	*Value for duty ($Am)*
1988-89	1018	3.8
1989-90	6246	13.9
1990-91	551	1.8

Source: ABS: Imports 3 - Foreign Trade Statistics on Magnetic Tape.

Table C4: Value of Australian exports of copper pipe and tube, by destination, 1988-89 to 1990-91

($'000)

Country	*1988-89*	*1989-90*	*1990-91*
New Zealand	7928	6715	6168
Singapore	3038	4605	5554
Hong Kong	2591	1665	4798
Malaysia	975	849	2746
Bahrain	1039	1603	1168
Phillipines	653	706	654
Indonesia	716	391	408
Other countries	2352	2042	1445
All	19292	18576	22941

Source: ABS, Foreign Trade, Australia, Merchandise exports, Detailed commodity tables, Cat. No. 5436.0.

Table C5: Value of Australian exports of copper wire, by destination, 1988-89 to 1990-91

($'000)

Country	*1988-89*	*1989-90*	*1990-91*
New Zealand	1476	1828	3779
Japan	-	-	1188
Hong Kong	-	96	513
Thailand	11	109	439
Malaysia	618	17	301
Korea, Republic of	-	236	287
Sri Lanka	-	-	261
Singapore	761	916	123
Other countries	258	230	119
All	3124	3432	7010

Source: ABS, Foreign Trade, Australia, Merchandise exports, Detailed commodity tables, Cat. No. 5436.0.

APPENDIX D: THE PRICING OF FEEDSTOCK FOR STEEL PIPE AND TUBE

CONTENTS

This appendix examines the pricing of feedstock used in the manufacture of steel pipe and tube. It aims to provide insights into factors that influence such pricing, and the effects on users of feedstock and the economy generally.

The study is based largely on information provided in response to a questionnaire sent to BHP Steel and the major steel pipe and tube manufacturers (see attachment D1). Much of the data received is confidential and hence this paper is written in general terms.

D1 Market characteristics

Feedstock

Steel pipe and tube is manufactured predominantly from hot rolled coil (heated steel slabs rolled to a flat coiled product) and from cold rolled coil (hot rolled coil further rolled to lighter gauges without the application of heat).

BHP Steel is Australia's only manufacturer of hot or cold rolled feedstock. It produces about 2.8 million tonnes per annum of hot rolled product in plants at Port Kembla, New South Wales and Western Port, Victoria. Purchases by pipe and tube manufacturers represent between 10 and 15 per cent of production and is supplied mainly from Port Kembla.

BHP Steel supplies virtually all of the domestic market for steel pipe and tube feedstock. Imports of hot and cold rolled coil are not recorded by end use but the company estimated that about 11ÿ000 tonnes were sourced overseas by pipe and tube manufacturers in 1990-91, which accounted for about 3 per cent of the domestic market. Sources included New Zealand, Japan, the Republic of Korea and the United States.

Imports of hot rolled coil from general sources (eg Japan, United States) are subject to a 5 per cent tariff, while those from developing country sources (eg Republic of Korea) are duty-free. For cold rolled coil the tariffs are 10 and 5 per cent for general and developing country sources respectively. There is no tariff on imports from New Zealand.

Pipe and tube manufacture

There are four main types of steel pipe and tube:

- structural pipe for use in commercial buildings, agricultural equipment, fencing, sign posts, fabricated metal products and many other uses;
- linepipe for the oil and gas industry;
- coated and cement-lined large diameter pipe for the water industry; and
- precision welded tube for the automotive and consumer durable industries.

Sales of steel pipe and tube (by tonnage) are approximately 68 per cent structural pipe, 16 per cent precision tube, 11 per cent oil and gas pipe and 5 per cent water pipe.

Tubemakers of Australia Limited (TOA), 49 per cent owned by BHP, is Australia's major pipe and tube manufacturer. It manufactures each of the four types mentioned above. It has the largest share in the structural pipe and precision tube markets and is the sole Australian supplier of the other two types. Its main plant is in Newcastle where most of its structural pipe is made. It also has plants in other States.

Palmer Tube Mills Limited (PTM) is the second largest structural pipe manufacturer. Its main plant is in Brisbane and a smaller plant is located in Melbourne. Hills Industries, located in Adelaide, manufactures welded steel tube both for its products such as clothes lines and folding beds, and for external sale. Welded Tube Mills of Australia, located in Brisbane, is a relatively small producer of pipe and tube, and Walker Australia, located in Adelaide, produces precision tube products for the automotive industry.

Only TOA has ownership links with BHP Steel.

Exports and imports of steel pipes and tubes are each equivalent to about 5 per cent of domestic sales. Exports are mostly to nearby countries such as New Zealand, Papua New Guinea and the Pacific Islands. Imports are mostly from Japan and the Republic of Korea. The tariff on steel pipes and tubes from general sources is currently 11 per cent and will become 10 per cent on 1 July 1992. Imports from developing countries have a five percentage points preference margin. There is no tariff on imports from New Zealand.

D2 Pricing

BHP Steel is unable to influence the international price for pipe and tube feedstock. Its total steel production is less than 1 per cent of world steel production and its exports are about 1 per cent of internationally traded steel. In contrast, it has scope for pricing above world prices in the domestic market because of its monopoly of pipe and tube feedstock production.

Domestic prices

BHP Steel's pricing policy for feedstock is to charge stable domestic prices. It has a published schedule of prices quoted on an ex-works basis for a 'base' product to which extra charges and discounts apply for variations in size, quantity, quality, packaging and settlement terms. For 1990-91, the base price of the most common pipe and tube feedstock (called hot rolled mill edge strip) was $544 per tonne. The variations applied to this price are outlined in box D1. The ex-works pricing basis is discussed further below.

Box D1: Summary of BHP Steel's pricing schedule for hot rolled mill edge strip

A base price of $544 per tonne applies to the following 'package': ex Port Kembla; Tubeform 200 grade; 6-8mm thickness; 781-1500mm width; order size at least 18 'Jumbo' coils; and particular strapping configuration. Extra charges and discounts for variations from the base specification include:

- additional charges for thickness and width variations range from $8 to $79 per tonne;
- additional charges of between $1 and $26 per tonne for orders less than 18 Jumbo coils (a Jumbo coil is 17.5 to 27 tonnes compared with a weight of 9 to 13 tonnes for standard coils);
- a surcharge of between $12 and $40 per tonne for higher quality grades;
- a surcharge of between $35 and $75 per tonne for product in the pickled and oiled condition, with thinner strip attracting the largest penalty;
- allowances of $2 to $4 per tonne for less than standard packaging;
- a discount of 1.5 per cent for payment within seven days in lieu of the standard 28 days; and
- a $1 per tonne discount for quarterly orders over 5000 tonnes ranging up to $19 per tonne for aggregate quarterly order volumes over 50 000 tonnes.

Source: BHP Steel, Pipe and Tube Price Schedule

The company is prepared, however, to negotiate prices on a case-by-case basis. At the initial public hearing BHP Steel said in regard to steel products generally:

> ... in essence it is a matter of us sitting down with our customer trying to arrive at a mutually agreed position in which we help him to meet whatever his competition is from offshore (transcript, p. 10);

and

> I suppose we can say that under current conditions, a very large part of our customer base is in receipt of some kind of arrangement outside of the price list (transcript, p. 11).

A major provision of negotiated prices is the payment of rebates for feedstock used in the manufacture of exported products, and rebates to offset the threat of specific import shipments of low priced steel pipe and tube. BHP Steel also indicated that it assists its customers on non-price aspects (such as frequency of supply).

The company stated that when it determines the level of export rebate, it takes into account a number of variables including the steel quality, supply requirements, the nature of the off-shore competition, the prevailing exchange rate and the volume of product purchased. Users commented

that the level of export rebate was predominantly a function of volume. The Commission understands that an export support formula is being developed by BHP Steel to replace the existing rebate system.

Surveillance of BHP Steel's domestic prices by the Prices Surveillance Authority (PSA) is likely to affect the company's pricing policy. This is discussed below.

Ex-works pricing

BHP Steel prices pipe and tube feedstock on an ex-works basis. Users pay the actual cost of freight from the mill to their factory. They have the option of paying the company to organise the transport or, like TOA in Newcastle, to arrange their own delivery. BHP Steel said its policy generally is to charge for intermediate steel products, such as pipe and tube feedstock, on an ex-works basis, and 'finished' products on a uniform capital city basis. Under the latter arrangement users in mainland capital cities, except Darwin, pay the same freight charge for delivery by the company. Thus, in terms of transport services received, users located relatively close to BHP Steel notionally pay a higher transport rate than do more remote users.

PTM is seeking damages in a legal action under section 46 of the *Trade Practices Act* for the cost disadvantage it incurs compared with TOA because of ex-works pricing of feedstock. It stated its concern as follows:

> The exclusion of the pipe and tube industry from Freight Equalisation by agreement [in 1929] between BHP and its then pipe manufacturing affiliate Stewarts & Lloyds Australia was not known to either [Australian Tube Mills] or PTM when they established their factories in Melbourne and Brisbane respectively, and neither company was aware that the price of its feed would be calculated ex-works (sub. 24, p. 14).

BHP Steel did not publish a price schedule for supply of feedstock to the pipe and tube industry until 1986 (for hot rolled coil) and 1987 (for cold rolled coil). PTM said it understands the history of pricing before then to be:

> ... BHP sold TOA its feed from its skelp mill in Newcastle free onto TOA's siding at least into the 1980's, and perhaps until the skelp mill closed, in accordance with contractual arrangements between them.
>
> PTM and Australian Tube Mills Pty Ltd (now owned by PTM) purchased hot rolled coil from BHP at a delivered CIF price until March 1986 when BHP issued a formal Pipe and Tube Industry Price Schedule and thereafter BHP sold hot rolled coil to PTM, ATM (and presumably) TOA on an ex-works basis.
>
> PTM believe that cold rolled coil was sold to the pipe and tube industry on a capital city Freight Equalised basis until March 1987 .... and thereafter sold this product on an ex-works basis to precision tube manufacturers (sub. 24, p. 12).

PTM is currently charged $52 per tonne for freight to Brisbane. It estimated that TOA is charged $17 per tonne for freight to Newcastle from Port Kembla.

BHP Steel explained at the initial public hearing that ex-works pricing of intermediate products (such as pipe and tube feedstock) arose as a sensible and effective way of pricing product to independent users located adjacent to the steel works (although TOA is now part-owned by BHP and its Newcastle plant is supplied with feedstock from Port Kembla).

TOA responded to the comments by PTM, saying:

> While it is logical for a manufacturer in this industry to locate near the source of raw material, providing access to markets is not inhibited, both [Australian Tube Mills] and PTM chose for their own reasons to base their businesses elsewhere. These reasons possibly included:
>
> - initial small scale entry to the business from an existing business
>
> - focus on serving local markets
>
> - proximity to local markets lowered outward freight costs
>
> - investment incentives by State Governments.
>
> It is untenable to say that these competitors were not aware that they would incur additional inward freight costs compared with Tubemakers when they located their businesses distant from the source of raw material ... there is no case, in equity, or otherwise, for Tubemakers to be called upon to subsidise the freight inward costs associated with their manufacturing operations, which would be the case were uniform capital city pricing to be adopted in place of the present system (sub. 43, pp. 3,4).

Prices Surveillance Authority

BHP Steel is required to notify the PSA of proposed price increases for its steel products. In response to a question at the public hearing, the company said:

> ... we make no bones about our belief that it is not appropriate to have the Prices Surveillance Authority (transcript, p. 22).

This position stems from the company's view that the restraint on its pricing by the predecessor of the PSA, the Prices Justification Tribunal, inhibited its profitability and therefore willingness to invest. By interfering in the commercial flexibility of BHP Steel, the PSA also has the potential to adversely affect economic efficiency. There are also costs for the company in complying with the PSA process.

In exercising its powers the PSA is required to have regard to criteria outlined in *the Prices Surveillance Act 1983* and various Ministerial directives. One of these is for the PSA to have regard to "the Government's policy of generally not supporting price increases in excess of movements in unit costs" (PSA 1990, p. vii).

It is difficult to assess the effect of the PSA on BHP Steel's prices because it cannot be known what prices would have prevailed in the absence of the PSA process. Data supplied by BHP Steel indicate that the domestic price of steel pipe and tube feedstock has increased at a rate marginally

less than the Consumer Price Index (CPI) over the past decade. However, this does not necessarily imply that the company's prices for pipe and tube have been restrained.

BHP Steel submitted 12 notifications of proposed price increases for various steel mill products in 1989-90. All notifications involved the recovery of increased costs, with some seeking to increase profitability. The PSA had no objection to the price increases in ten cases. In the other two, it endorsed a lower price increase. BHP Steel abided by those decisions.

Export prices

Exports of hot rolled coil by BHP Steel are made both under term contracts and at spot prices.

Although details of the term contracts are not available, the company acknowledged that prevailing spot prices influence the prices that are negotiated for term contracts. World spot prices for hot rolled coil declined from about $580 per tonne in June 1989 to about $430 per tonne in July 1991 (see figure D1). Apart from this downward trend over the period, spot prices also fluctuated considerably on an average monthly basis.

Comparison of export and domestic prices

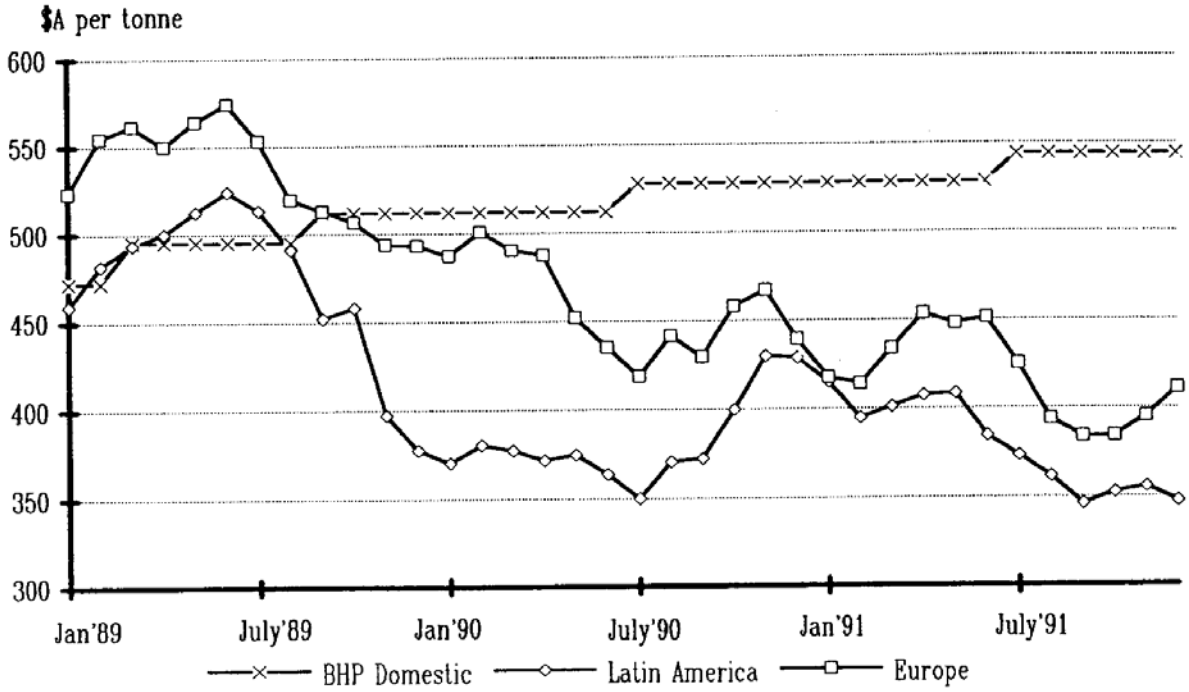
The margin between export and domestic prices can be expected to vary over time because of movements in world spot prices and BHP Steel's policy of charging stable domestic prices. In regard to hot rolled coil, figure D1 shows that during 1989, when world prices were relatively high, the domestic base price was below the price that could be obtained for exports in the spot market. World spot prices have subsequently declined to below the domestic base price.

Because not all BHP Steel's sales are in spot markets, and significant adjustments are made to the domestic base price, a more meaningful basis of comparison for domestic and export prices is in terms of the net realised prices in the two markets.

Differences in the costs of servicing each market, such as different payment terms and the provision of technical back-up, must also be taken into account to make valid comparisons of the degree of price discrimination between the domestic and export markets. The Commission has no specific information on this but notes BHP Steel's comment in regard to its export prices generally:

> ... these are normally negotiated on the basis of developing an ongoing and stronger relationship between a supplier and customer. As such, prices negotiated usually reflect similar considerations to those established for domestic prices, particularly in regard to pricing stability, quality and delivery (sub. 6, p. 10).

Figure D1: **Domestic and spot prices for hot rolled coil, 1989 to 1991**



Source: TOA

Data provided by the company showed that for the first half of 1991 the average realised ex-works domestic price for hot rolled coil was 23 per cent higher than the average (free-alongside-ship) export price. Because the difference is based on average prices, this suggests that some domestic sales would have been priced at more than 23 per cent above the export price and others below this margin.

The degree to which BHP Steel can charge above export parity in the domestic market depends upon the value to users of the feedstock, the price of substitute materials, and the cost of sourcing locally compared with the price of comparable imports. The company stated:

> We are able to obtain a premium in certain markets based on the additional value in our offer arising from benefits such as shorter delivery times, customised specifications, flexibility in supply, technical support and market development assistance (sub. 6, p. 8).

Such domestic supply advantages explain why BHP Steel is able to price, on occasions, above import parity. For example, data supplied by the company indicate that for much of the past decade domestic prices to Brisbane have exceeded the into-store price of imports. In mid-1991, the

margin was about $50 per tonne (or about 10 per cent of the domestic base price).

D3 Assessment of pricing

In broad terms, pricing is efficient if consumption approximates that in a fully competitive market, that is, when price equals the marginal cost of efficient production. For export-oriented industries the efficient domestic price is the export price, even if this is above the marginal cost of efficient production (see chapter 2 of the report).

Prices are efficient if they evoke the same level of demand as would result if price were equal to marginal cost. Thus, assuming that BHP's export returns at least cover its marginal costs, the practice of charging domestic prices for feedstock which are higher than export returns will be efficient if it does not foreclose demand. If demand is not foreclosed, lowering domestic prices to export parity would simply result in a transfer of profitability from BHP to users and would have no effect on overall economic efficiency.

In order to determine the potential efficiency loss from pricing feedstock above export parity in the domestic market, it is necessary to assess whether price reductions to around export parity would evoke additional processing (value-adding).

Pipe and tube manufacturers indicated that lower feedstock prices are likely to be passed on for structural and precision tube products because of intense competition among domestic producers. For oil, gas and water pipes, cost savings on feedstock may also be passed on to gain a competitive edge against imports and substitute materials. Feedstock costs of pipe and tube production generally represent about 60 to 70 per cent of total costs (although there are variations from 35 to 90 per cent for various products). Thus, export parity pricing of feedstock in the first half of 1991 would have led to an average fall in the price of pipe and tube of approximately 15 per cent.

According to pipe and tube manufacturers, a fall in the price of pipe and tube would stimulate domestic consumption and replace imports and substitute products. The impact of lower feedstock prices on downstream export consumption is not clear. One pipe and tube manufacturer stated that a reduction in feedstock prices of 10 to 20 per cent would greatly increase downstream exports. But another producer gave an example indicating the lack of competitiveness of Australian pipe and tube in Asian markets despite the availability of a full export rebate.

Since an accurate judgment about the responsiveness of demand to lower feedstock prices is not possible, some indication of the relationship between potential efficiency losses and the responsiveness of demand can be gained from the following calculations. Assuming demand for feedstock by domestic pipe and tube manufacturers increases sufficiently from lowering domestic prices by 23 per cent so that BHP Steel's revenue from domestic sales remains unchanged (the price elasticity of demand is -1.0), the potential efficiency gain is estimated to be $3 million to $4 million. If the price elasticity is -0.5 (ie demand is less responsive to price), the potential efficiency gain is estimated to be in the order of $1 million to $2 million.

The achievement of these potential gains depends upon the company being able to meet the additional consumption without augmenting plant capacity. If such consumption is satisfied by

diverting sales from export markets because of capacity constraints on increased production, then there is no efficiency gain to the country.

It is in BHP Steel's interest to seek beneficial trading opportunities so as to maximise throughput and the contribution to fixed costs. This fact together with the company's pricing flexibility suggests that there is currently little foreclosed demand from pipe and tube manufacturers and that any efficiency loss arising from such demand would be very small.

BHP Steel's pricing policy is generally consistent with achieving efficient resource use. However, given that significant export opportunities can arise from small initiatives, it is important the company's pricing flexibility extend to cover such situations. One manufacturer commented that potential export orders may not be of sufficient volume to qualify for the maximum export rebate available (for steel feedstock) with the consequence that the order may be lost.

Ex-works pricing

Ex-works pricing of steel pipe and tube feedstock is efficient because users are required to face the actual costs of transport from BHP Steel to their factory. This gives appropriate signals for production location decisions. In contrast, under uniform capital city pricing, it is possible that some users may pay less than the efficient marginal cost of production and delivery.

Prices Surveillance Authority

PSA control of prices may affect pricing policy. If prices are different from what the market would otherwise determine, economic efficiency may be adversely affected.

The PSA process may reduce economic efficiency in various ways. For example, if there is insufficient capacity to meet demand the PSA process may preclude increases in prices to ration supply efficiently. Price increases beyond unit cost increases can be justified on efficiency grounds in these circumstances. Or, if the PSA process restrains price increases such that the incentive for entry into the supply of feedstock by other firms is reduced, improved efficiency stimulated by competition may well be foregone. On the other hand, the PSA may approve cost-based price increases at times when world prices are falling.

In general, competitive pressures are relied upon to provide incentives for industries to produce at least cost and for prices to be competed down to this level. Australian governments have introduced policies aimed at increasing competitive pressures (eg tariff reductions) and microeconomic reforms aimed at achieving cost efficiencies. In the case of feedstock for steel pipe and tube, further pressures arise from substitute materials such as aluminium, wood and plastic.

Even if there were considered to be benefits from the PSA process, the test must be whether the gains exceed the costs of intervention; as a minimum, there are always administrative and compliance costs in the PSA process. In view of the potential drawbacks of the PSA process, and the increased competitiveness in BHP Steel's operating environment, the Commission concludes that there are strong grounds for reviewing the need for continued surveillance of feedstock prices by the PSA. In its submission responding to the Draft Report, the PSA said it:

> ... agrees that the continuing relevance of surveillance needs to be reassessed, for example, in the light of changes in industry competitiveness as a result of tariff reductions (sub. 82, p. 13).

D4 Non-price issues

The pricing of feedstock is, of course, only one of many factors influencing the competitiveness of pipe and tube manufacturers. For example, pipe and tube manufacturers indicated that freight rates from Australia to various export destinations were generally about twice the cost for comparable journeys for competing suppliers in the Republic of Korea, Thailand and the United States. Import restrictions in other countries were also mentioned, with barriers such as local design standards and quotas sometimes being a greater hindrance than overseas tariffs.

Other factors mentioned by pipe and tube manufacturers as inhibiting their competitiveness included Australia's exchange rate and the level of interest rates, government taxes on inputs (payroll tax and wholesale sales tax), government levies for superannuation and training, and the cost of government regulations for the environment and safety.

Pipe and tube manufacturers acknowledged that their own technical efficiency was also a factor influencing their competitiveness, although it was claimed that recent improvements in productivity had resulted in performance at near world standards.

D5 Conclusions

The available evidence indicates that feedstock for steel pipe and tube is generally sold in Australia at higher prices than in the export market. However, because of BHP Steel's flexible pricing policy, the domestic price of feedstock does not appear by and large to be inhibiting downstream value-adding opportunities. The Commission concludes that the company's pricing of feedstock is basically efficient. Nonetheless, the potential exists for BHP Steel to extend its pricing flexibility to feedstock for domestic use and to low volumes of feedstock destined for processing for export.

Under more buoyant market conditions the incentive for BHP Steel to price flexibly may be reduced, detracting from the competitiveness of downstream processors. Such adverse

consequences can be limited by governments continuing reforms to tariffs, overseas shipping and wharfage in order to foster import competition.

The Commission considers that the ex-works pricing basis for steel pipe and tube feedstock is efficient.

It is the view of the Commission that the PSA process is likely to be detrimental to improved pricing efficiency of steel pipe and tube feedstock. It concludes that consideration should be given to discontinuing the surveillance of feedstock prices by the PSA.

A range of other, non-price, factors inhibits the international competitiveness of Australia's pipe and tube manufacturers. The Federal and State Governments should continue to address these factors which include inefficient domestic and international transport and handling systems, and trade barriers in other countries.

ATTACHMENT D1: STUDY PARTICIPANTS

The following companies provided information in response to the Commission's questionnaire for this study:

Producer

BHP Steel

Users*

Tubemakers of Australia Limited

Hills Industries

* Palmer Tube Mills Limited, while making a public submission to the inquiry, did not directly respond to the questionnaire.

APPENDIX E: THE PRICING OF PULPWOOD

CONTENTS

This appendix examines the pricing of pulpwood from publicly owned forests and plantations, and considers the effects of such pricing on users of pulpwood and on the economy generally.

Concern about domestic pulpwood pricing (particularly its high price) was raised in a number of submissions to the inquiry.

Australia's timber resources, including their pricing, have been the subject of a number of inquiries and a major review by the Resource Assessment Commission (RAC) has just been completed (see attachment E1). The Commission has drawn as much as possible on these inquiries but, where necessary, has obtained further information from pulpwood users (see attachment E2) and suppliers.

E1 Market overview

Pulpwood is hardwood or softwood timber that is processed into woodchips or pulp for the manufacture of paper, paper products and wood-based panels. The term pulpwood encompasses logs, tree thinnings and sawmill residues such as sawdust, shavings and off-cuts.

Pulpwood is obtained from both public and private sources. State and Territory forest services are the key managers of native forests and are also engaged in the establishment and management of timber plantations for both sawlogs and pulpwood. In addition, some forests and plantations are privately owned.

Plantations represent approximately 2 per cent of Australia's timber resource base but provide 34 per cent of Australia's timber requirements. As at March 1989, nearly 95 per cent of Australia's plantations were softwood, with 70 per cent in public ownership. Just over half of hardwood plantations are privately owned.

A major use of pulpwood is to produce pulp for paper products, including writing paper, newsprint, packaging paper and paperboard. There are currently nine companies involved in the pulp and paper industry. The RAC (1991a) notes:

> Pulp and paper making are strongly linked, and there is vertical integration of most processes from plantation to paper production, often including marketing and distribution. Pulp mills dependent on native or plantation wood are all situated close to the primary source of wood (p. 246).

Growth has been substantial in consumption and domestic production of paper and paperboard over the past decade; both imports and exports have been rising (see RAC 1991a, p. 247).

Another major use of pulpwood is in the manufacture of wood-based panels (hardboard and softboard) and reconstituted wood products. There are currently 35 companies operating in the wood panel industry, many maintaining plantations to provide part of their pulpwood requirements.

Two companies, North Broken Hill Peko and Bowater Industries, are involved in the production of pulp and paper as well as wood panels.

Over the past decade, production and consumption of wood panels have increased, while imports and exports have remained fairly constant (see RAC 1991a, p. 242).

Pulpwood is exported predominantly as woodchips (mainly to Japan) but also in the form of pulp. The majority of export woodchips come from Tasmania and New South Wales, with smaller amounts from Victoria, Queensland and Western Australia.

E2 Pricing

E2.1 Pricing practices

Despite the many reviews of matters relating to Australia's timber resources, information specifically relating to the pricing of pulpwood is limited. A recent report by the Australian Bureau of Agricultural and Resource Economics (ABARE 1990b) outlines in general terms the practices employed in the pricing of timber (both sawlogs and pulpwood) by Australia's forestry authorities.

Major sales of pulpwood are governed by long-term contracts between pulpwood users and State forestry authorities and are often set in legislation. The underlying contractual arrangements appear to be:

- the volume of timber to be supplied over the period of the contract;
- a negotiated base price for the specified volume of timber;
- a formula-based approach for adjusting base prices over the period of the contract; and
- a review mechanism for adjusting the base price at specified intervals to take account of changed circumstances.

Contract duration and volumes

The duration of agreements varies between States. For example, in Queensland agreements cover a 20-year period, while in Tasmania existing agreements were established for 80 years.

The Victorian Department of Conservation and Environment noted:

> ... Governments in Victoria have sought to encourage the establishment of major industries by making long-term agreements which provide security of pulpwood supply (sub. 51, p. 2).

The contracts usually specify the minimum and maximum annual quantities of pulpwood to be harvested. In addition, agreements can contain 'take or pay' clauses which specify that the buyer must pay for a given percentage of the minimum quantity regardless of whether the timber is used. The Victorian Department of Conservation and Environment stated that such clauses are necessary due to the large capital investment required to establish plantations.

Base prices

Pulpwood logs are generally sold 'at stump', that is, the trees are sold as they stand in the forest. Buyers are responsible for harvesting and hauling wood to processing plants. One exception to this approach is Western Australia, where the State forestry authority sells wood on a delivered-to-mill basis.

State forestry authorities call tenders for major sales of pulpwood from public sources. The successful tenderer enters negotiations with the forestry authority to determine the final base price. For example, the NSW Government said that:

> Softwood pulpwood prices are set predominantly by prescriptions in long term Wood Supply Agreements. The base price for these agreements was negotiated following advertisement and tendering.
>
> Prices for the [NSW Forestry] Commission's various markets are set with reference to a number of factors, including
>
> - comparable log prices elsewhere;
> - market price for competitive end products;
> - prices obtained from tendering;
> - ability of industry to pay;
> - demand for timber products;
> - residual value; and
> - strategic aims in promoting efficiency in industry for current and potential utilisation of log supply (sub. 61, p. 3).

The case-by-case negotiation process results in prices that vary between buyers on the domestic market as well as between the domestic and export markets. For example, Australian Newsprint Mills Limited (ANM) (sub. 40, p. 2) stated that a particleboard manufacturer is charged $13 per tonne for softwood pulpwood while ANM is charged $26 per tonne. It also noted that softwood pulpwood exported as chips is sold at $8 per tonne. Reasons behind price differences are outlined in section E2.3.

In Tasmania, hardwood pulpwood used to manufacture export chips is priced at three times the level for domestic use. According to the State Government (sub. 67, p.1) this is because the

Tasmanian Forestry Commission is unable to increase domestic royalty levels due to the provisions of agreements set in legislation.

Price adjustment and review

The method for reviewing price levels normally includes provision for prices to be maintained in real terms through indexation of base prices. In Queensland, for example, royalties are indexed to the Consumer Price Index (CPI). This is also the case in a number of New South Wales agreements.

In addition to annual indexation, most contract prices are subject to periodic reviews, usually every three to five years. Reviews are designed to ensure that prices adjust to changing market conditions and that they reflect appropriate market values. A number of factors are taken into account, including prices in other States, production costs, market prices for end products and the ability of industry to pay. In Western Australia price reviews may be held at the Minister's discretion.

The NSW Government noted, for example, that:

> ... the base price [for hardwood pulpwood at Eden] has been adjusted through reference to cost of production over the past decade. Pulpwood prices elsewhere have been negotiated with reference to Eden but allowing for haulage distance and intensity of operations (sub 61, p. 3).

The NSW Government added that it is reducing the period between reviews from five to three years to allow for more responsive pricing.

In Tasmania, some legislatively based agreements ('concessions') do not allow for periodic reviews of prices although they may specify that the royalty is to be annually indexed to the CPI.

Under reviews, new prices may be arrived at through negotiation between buyer and seller. If the parties fail to reach agreement, contracts generally specify alternative arrangements for determining a new royalty. The Victorian Department of Conservation and Environment stated, for example, that a new price may be arrived at by "... indexing the previous rate according to published Government data on average weekly earnings and the wholesale price index of building materials, or by arbitration in accordance with the *Arbitration Act 1958*" (sub. 51, p. 2).

E2.2 Prices

Pulpwood prices to individual purchasers are generally confidential. Average prices for hardwood and softwood pulpwood logs for 1988-89 are presented in table E1.

Table E1: Average 'at stump' pulpwood prices [1], by wood type, 1988-89

($ per cu m)

State	*Hardwood*	*Softwood*
New South Wales	10.75	12.16
Victoria	8.06	12.36
Tasmania	12.86	7.55
Queensland	3.19	6.83
South Australia	not produced	12.52
Western Australia	10.29	7.29

1 Care must be exercised when comparing these prices because of differences in species, quality and the inclusion/exclusion of other charges such as for forest roads. Prices may vary greatly from the average level in different regions within a State.

Source: ABARE 1990b, p. 19.

A number of observations can be made from the average price information contained in the table:

- there is no consistent relationship between hardwood and softwood prices, with hardwood being priced higher in Tasmania and Western Australia, and lower in other States;
- prices in some States are significantly lower than in others, for example in Queensland. Such large differences may no longer exist as there have been significant price increases in a number of States in recent years; and
- the variability in prices across States suggests an even greater variability to individual purchasers.

With the exception of softwood in South Australia and Tasmania, prices for pulpwood logs have increased in real terms in all States during the 1980s. For example, real increases of around 280 per cent have been recorded for both softwood and hardwood in New South Wales, while in Tasmania, hardwood royalties increased by 200 per cent from $4.20 per cubic metre in 1987-88 to $12.86 in 1988-89 (see ABARE 1990b, p. 19).

Simons & McLennan Magasanik (1990p. 5-19) presented information on softwood pulpwood royalty trends from 1977 to 1988. The information shows a clear upward trend for the weighted average royalty in all States except Western Australia.

In its submission, the Australian Wood Panels Association (AWPA) discussed changes in the cost components of wood panel manufacture. It stated that:

> The only component which has increased in real terms (relative to inflation) is the royalty component (sub. 29, p. 4).

A number of submissions referred to 'high' pulpwood royalty levels. Several firms submitted that excessively high royalties are detrimental to their competitiveness in the domestic and export markets. This is discussed in section E3.

ABARE (1990b) examined potential market prices for sawmill and pulpwood logs and compared them with actual royalty (price) levels. Using residual pricing[1] as a method of estimating potential market prices, ABARE concluded that in 1984-85 log prices in the reconstituted wood products area were lower than a competitive market could realise, while in the pulp and paper area results were ambiguous.

CIE (1990) undertook a study that examined residual pricing of logs in Tasmania for 1986-87 and 1989-90. It concluded:

> These crude calculations do not provide any evidence of royalties being too low. In fact, the reverse appears to be the case for log sawmilling in aggregate (p. 44).

With regard to hardwood pulpwood royalties, the report states:

> These calculations suggest that while royalties in 1986-87 appeared well below residual log value this gap has narrowed substantially by 1989-90 (p. 45).

E2.3 Influences on pricing

There are two significant features of the market for pulpwood that influence prices. First, pulpwood is in the hands of a small number of suppliers (predominantly State Governments) and second, there is often only one major purchaser of pulpwood within a region.

Although the volume of pulpwood available from private sources has increased recently, the various State forestry authorities are still the major suppliers. For example, the NSW Forestry Commission supplies 95 per cent of the State's pulpwood and a similar situation is understood to apply in other States. High transport costs relative to the value of the timber militate against trade between regions.

State forestry authorities are considered price leaders by many private suppliers. This situation is acknowledged by State Governments. For example, the NSW Government recognised that the NSW Forestry Commission exercises a fair degree of monopoly power and added:

[1] A residual price is a measure of the value of a raw material to a user. It is calculated by subtracting the costs of capital, labour and intermediate inputs from the value of output.

> The contribution of private growers of timber to creating a more competitive market for logs in NSW has never been substantial and no change is expected in the near future (sub. 61, pp. 5,6).

Prices for imported pulp and pulpwood-based products provide an upper limit to the ability of forestry authorities to price pulpwood. Prices for pulpwood must remain at levels that allow domestic users to remain competitive with imported pulp and final products.

In its submission, the NSW Government commented:

> The price for domestic softwood pulpwood is influenced by prices for imported and competing end products, but the corresponding log price forms only a small proportion of end product value and hence the linkage between end product price and log price is not particularly strong (sub. 61, p. 7).

Another factor that limits the ability of forestry authorities to set excessively high prices is the possibility of vertical integration into pulpwood production by processors. There is evidence of vertical integration, with one of the stated reasons being to avoid high royalties on pulpwood from public sources. The higher the royalties on public timber, the greater the incentive for firms to produce their own timber.

Government royalties can also have a significant effect on the viability of operating private plantations. One Victorian wood panel manufacturer stated at the Draft Report hearing that, while at one time between 90 and 100 per cent of its wood requirements were obtained from State-owned sources, it currently purchases only 30 per cent from those sources.

The price of substitute materials further forms an upper bound to the price of pulpwood logs. For example, recycled paper can be substituted for pulpwood in the production of paper, and sawdust can be used instead of logs in wood panel production. A wood panel manufacturer commented that sawdust is being used only because it is cheaper than logs. The ability of firms to substitute other materials for pulpwood logs is limited, for reasons other than cost, by technological constraints and by the 'take-or-pay' clauses included in some long-term contracts.

As noted, there is often only one significant buyer of pulpwood within a region. The AWPA outlined the reasons for this in respect of the wood panels industry, which apply equally to the pulp and paper industry:

> Because of the relationship between the productive capacity of forest plantation zones throughout Australia and the high minimum economic size required for an efficient wood panel plant, combined with the high cost of road transport of recently harvested (wet) pulpwood, most panel plants are so spaced as to each draw on their own unique wood harvest area (sub. 29, p. 13).

In such circumstances, buyers can often obtain a lower price than under more competitive circumstances because the supplier's alternative is not to sell at all. Large buyers in regions can have a greater influence over their input prices as they are frequently the main industry within a region.

Purchasers generally have a greater degree of bargaining power before a processing plant is established. They may be able to negotiate a favourable price for access to the resource, particularly if there are a number of alternative sites for the project. Governments, on the other hand, face a greater loss if negotiations are not successful, particularly if the new industry promised improvements in a regional economy.

The balance of power shifts once a processing plant is established. Industry will have made significant capital investments in the new plant and State authorities are able to use this to their advantage when negotiating future price increases.

One example of this shift in bargaining power can be found in the negotiations between ANM and the NSW Government. ANM proposed to establish a newsprint mill in Albury and source its pulpwood requirements from NSW Government plantations in the Tumut and Albury regions. The price of pulpwood was established in the bid. After two-thirds of the mill had been built, the Government established a committee to examine the price of wood for the mill and concluded that the price should be 28 per cent higher. The company said it had little choice but to accept the higher price (transcript, pp. 102-104).

In reply, the NSW Forestry Commission said that:

> ... it is normal commercial practice for parties to negotiate following expressions of interest or tenders to reach positions acceptable to both parties. The [NSW Forestry] Commission made concessions to the Company [ANM] during the early years of operations (sub. 68, p. 15).

The Federal Government has some influence on the export volumes and prices of hardwood woodchips through a system of long-term approvals of operations coupled with annual export licences. Approvals are subject to environmental impact statements and give exporters security of supply when negotiating contracts and undertaking necessary investments. Once long-term approval has been granted, exporters are required to obtain annual export licences which are subject to a number of conditions including minimum prices for the sale of chips.

Long-term approval is not necessary for the export of chips from sources that do not trigger environmental protection legislation (eg sawmill residue), although annual licences are still required.

Current licences allow a total of 5.575 million tonnes of hardwood chips to be exported annually. In 1990, seven companies held export licences, with one-third of the total quota being held by North Broken Hill Peko. The RAC (1991b) notes:

> ... [Australian Pulp and Paper Mills] negotiates an agreed price with its Japanese buyers which then becomes the benchmark for other Australian producers. The other Australian producers ... agree to supply at the same price adjusted for quality differentials (pp. 35,36).

The licensing system has not proved a binding constraint on total woodchip exports as these have always been lower than the total annual quota. For example, in 1989-90 exports amounted to 4.77

million tonnes, or 85 per cent of the quota. However, the quota appears to induce regional constraints. For example, Bunnings Forest Products claimed that the company's exports are limited by its quota allocation.

As noted in the previous section, softwood used for export chips is priced lower than pulpwood used domestically. The NSW Government outlined several reasons for this:

> Market prices for woodchips are heavily constrained by international prices and the log price forms a large proportion of the selling price. Hence there is often little scope for log price increases. In contrast, the log price component of products processed domestically is usually a relatively small proportion of the selling price and the opportunity exists for the grower to accrue some of the benefits from processing a low quality (pulpwood) product into a high valued product.
>
> Export of softwood woodchips from NSW is likely to be a relatively short-term proposition. In contrast, supply of pulpwood to domestic processors for value-added production is secure over long periods, which attracts a price premium (sub 61, pp. 4,5).

On the issue of price premiums for long-term security, ANM challenged the NSW Government view, stating that:

> In the context of a glut of pulplogs, the benefits of a long term relationship lie with the forest owner and should thus attract a price reduction rather than a premium (sub. 78, p. 2).

A similar view was expressed by the Australian Wood Panels Association.

Long-term contracts were established many years ago. At that time it was not clear that there would be an oversupply of pulpwood. Indeed it was believed that a shortage might arise and thus a price premium could be charged for guaranteed supplies.

E3 Assessment of pricing

E3.1 Efficiency of pricing practices

In broad terms, pricing is efficient if consumption approximates that in a fully competitive market, that is, when price equals the marginal cost of efficient production (see chapter 2 of report).

The marginal cost must include environmental costs and the benefits (such as profitability) that would be foregone in an alternative use. This normally implies the price must not be less than that which could be obtained for alternative uses, such as by exporting.

Generally, Australia's native forests are managed as multiple-use resources. Native forests provide timber (wood use) and a host of non-wood uses such as recreation, habitat for wildlife and water catchment. Valuing environmental costs and the benefits of non-wood uses can be very difficult.

A further problem with assessing marginal cost is that of allocating overall forest management costs to timber production. ABARE (1990b) noted that:

> ... if native forests were not used for timber production, costs of forest management would still be a large proportion of what is currently spent. From discussions with State agencies, this proportion would probably be greater than 50 per cent (p. 26).

Allocating costs between sawlog and pulpwood production is even more difficult.

ABARE (1990b) noted that because the stated goals of forestry authorities (such as long-term self sufficiency and maximising the rate of plantation establishment) are based on biological factors, they are likely to be in conflict with the economic criterion that prices at least cover marginal cost. ABARE concluded, for example, that the marginal cost efficiency criterion is most unlikely to be satisfied by balanced budget rules, under which a number of forestry authorities operate. These policies are therefore likely to result in some logs being sold at prices below marginal cost, with a consequential loss of allocative efficiency. ABARE noted, however, that a number of forestry authorities are moving away from these traditional goals.

One outcome of not pricing on the basis of marginal cost is that forestry authorities potentially foreclose pulpwood demand (if prices are higher than marginal cost) or encourage over-consumption (if prices are lower than marginal cost). The extent to which demand might differ from its efficient level is specifically addressed in section E3.2.

The degree of foreclosure can be minimised by forestry authorities adopting a flexible pricing policy. The common approach of calling for tenders and negotiating prices on a case-by-case basis suggests that forestry authorities limit the extent of foreclosure. Nevertheless, the efficient outcome of the approach also depends on the authorities having knowledge of their marginal costs to ensure that wood is not sold at prices below this level.

The Commission concludes that State forestry authorities do not price pulpwood on the basis of marginal cost. If prices are below the marginal cost of efficient production, forestry authorities can be considered to be pricing inefficiently.

The fact that private firms have established plantations suggests that they are able to grow wood at a lower cost than buying it from State forestry authorities, although other factors such as reducing transport costs or increasing quality may be important considerations. If price is the main consideration, this may imply that prices being charged by forestry authorities for pulpwood are not below efficient marginal costs.

The efficiency of the price adjustment mechanisms inherent in supply contracts is more questionable. Submissions by ANM and the AWPA drew attention to the inflexibility of the formula approach in making such adjustments.

ANM noted that the annual supply of softwood pulpwood is 5 million tonnes, while sales are only 2 million tonnes per annum. If prices are responsive to market conditions, the price of pulpwood would be expected to fall to equate demand and supply. The discussion of prices in section E2.2 suggests that average prices have not adjusted despite the apparent oversupply.

In reply, the NSW Forestry Commission stated that because trade is regionalised, the oversupply may not be reflected in all markets. For example, it noted that in the Tumut area there "... might only be a small surplus of supply over requirements to the year 2000" (sub. 68, p. 16). Where the market is regionalised, the price for pulpwood would be expected to reflect the supply conditions within the region, rather than the situation Australia wide.

Long-term contracts that do not make provision for adequate price review may lead to inefficient pricing and resource use. This has been recognised by the Tasmanian Government which noted that, under the legislatively based concession system, royalties:

> ... can not be increased except in accordance with the relevant procedures or by changes to the legislation. The latter course has not been seen as attractive to Government because of the implications to the viability of the projects concerned (sub. 67, p. 1).

This system has resulted in the erosion of the real value of royalties on logs sold in the domestic market.

The Tasmanian Forestry Commission indicated that the concession system is being replaced by wood supply agreements which will address this problem to an extent. It noted, however, that some domestic industries may "... not be able to bear commercial rates and still remain viable" (sub. 67, p. 1).

Submissions by forestry authorities suggested a willingness to be flexible in regard to pricing. For example, the NSW Forestry Commission (sub. 68) stated that:

> ... [it] has no incentive to deny domestic producers access to these resources, since the export price is expected to be substantially below current average domestic prices (p. 8);
>
> ... a quantity discount of around 60 per cent was offered on the pulpwood price for any sales above the minimum commitment level (p. 13); and
>
> ... [it] reduced average pulpwood prices by approximately 7 per cent in 1990 compared to normally indexed prices p. 13);

while the NSW Government explained:

> In general, the [Forestry] Commission is willing to negotiate lower prices for export production if the consequence is increased total revenue through higher volume of sales (sub. 61, p. 5).

In Victoria, a panel board manufacturer was offered a lower price on pulpwood volumes in excess of contracted amounts following negotiations with the Victorian Government.

The Commission supports a policy of flexible pricing provided that prices are equal to or above efficient marginal cost.

The long-term contracts typical in the pulpwood market may limit competition by acting as a barrier to entry of pulpwood processors. These agreements are often set in legislation and give the buying party exclusive rights to an area of forest. This severely limits the ability of new entrants to obtain pulpwood for their operations.

State Governments are aware of such consequences with the Tasmanian Government, for example, commenting:

> In the past, major forest concessions have been the source of primary distortions in a free market price in relation to pulpwood supplies in the State. They have made it more difficult for new entrants into the pulp and paper industry, as well as neither giving incentives to upgrade old processing equipment nor provide the entry of competition to improve the efficiency of operations (sub. 26, p. 2).

As noted above, prices for pulpwood used domestically differ from those for export. In New South Wales and Victoria, pulpwood for the domestic market is priced above that destined for the export market, by as much as 225 per cent in one case in Victoria. In Tasmania, the reverse is the case, although this is as much the result of legislative constraint on domestic prices than a deliberate pricing practice.

The Commission supports a policy of varying the price between the domestic and export markets so long as demand at the margin is not foreclosed by pricing above efficient marginal cost. Provided State forestry authorities are not foreclosing demand in the domestic market by charging a higher price, such a practice cannot be considered detrimental to economic efficiency

E3.2 Downstream effects

As noted in section E2.2, the Commission received a number of submissions from pulpwood users regarding 'high' royalty levels in several States. Firms indicated that, if they could obtain pulpwood at lower prices, they would displace imports of pulpwood-based products and, in some cases, improve export performance. For example, in response to a Commission questionnaire it was claimed that:

> ... the particleboard industry could greatly increase local production and exports if it obtained pulpwood at a lower price (Bowater Tissue Limited); and

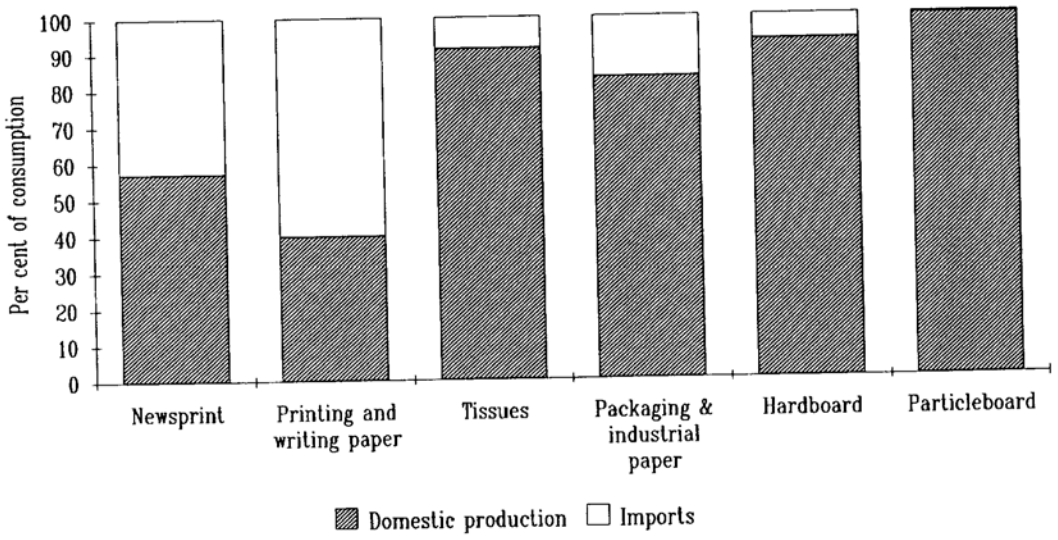
> Costs of raw materials are of major concern and our objective is to achieve wood costs comparable with those of the most efficient competitors. ... we must match those low cost producers who are likely to compete on our domestic and export markets. Stumpages [prices] for State Forest wood are of concern because the rates of increase have been much higher than our ability to increase selling prices (Australian Paper Manufacturers).

Pulpwood users indicated that they face increased competition in the domestic market from imports due to reductions in tariffs and argued that, to remain competitive, their raw material purchases must be at a comparable level to overseas producers. Tariffs on pulp and paper products range from zero to 15 per cent and on wood panels from zero to 16 per cent. Rates over 5 per cent are phasing down to that level by 1996.

ANM provided information on pulpwood prices for Australia, Chile, Fiji, New Zealand, British Columbia and the United States. This shows that average stumpages (royalties) are significantly higher in Australia than in other countries (see attachment E3).

Unfortunately, users provided little quantitative analysis of the effect of lower royalties on their production and competitiveness. However, data for a number of wood-based products (see figure E1 and attachment E3) show that in most cases significant quantities of pulpwood-based products are imported, highlighting the potential for import substitution. Although smaller, exports of pulpwood-based products also occur.

Figure E1: **Proportion of domestic and overseas supply of pulpwood-based products, 1989-90**



Source: NAFI (1990, pp. 69-79)

The influence of changes in royalties on competitiveness depends on the share of pulpwood costs in total production costs. Table E2, which presents the cost structure of the pulp and paper industry, shows that pulpwood logs account for 5 per cent of gross production costs. These figures are of a broad nature (across the pulp and paper industry) and do not reflect the significance of pulpwood at the firm level.

The AWPA submitted that wood costs represent around 30 per cent of operating costs for wood panel production. Questionnaire returns from panel producers indicated that the cost of pulpwood ranges between 15 and 30 per cent of total production costs. However, only part of the pulpwood cost is attributable to royalties (10 to 50 per cent); a significant proportion of wood cost is for harvesting and transport to the mill.

Table E2: Cost structure of the pulp and paper industry, 1987

Item	*Share of gross cost of production (per cent)*
Logs	5
Other domestic materials	27
Imported pulp, paper and paperboard	19
Other imported materials	3
Labour	26
Capital	9
Other	11

Source: RAC 1991a, p. 267

Simons & McLennan Magasanik (1990) examined the effects of changes in wood costs in general on the competitiveness of pulpwood users. They found that a 10 per cent increase in wood costs increased costs by an average of 1.3 per cent for pulp and paper, 2.3 per cent for fibreboard and 2.2 per cent for particleboard.

In summary, the available information suggests that royalties form a small percentage of production costs for pulp and paper manufacture, but are of considerably greater significance in the production of wood panels.

The Industry Commission (1991e) simulated the impacts of a 50 per cent reduction in softwood royalties on the pulp and paper industry using the ORANI model. The results included:

- 0.4 per cent increase in output of newsprint;
- 0.1 per cent increase in output of printing and writing paper;
- 0.2 per cent increase in output of packaging paper;
- 13 per cent increase in softwood logs used in pulp production; and
- negligible (between -0.05 and 0.05 per cent) economy-wide effects, including gross domestic product, export and import volumes.

In terms of production quantities, these impacts in 1987-88 translate to 1600 tonnes of newsprint, 270 tonnes of printing and writing paper and 2250 tonnes of packaging paper.

For wood panels, the AWPA compared the prices at which Australian and New Zealand made wood panels could be landed in Taiwan. It concluded that Australian manufacturers would need a reduction of $4.97 per wet tonne of pulpwood to match the New Zealand price. The AWPA believes that any cost reductions can be passed on to win market share.

The available evidence suggests that, with regard to paper and paper products, even large changes in royalties would have only a limited impact on log consumption. Hence any distortions in the price of pulpwood would have only a small impact on competitiveness. For wood panels, however, changes in pulpwood royalties could be expected to have a much larger impact given the greater importance of pulpwood in total costs. Improvements in areas such as harvesting and haulage may have larger effects in the mill door cost of pulpwood and thus the demand for logs and processors' competitiveness.

E4 Non-price issues

A number of issues apart from wood pricing were mentioned by pulpwood users as reducing their competitiveness in domestic and export markets.

One related to electricity pricing. ANM indicated that its Albury newsprint mill has the highest electricity cost out of 157 companies surveyed by the Canadian Pulp and Paper Association. The company suggested three reasons. First, the Albury mill uses a mechanical pulping process which consumes far more electricity than a chemical pulping process. Second, the Albury mill *uses Pinus radiata* chips which are inferior to other softwoods used overseas with regard to energy requirement for pulping. Third, the company believes that "... the price of electricity in New South Wales is high" (transcript p. 113).

The Commission recently examined the pricing of electricity in its report *Energy Generation and Distribution* (IC 1991b). The report argues that, although governments are moving to improve efficiency in electricity generation, average electricity prices would fall even further in the long run under reforms recommended by the Commission. In the short run, removal of cross-subsidies would advantage industrial users.

The gains from reforming electricity generation and distribution are likely to be small for major pulpwood users. Simons & McLennan Magasanik (1990) discussed the effects of changes in power costs on the competitiveness of pulpwood users. A 10 per cent increase in power costs was found to increase costs by an average of 0.9 per cent for pulp and paper, 0.4 per cent for fibreboard and 0.2 per cent for particleboard.

Even so, one wood panel manufacturer in Victoria is proposing to generate its own electricity, claiming expected savings of around 40 per cent in electricity costs.

Another area affecting competitiveness is transport and wharfage costs. It is widely recognised that the Australian trucking industry is highly efficient. However, proposals have been put forward to ensure that heavy vehicles pay the full cost of road use. To the extent that they are not already doing so, these proposals may increase the costs of road transport.

Reforms have commenced in water transport, with changes to port authority operations and stevedoring practices, and a recrewing package to raise productivity in coastal shipping. These reforms are aimed at lowering costs and improving the efficiency of the waterfront and coastal shipping. The need now is to press ahead.

E5 Improving pricing practices

The pricing of timber has been examined in a number of other reviews, notably by the RAC (1991a) and the ESD Working Group (1991). A number of pricing and timber use policies have been suggested in these reviews.

In addition, a recent meeting in Mt Gambier involving ABARE, the National Association of Forest Industries and representatives of the State forestry authorities proposed the following pricing and allocation principles:

- Wood production, like wood processing, must operate on a cost efficient basis.
- The community should receive a commercial return on public forests used for wood production.
- Within the context of grower efficiency, costs of production and a real rate of return on equity are valid benchmarks for pricing decisions.
- Factors identified as influencing market value and suitability for particular end uses should be taken into account in the pricing decision.
- Logs should be priced to recover the full market value of timber. This implies market direction of logs towards highest value end use.
- Similar quality log products should be priced at the same level irrespective of end use or purchaser, but an end use market able to pay a higher price for the same product should prevail.
- Wood users should have predictable supplies and predetermined property rights which are transferable.
- Where practicable, both wood and non-wood forest users should be charged. Furthermore, wood users should pay for wood production costs exclusive of non-wood costs in a multiple use context.
- Entry and exit costs to the industry should be kept low.
- Pricing and associated arrangements should:
    - be simple and transparent,
    - ensure an efficient mix and use of inputs,

- not discourage rapid industry adjustment to scale economies, technological change and changing market conditions (Queensland Government sub. 17, App. 1, p. 4).

In its submission, the Department of Primary Industries and Energy listed a number of principles for maximising the economic benefits from production forests. They are:

- There should be a market based system for allocating wood production resources to the highest value end use which is competitive, equitable, transparent and consistent with sustainable forest management practices eg, an auction or tender based system incorporating reserve prices covering capital and operating costs and a return on investment.

- Harvesting rights should be transferable, allowing the allocation of wood production forest on market based criteria.

- The budgets of forest authorities should be transparent with the costs of wood production being clearly identified from other activities. A move to program budgeting along the lines already adopted by the Commonwealth would assist in such moves.

- Where practicable, cost and pricing systems for wood and non-wood demands should be based on `user pays' principles (sub. 37, p. 13).

The Commission notes that many of these proposals are in the form of drafts and are subject to further consideration in the forums from which they have emerged. The Commission does not propose to comment on them directly; rather, it will outline what it sees as the broad principles for pulpwood pricing.

First, price must at least equal efficient marginal cost. If pulpwood is sold below this level, the price will not cover the cost of resources in production and a higher than efficient level of consumption will be encouraged.

Second, prices above marginal cost should not foreclose potential demand. Sellers should be flexible in their pricing practices by negotiating prices down to marginal cost to those buyers where it is necessary to ensure that demand is not foreclosed.

Third, the price of pulpwood should reflect its full value in use. This will achieve two objectives. It will remove any resource rent at the first stage of production and so reduce the scope for inefficiencies in downstream manufacturing. Second, it will maximise returns to society on funds invested in public forestry.

These principles highlight the need for forestry authorities to be able to determine their costs of wood production. Native forests should be utilised in a manner that maximises benefits from wood and non-wood use. The appropriate marginal cost should reflect the costs of removing wood from this optimum mix of uses.

The Commission recognises the difficulties in establishing marginal costs, but considers it important that costs are examined to establish a minimum efficient price and to provide a basis for examining business strategies, including investment decisions. Forestry authorities may need to improve accounting procedures so that costs associated with wood production are clearly identifiable from those due to non-wood use.

The Commission supports the suggestion that wood users should not pay costs attributable to non-wood use, and that in general, a user-pays system should be adopted for both wood and non-wood use.

Where it is cost effective, non-wood uses of native forests should be priced. The NSW Forestry Commission, for example, charges farmers a fee for grazing cattle in native forests that are also used for wood production. Pricing some non-wood uses may prove impractical if the cost of doing so outweighs the benefits. For example, the costs of policing native forest to prevent non-payers from using the area for recreation may outweigh the revenue obtained from such measures. In this case, the public would be better off without an access fee. It may prove too costly to obtain accurate values for native forests in some non-wood uses (such as maintaining biodiversity).

In cases where it is not possible for forestry authorities to charge for non-wood use, governments should be responsible for costs associated with such activities. This would reduce the need for forestry authorities to charge wood processors for non-wood uses, leading to a more appropriate price for pulpwood.

Pulpwood should be directed to the area where it has the highest value in use. The Commission does not support log gradings that force wood into sawmilling rather than pulp production. If a log is worth more for woodchipping than it is for sawmilling, the log should be sold to manufacture woodchips. An effective pricing system would ensure that resources are directed to the best use.

Transferable harvesting rights would allow the most efficient users to obtain extra quantities of pulpwood. Buyers who place a high value on pulpwood would be able to purchase harvesting rights from those who value it less. Transferable rights would allow easier entry and exit into wood processing industries. New entrants could purchase harvesting rights from those firms wishing to leave the industry. This would increase the opportunities for ensuring that pulpwood is allocated to those who value it most, and facilitate structural change.

Long-term contracts should allow for price reviews and variations at regular intervals to ensure that prices reflect actual market conditions. Reviews should take into account factors such as demand and supply conditions, the value of pulpwood in use, the competitiveness of the final products, and the price of substitute inputs.

The pricing of pulpwood should not be influenced by subsidy considerations of State Governments, as this can distort demand for the subsidised input and reduce economic welfare. If governments feel compelled to assist particular industries, a more desirable approach would be to do so through direct budgetary appropriations, making the subsidy transparent. This would allow more accurate monitoring of forestry authorities.

In order to ensure that the outlined principles are implemented, State forestry authorities should be placed on an appropriate commercial footing. (The benefits of corporatisation and/or privatisation have been examined in several recent reports of the Commission, including its 1990-91 Annual Report.) In addition, the authorities should be subject to the *Trade Practices Act* so that private growers are able to compete on a fairer basis with forestry authorities.

E6 Conclusions

The general approach by forestry authorities of negotiating pulpwood prices on a case-by-case basis, and the expressed willingness to be flexible in pricing export-destined wood and quantifies greater than minimum contracted amounts, are consistent with efficient pricing principles.

However, two aspects of current pricing practices are of concern. First, without detailed knowledge of efficient production costs (including environmental costs), forestry authorities may supply wood at prices below efficient levels. The fact that private firms have established plantations to source supplies may indicate that prices charged by forestry authorities are generally not lower than efficient marginal costs.

Second, and more importantly, the apparent lack of flexibility inherent in the formula-based approach for adjusting prices in existing contracts may lead to inefficient pricing and resource use. However, the onus is on processors to establish a case to the relevant forest authority that lower pricing will lead to increased sales and profits, and is mutually beneficial. Commercially oriented forestry authorities will recognise such opportunities and respond accordingly.

The Commission acknowledges the difficulties for forestry authorities in putting their pricing practices on an efficient basis. It has identified the underlying principles for efficient pricing, which are well known to those undertaking concurrent reviews of forestry matters. Addressing the detail of wood pricing is beyond the scope of this inquiry and, in the Commission's view, falls more appropriately within the province of reviews which have such matters as their primary focus.

ATTACHMENT E1: STUDIES INTO TIMBER PRICING

Ecologically Sustainable Forest Use (ESD 1991)

The report makes recommendations regarding future allocating systems and pricing procedures. It suggests that the full social costs of resource use be met, that the policy objectives of forestry authorities be transparent, and the marginal costing (rather than average costing) of wood production. The report recommends that timber be sold at auction subject to a floor price that reflects the full social costs of production including a rate of return.

Draft Report into Forest and Timber (RAC 1991a)

On the basis of a consultancy by ABARE into the efficiency of pricing of timber, the report examines potential market prices for sawlogs and pulplogs and compares these to actual royalty levels. Using residual pricing as a method of estimating potential market prices, it concludes that pulplog prices in the reconstituted wood products area were lower than a competitive market could realise, while in the pulp and paper area, results were ambiguous depending on final product prices. The residual prices assessed were for 1984-85. As there have since been significant real increases in royalties for pulpwood in a number of States, these calculations may not be an accurate reflection of the current situation.

Report on Recycling (IC 1991f)

The report states:

> While there are indications that forest pricing and management practices in some States are not consistent with meeting the 4 per cent rate of return required of them, there is little rationale for raising pulplog royalties for more mature trees. Returns to forests could be raised by increasing sawlog royalties for larger trees, by shortening rotations, or by a combination of the two (p. 121).

Interim Report on Paper Recycling (IC 1990b)

The report notes that the underpricing of sawlogs has resulted in an over-supply of pulpwood. It suggests that the:

> ... negotiated pulpwood price is likely to reflect the relative bargaining strength and objectives of both parties, and not necessarily the value of the pulpwood to the user, or its true cost of supply (p. 61).

The report adds that a low rate of return on State-owned plantations could suggest that royalties on timber from public plantations should be increased in order to increase rates of return. It states that this is further evidence of inefficient production and pricing by State authorities.

Optimum Pricing Arrangements for Tasmania's Crown Forests (CIE 1990)

The report contains an updated (1986-87 and 1989-90) analysis of residual pricing for sawlogs and pulplogs used for chips (for export and domestic use) in Tasmania. The results show that the gap between residual prices and actual royalties has narrowed substantially, and for sawlogs, actual royalties have been higher than residual prices.

Report of the Commission of Inquiry into the Lemonthyme and Southern Forests (DASETT 1989)

The report concluded that the Tasmanian Forestry Commission could set substantially higher prices for all categories of timber without reducing sales.

The Wood And The Trees (ACF 1988)

In a discussion of royalty policy, the report concludes that pulplogs in Australia were undervalued. The report notes that underpricing has lead to:

- unprofitability of State forest authorities;
- subsidisation of log buyers by tax-payers;
- reduced incentive for private interest to invest in forestry to a level well below that expected in a free market; and
- stimulation of the relatively wasteful use of trees, logs and processing residues.

Log Pricing in Australia (Byron and Douglas 1981)

The report concludes that in the export woodchip, sawlog and domestic pulpwood markets, timber prices were lower than estimated maxima calculated on a residual pricing basis. The report examines options for the pricing of timber resources. It concludes that, due to the prevalence of regional monopsonies in the pulpwood market, bilateral negotiations based on a cost of production approach and standard public expenditure criteria should be used to determine prices for pulpwood.

ATTACHMENT E2: STUDY PARTICIPANTS

The following companies provided information in response to the Commission's questionnaire for this study:

Australian Newsprint Mills

Australian Paper Manufacturers

Bowater Tissue Ltd

Bunnings Forest Products Ltd

CSR Wood Panels

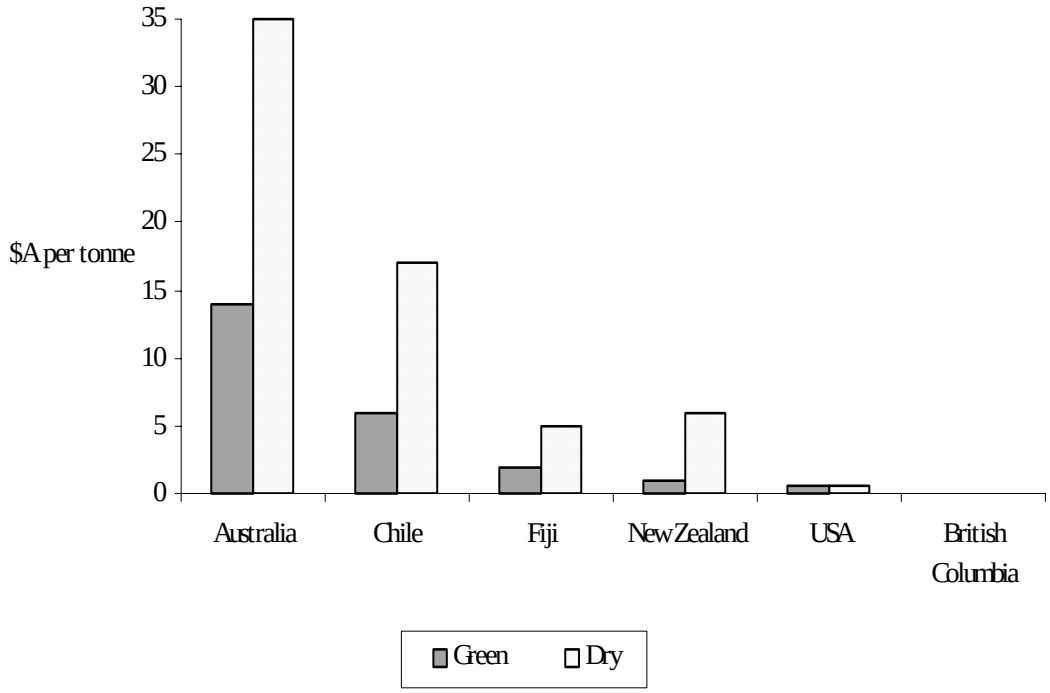
ATTACHMENT E3: MARKET STATISTICS

Table E3.1: **Australian production, consumption and trade, pulpwood-based products, 1988-89**

Product	*Production*	*Export*	*Imports*	*Apparent consumption*
Pulp (kt)	1061	69	262	1254
Newsprint (kt)	384	2	288	670
Printing and writing paper (kt)	353	10	517	852
Tissues (kt)	144	0	14	163
Packaging & industrial paper (kt)	1073	114	197	1123
Hardboard (cu m)	115 000	4440	8310	118 870
Particleboard (cu m)	799 104	122 4010	803	803 083

Source: NAFI (1990, pp. 69-79).

Figure E3.1: **Softwood pulpwood royalties 1, selected countries, 1991-92**



1 Weighted average 'stumpages'.
Source: Submission No. 78, p. 13.

APPENDIX F: THE PRICING OF RAW AND REFINED SUGAR

CONTENTS

This appendix examines the pricing of Australian produced sugar. The pricing of both raw and refined sugar was raised as an issue during the inquiry, with an emphasis on the adverse consequences of such pricing on the competitiveness of processing industries.

The information used for the study is largely drawn from the Commission's recent inquiry into the Australian sugar industry (IC 1992). The Commission's estimates of import and export parity prices for raw and refined sugar, presented as attachment F1, are for the financial year 1989-90.

World prices for raw and refined sugar are extremely volatile and, as a consequence, the returns to growers and millers fluctuate over time. The use of data for only one year, however, is not regarded as having a bearing on the findings arising from the analysis of pricing practices presented in this paper.

F1 Market characteristics

Growing and milling

Sugar cane is grown on about 6500 farms. In the 1990-91 season, mills processed 21.4 million tonnes of cane into 3.1 million tonnes of raw sugar.

There are 28 sugar mills in Australia, 25 of which are located in Queensland and three in New South Wales. CSR Limited (CSR) owns seven Queensland mills, Bundaberg Sugar Company owns six, and four are owned by the Mackay Sugar Co-operative. All remaining Queensland and New South Wales mills, except two, are grower owned.

About 25 per cent of Australia's raw sugar production is sold to domestic refiners, the remainder being exported. Australian exports account for about 10 per cent of world trade.

Imports of raw sugar are minimal. The import tariff in 1989-90, the year to which the Commission's price analysis relates, was $115 per tonne. It is currently $76 per tonne from general sources and will be reduced to $55 per tonne on 1 July 1992. The tariff is reduced by 5 per cent of the free-on-board (fob) price for raw sugar from developing countries, the most likely source of import competition. In 1989-90, this tariff is estimated to have been $94 per tonne.

In Queensland, the dominant sugar producing State, regulations govern almost every aspect of cane growing, milling and marketing. The regulations of greatest relevance to pricing of raw sugar on the domestic market are the compulsory acquisition powers of the Queensland Sugar Corporation (QSC), which give it sole seller status and a dominent position in the Australian raw sugar market.

In contrast to Queensland, there are no government controls on marketing of sugar in New South Wales. All raw sugar output is sold to the refinery jointly owned by the grower co-operative and the Manildra Food Group. The New South Wales industry supplies about 25 per cent of the domestic market, and its capacity to expand and compete with Queensland is limited because of a lack of suitable land for cane growing.

Refining

Raw sugar requires further refining before it can be used in the manufacture of food and beverages. Refineries process Australian raw sugar into white (refined) sugar and liquid sugar products. Sales of raw sugar to Australian refineries totalled about 900 000 tonnes in 1989-90.

There are six commercial sugar refineries. Four are owned by CSR (one in each mainland State capital city except Adelaide), one by the Bundaberg Sugar Company and one by Manildra Harwood Sugars (near Grafton, NSW). CSR has the dominant share of the domestic market (about 69 per cent), followed by Manildra Harwood Sugars (25 per cent) and Bundaberg Sugar Company (5 per cent). Imports and exports of refined sugar are minimal.

The tariff on refined sugar is being phased down along with the tariff on raw sugar. In 1989-90 it was $115 per tonne for imports from general sources and estimated to have been $87 per tonne from developing countries.

Sugar refiners face competition in the form of in-house refining by large users (for example, the Golden Circle liquid sugar plant in Brisbane) and from producers of fermentables such as glucose syrup, starch and some grain products which can be used in the production of beer. Artificial sweeteners provide only limited competition at present for technical reasons and because of food regulations restricting their use.

Sugar users

Retail sales are about 22 per cent of the refined sugar market and are declining in importance.

The main manufacturing uses of refined sugar are non-alcoholic beverages (29 per cent), confectionery (11 per cent), bakery products (9 per cent), preserved foods (8 per cent), alcoholic beverages (7 per cent) and dairy products (6 per cent). Refined sugar represents about 15 per cent of the production cost of the manufacture of non-alcoholic beverages and confectionery.

F2 Pricing

Raw sugar prices

In its recent inquiry into the industry, the Commission concluded that Australian raw sugar producers are unable to influence the price they receive in overseas markets:

> ... Australia's share of the world sugar trade is small and, as a consequence, Australia is commonly regarded as a price taker on international markets (IC 1992, p. 46).

Export sales are made on a contract basis and are generally quoted on a cost and freight, or a cost, insurance and freight, basis. All export sales are paid for at the time of shipment. Actual export (and domestic) prices are confidential but constructed prices, based on spot market prices, are used for comparative purposes (see attachment F1).

An indicative, ex-mill export price for raw sugar is estimated to have been $395 per tonne in 1989-90.

The QSC's domestic pricing policy is to price up to the cost of duty paid imports. Domestic sales are on a cash and into-store basis. The price at which the New South Wales industry sells to Manildra Harwood Sugars refinery is confidential.

An indicative cost of importing raw sugar from developing country sources, into-store, was estimated to have been $545 per tonne in 1989-90 (see attachment F1). Assuming this equals QSC's domestic price, to place it on a comparable basis with QSC's export price requires the deduction of costs associated with transporting the raw sugar from the mill to the refiner's store. The Commission estimates this to average about $50 per tonne.

An indicative, ex-mill domestic price for raw sugar is estimated to have been $495 per tonne in 1989-90. This is $100 per tonne, or about 25 per cent, above a comparable export price.

The relationship between export price and production cost is not known. In its inquiry into the sugar industry, however, the Commission concluded that the higher domestic returns are not necessary to crossÄsubsidise export sales. In other words, cost is at or below the export price.

Rebates equivalent to the tariff on raw sugar imports from developing country sources are available from the QSC for raw sugar destined for export either as refined sugar or as exported food products and beverages. The scheme is administered by refiners and monitored by the QSC. In 1989-90, export rebates totalled $2.7 million.

Refined sugar prices

The Commission found in its sugar industry inquiry that domestic prices of refined sugar are generally set at import parity levels:

> Because of the limited competition between refiners on the domestic market, the price of refined sugar is essentially determined by the price at which imported refined sugar is available (IC 1992, p. 133).

An indicative cost of importing refined sugar from developing country sources, into-store, was estimated to have been $748 per tonne in 1989-90 (see attachment F1). As users are generally located in close proximity to refiners, this cost is likely to approximate CSR's domestic selling price on an ex-refinery basis.

An indicative, ex-refinery domestic price for refined sugar is estimated to have been $748 per tonne in 1989-90.

Although not an exporting industry, it is possible to calculate an indicative price that domestic refiners would need to match to be competitive on world markets. For 1989-90, this price was estimated to have been $536 per tonne on an ex-refinery basis (see attachment F1).

The influence of the raw sugar price on the viability of refining for export is apparent when the estimated export price of $536 per tonne is compared with the input cost of raw sugar. As indicated above, the delivered domestic price of raw sugar was estimated at $545 per tonne. Deducting the QSC export rebate (equivalent to the developing country tariff estimated at $94 for 1989-90), reduces this cost to $451, which allows $85 per tonne ($536 less $451) to cover the cost of refining for export. The Commission understands this margin to be insufficient, particularly having regard to the fact that it takes more than one tonne of raw sugar to produce one tonne of refined sugar. In comparison, in 1989-90 the difference between the into-store domestic price of raw and refined sugar was estimated as $203 per tonne.

The Commission has no information on how close the domestic price is to the cost of efficient production. If competition in the refining industry or with substitute products is intense, the price received can be regarded as indicative of the marginal cost of production. If competition is weak, the cost of production may be below this price. Because of the dominant position of CSR in refining, competition in the domestic refined sugar market is not strong.

F3 Efficiency implications

A concern of this inquiry is the potential for import parity pricing of raw sugar in the domestic market to foreclose potential value-adding activities. Raw sugar is a major input to refined sugar production. Domestic prices that are currently above the export parity price for raw sugar may be preventing value-adding by some users.

Competition in sugar cane growing, milling and refining would ensure that prices for refined sugar are set at market determined levels with no losses from pricing or productive inefficiency.

The Commission estimates that the potential loss from pricing domestic sales of raw sugar above export parity is approximately $0.9 million. This estimate was determined by using a price

elasticity of demand (the proportional change in demand relative to the proportional change in price) of -0.1 and by assuming a domestic price premium of $100 per tonne, the difference between the indicative ex-mill domestic and export prices.

Demand is virtually insensitive to price changes because refined sugar represents only a small proportion of the costs of manufactures, and final demand for sugar is also largely insensitive to price. For example, a recent estimate of the elasticity of demand for refined sugar, which can be expected to be slightly higher than that for raw sugar in absolute terms, is -0.076 (Wong et al 1989).

The potential loss estimate represents only a small fraction of domestic sales of raw sugar which are valued at about $355 million (at the estimated efficient cost of production of $395 per tonne). The relatively small loss of potential output associated with import parity pricing, coupled with the availability of export rebates, suggests that the domestic pricing policy of raw sugar producers is not causing a significant distortion to efficient resource use.

The influence of statutory marketing arrangements

In the report of its separate inquiry, the Commission presented the following finding:

> As a result of the statutory marketing arrangements for Queensland sugar and tariff protection, substantially higher unit returns are achieved from domestic sales of raw sugar than are obtained from export sales. In the absence of the statutory marketing arrangements, and with competition between domestic millers, it could be expected that arbitrage between the domestic and export markets would normally result in domestic unit returns being similar to export unit returns, other things being equal (IC 1992, pp. 92-93).

Accordingly, the Commission recommended that the Federal Government approach the Queensland Government with a view to deregulating the industry and thereby bring about improvements to productive efficiency and competition. The Commission also recommended that the specific tariffs applying to imports of raw and refined sugar be replaced by a direct transitional payment once the QSC's compulsory acquisition powers are removed.

The Commission's ORANI model simulation suggests that the removal of the tariffs and the loss of the ability to set domestic prices above export parity will lead to a smaller sugar industry, with raw sugar output and exports declining by between 2 and 3 per cent. The simulation assumed raw and refined sugar price distortions of 28 and 7 per cent respectively. The lower sugar prices were found to advantage sugar-using industries, with exports of preserved fruits increasing by 2 per cent and jams, confectionery and cocoa products increasing by 4 per cent (IC 1992, p. 153).

The influence of productive inefficiencies

The Commission found that the regulation of production under the current statutory marketing arrangements have acted as a disincentive to improving efficiency in the sugar industry. Changes to the land assignment system could increase on-farm productivity by 9 per cent. The elimination of practices prescribed under the statutory marketing arrangements and the land assignment system would encourage innovation and allow efficient producers to expand.

The annual gain in real gross domestic product from deregulation of raw sugar production using the Commission's ORANI economy-wide model was estimated to be between 0.05 and 0.1 per cent, or between $200 million and $400 million in 1990-91 prices (IC 1992, p. 151). This estimate represents the long-term efficiency gain after the industry and the economy adjust to the expansion of cane land and productivity improvements are realised.

This estimate is much greater than the loss due to pricing inefficiency, estimated to be in the order of $0.9 million. This supports the Commission's view that pricing inefficiency is a minor concern compared with other factors such as production inefficiency.

The influence of tariffs

The power to set domestic prices for raw sugar above export parity has enabled the QSC to take advantage of the tariff on raw sugar to increase returns to growers at the community's expense. The gain accrued by the Corporation and other producers because of their power to increase the price of raw sugar by the tariff is estimated to have been $87 million in 1989-90, or $84 million after taking export rebates into account (IC 1992, p. 97). The gain from tariffs will be less from 1991-92 onwards due to the phased reductions in tariffs.

The cost penalty to domestic users arising from the tariff on refined sugar is estimated to have been $87 per tonne in 1989-90, or 12 per cent of the indicative domestic price in that year. This has been estimated to represent a cost burden on food processors and consumers of refined sugar of about $90 million (IC 1992, p. 134).

The cost burdens associated with the raw and refined sugar tariffs estimated above are not additive. With the deregulation of the raw sugar industry in Queensland and the removal of the tariff for raw and refined sugar, the price of refined sugar could be expected to fall. In 1989-90, the extent of the fall would have at least equalled the refined sugar tariff of $87 per tonne, and potentially may have amounted to about $100 per tonne, the domestic and export price difference.

For statutory marketing authorities with the ability to influence domestic prices, tariffs provide scope to increase the return from domestic sales. If the price is inflexibly applied there is also the potential to foreclose domestic sales with a loss of benefit to the producers, users and the economy as a whole.

The QSC's policy of providing rebates down to the duty-free cost of importing raw sugar only partially captures the potential benefits of a flexible pricing policy. Sales to some users at prices between export parity and the duty-free cost of importing (the lowest domestic price offered) may also produce the benefits referred to above.

The influence of competition in downstream industries

The Commission concluded in its sugar inquiry report that the level of competition in the refined sugar market is not strong because of the concentration of refiners:

> ... given the level of concentration in the refining sector and the absence of significant competition between refiners on the domestic market, it is likely that the duty paid import parity pricing of refined sugar will prevail (IC 1992, pp. 134-135).

As discussed above, the removal of tariffs could have reduced the domestic price of refined sugar by between $87 and $100 per tonne in 1989-90.

This highlights the importance of ensuring that there is competition in downstream industries. Without such competition, the potential efficiency gains from efficient pricing of raw sugar will not be fully passed on, and the increased profitability could allow inefficiencies to be sustained until the competitive situation changed.

F4 Conclusions

The statutory marketing powers of the QSC and its dominance in the domestic market allow raw sugar producers to earn higher returns in the domestic than export markets. The scope to charge higher prices in the domestic market is increased by tariff protection on imports of raw and refined sugar.

The Commission considers that the raw sugar industry would be viable with lower gross domestic returns. This finding implies that the export price is an efficient price because it covers industry costs and does not reduce the returns achievable from exporting.

The Commission's analysis suggests that the loss of benefit to the nation from pricing inefficiency is small relative to the gains possible by reducing efficiency losses resulting from controls such as those applying in Queensland for sugar production and marketing. Nevertheless, capturing this benefit is worthwhile if it can be achieved at a net gain to the community.

The QSC's statutory marketing powers do not necessarily preclude efficient pricing, yet the Corporation has chosen to limit the price rebate available on raw sugar destined for export (either as refined sugar or food products and beverages). This policy may be foreclosing potential demand. Inefficient pricing is underpinned by a lack of competition in Australia's domestic sugar markets. The Commission notes that abolition of compulsory acquisition powers (and, as a result, a

weakening of the dominant position of the QSC in the domestic raw sugar market) is a necessary precondition for encouraging competition in both the raw and refined sugar markets. The reforms recommended in the Commission's report on its separate inquiry should stimulate greater pricing efficiency by addressing this problem.

ATTACHMENT F1: DATA USED TO CONSTRUCT EXPORT AND IMPORT PARITY BENCHMARKS

Constructing an import parity price for raw sugar: 1989-90

		Source
World raw sugar price	US 14.34c/lb	fob Caribbean ports, from ABARE
Exchange rate US $/$A	0.770425	Reserve Bank of Australia, Bulletin, December 1990
	$A/t	
World price in Australian dollars	410.25	[USc/lb x 22.046] / exchange rate
plus freight and handling: South-East Asia to east coast refinery	35	ABARE
Price at refiner's wharf	445.25	World price $A/t + freight, insurance and handling
plus port charges	5	IC estimate of additional cost of getting sugar imports across the wharf
free into refiner's store	450.25	price at refiners wharf + port charges
plus tariff on raw sugar		
- general duty	115	
- DC duty	94.49	
Import parity price of raw sugar		
- general duty	565.25	free into refiner's store plus general duty
- DC duty	544.74	free into refiner's store plus DC duty

Constructing an export parity benchmark price for raw sugar: 1989-90

	$A/t	
World fob price	410.25	
less transport and terminal costs	15	IC estimate of cost of getting export sugar from mill onto the ship. Includes transport from mill to terminal $5, storage at terminal $5 and loading costs $5.

Export parity benchmark price	395.25	Gross return to mills on exports

Constructing an import parity price for refined sugar: 1989-90

		Source
World refined sugar price	US 19.59c/lb	London daily fob European ports, from ABARE
Exchange rate US $/$A	0.770425	Reserve Bank of Australia, Bulletin, December 1990
	$A/t	
World price in Australian dollars	560.55	[USc/lb x 22.046] / exchange rate
plus freight and handling: South-East Asia to east coast port	90	ABARE
Price at end user's wharf	650.55	World price $A/t + freight, insurance and handling
plus port charges	10	Cost of getting refined sugar from wharf into store
free into store	660.55	price at wharf + port charges
plus tariff on refined sugar		
- general duty	115	
- DC duty	86.97	
Import parity price of refined sugar		
- general duty	775.55	free into store plus general duty
- DC duty	747.52	free into store plus DC duty

Constructing an export parity benchmark price for refined sugar: 1989-90

	$A/t	
World fob price	560.55	
less exporting costs	25	IC estimate of cost of getting export sugar from refinery, over wharf and onto ship. Includes additional packaging for export and minor transport costs.
export parity benchmark price	535.55	Gross return to refiners on exports

Source: Based on attachment to IC 1991f.

APPENDIX G: PETROLEUM RESOURCE RENT TAX

Context

In the 1990-91 Budget, the Federal Government announced that the Bass Strait royalty and excise regime would be replaced by an extension of the existing Petroleum Resource Rent Tax (PRRT).

The move to a PRRT for Bass Strait petroleum was criticised by a number of inquiry participants in respect of its implications for natural gas and ethane. While generally not opposing the concept of a PRRT, natural gas and ethane users argued that the producers should bear the burden of the tax. Further, Altona Petrochemical Company (APC) believed that "... the level of RRT on ethane should be set such that at worst the secondary tax is no higher than that previously applicable via royalty" (sub. 75, p. 2).

Several other points raised by participants - such as the retrospectivity and environmental aspects of the PRRT - are not directly relevant to this inquiry.

Given that neither natural gas nor ethane are exported from Bass Strait, the pricing of exports compared with domestic sales is not an issue.

Pre-July 1990 system

The Department of Primary Industries and Energy (DPIE 1990) divides the pre-existing petroleum excise and royalty arrangements into three geographical groupings:

- onshore and the State territorial seas - subject to a Commonwealth ad valorem excise and a State royalty (except Barrow Island in Western Australia which only has a resource rent tax);
- Bass Strait and the North West Shelf - subject to Commonwealth excise and/or royalties; and
- all other off-shore operations - subject only to royalty.

The term petroleum covers natural gas, ethane, crude oil and liquid petroleum gas (LPG). Natural gas and ethane were subject to a 10 to 12 per cent royalty on gross sales value only, while crude oil and LPG were subject to this royalty as well as excise.

Post-July 1990 system

Under the new system, excise and royalties have been replaced by a 40 per cent PRRT on net revenues from all petroleum production from Bass Strait. The PRRT was applied retrospectively with an effective commencement date of 1 July 1990.

It is important to regard the PRRT as a royalty (a charge for use of a public resource) and not a tax. The Commission has previously noted that:

> Correctly interpreted, royalties are not an unwarranted impost on miners, but are a charge analogous to payments for access to other 'gifts of nature' - such as broadcasting licence fees for the right to use part of the electromagnetic spectrum or payments for fishing quotas which represent a right to take a certain quantity of fish from a fishery.
>
> The people of Australia (as owners) are entitled to be appropriately compensated in return for transferring the right to exploit the country's mineral wealth to mining companies (IC 1991g, Vol. 3, p. xxv).

With regard to the possibility of special treatment of ethane, DPIE explained that:

> Provision of special arrangements for Bass Strait natural gas or ethane would have impaired the efficiency of the PRRT. A differential PRRT rate for specific Bass Strait petroleum product streams would cause investment and consumption distortions and may encourage the less than optimal use of the resource. Special treatment of gas or ethane could also create cost allocation problems. This would have unnecessarily complicated the PRRT (sub. 50, pp. 1,2).

In respect of the revenue effect of PRRT, the Government believes that:

> The changes to the secondary tax regime on petroleum are expected to reduce revenues by $305m in 1990-91 and $450m in 1991-92. A revenue positive outcome is expected in 1992-93 with the changes resulting in increased net revenues over the decade (Budget Statements 1990-91, p. 4.7).

The Commonwealth agreed to provide $60 million to the Victorian Government over two years to minimise transitional pressures on gas prices in Victoria. $45 million has been paid and the remaining $15 million is due to be paid in June 1992.

Pass-on of PRRT to consumers

Chemplex Australia Ltd stated in its submission that the PRRT has increased the cost of Bass Strait ethane to users and threatens to reduce the production volumes of the downstream petrochemical industry. It said that prices are negotiated through long-term contracts, which "... pre-date the RRT legislation by several years and entitle the producers to pass on changes in secondary taxation" (sub. 20, p. 2). Chemplex added that it is not practicable to import ethane and natural gas (unlike crude oil or LPG), leaving consumers with little commercial leverage to avoid the price increase.

Chemplex claimed the PRRT will increase the price it pays for ethane by some 25 per cent. It said that this would make the company uncompetitive by world standards, threatening its ability to export (currently some 40 per cent of its total production).

Responding to the Draft Report, Chemplex stated that:

> No comment is made about the discrimination between ethane and natural gas users, the former being told to solve the problems created for them by the legislation, the latter being granted $60 million ex the Federal coffers to compensate them for PRRT pass through.
>
> The Commission should be aware that Chemplex has now received invoices totalling in excess of $3 million from Esso and BHP for PRRT and is being forced to enter expensive arbitration proceedings in order to attempt to resolve this Federal Government produced problem (sub. 80, p. 2).

APC also believes the PRRT will increase the price of ethane, the major raw material for the Victorian petrochemical and plastics industry. This, it claims, will result in cost increases of about $10 million a year for ethane users and plastics manufacturers, plus another $5 million a year due to the PRRT's effects on natural gas prices. The company noted that this increase in costs cannot be passed on since plastics prices are set by international competition.

APC stated that its concerns about the PRRT being passed on to users:

> ... will not be resolved by imposing restrictions on producer/user pass-through or leaving it to commercial negotiation. Although restrictions might alleviate the user's pricing concerns in the short term, the producer's RRT costs could ultimately creep through post future contract renegotiations ... (sub. 75, p. 1).

The Victorian Gas Users Group claimed that the PRRT will be passed on to users and will therefore be an additional impost to the Public Authority Contribution collected from the Gas and Fuel Corporation of Victoria by the Victorian Government. It added that:

> The impact on gas users was clearly an oversight or unintended consequence of the overall objective of rationalising the royalty/excise regime in existence on Bass Strait products excluding gas and ethane. There was no prior consultation with the government, the gas distributor or end users to examine the effect both short and long term on development of the gas market and manufacturing industry. It is unacceptable to have the two tiers of government taxing the manufacturing sector without any co-ordination or consideration of the consequences (sub. 32, p. 6).

Esso Australia Ltd, in evidence to the Senate Committee on Finance and Public Administration in May 1991, stated:

> ... we have been advising our customers that there is the potential for an additional pass-on if the RRT legislation is passed. Certainly our view is that under the provisions of the contract there is an entitlement for us to do that and this will be a subject of commercial negotiations. Our starting point going into those negotiations will be that we intend to pass on the full impact of that price. But it will be a negotiation and beyond that I cannot speculate (Senate Hansard, p. 127);

and in its submission to this inquiry:

> The Commonwealth Government has asserted that the RRT should be borne entirely by the producers and not passed on. However, in Esso's view, the Government was never under any misapprehension that RRT on gas could and would be passed on to gas users. The impact on gas users was neither an oversight nor an unintended consequence of the imposition of RRT: the Government simply tried to shut its eyes to the consequences of its new tax (sub. 54, p. 2).

The Federal Government's position with respect to the prices of natural gas and ethane in Victoria is that they are best determined by commercial negotiations between the parties directly involved:
Over the long term there are a number of issues affecting natural gas prices in Victoria which would be best negotiated by the parties directly involved. These include the degree to which the Bass Strait producers absorb the PRRT, the capacity of the GFCV and other purchasers of Bass Strait gas to renegotiate prices and the level of charges currently imposed by the Victorian Government on the GFCV.

> The Government carefully examined the possible effects on ethane prices of the transition to PRRT on Bass Strait petroleum production. It looked at the likely effects on downstream industries, having regard to a number of factors, including the profitability of ethane production in Bass Strait. Given the producers' long term commitment to the development of the Bass Strait resource, it is unlikely that ethane price increases detrimental to commercial sales volumes would be contemplated. The Government's decision not to interfere in price setting arrangements was made on the basis that commercially sustainable prices for ethane would be best resolved without government involvement (DPIE sub. 50, p. 2).

In its submission, DPIE advised that the Government was aware of concerns that the transition from the previous excise and royalty arrangements for petroleum production in Bass Strait to the PRRT:

> ... could cause changes to Victorian gas prices, with possibly disruptive consequences for industry and domestic consumers. The Government's special grant to the Victorian Government for each of the first two years of PRRT was provided to minimise any transitional pressures on natural gas prices. The Victorian Government has given public assurances that natural gas prices will not now be affected by the transition to the PRRT in Bass Strait (sub. 50, p. 2).

Report on operation of the PRRT Act

The PRRT legislation was amended recently, by the insertion of a clause requiring the responsible Minister to prepare a report on the operation of the Act by 30 November 1992. The report is to cover: whether the Act has been effective in achieving its objectives; the impact on prices and on industry; and the impact on the development of new off-shore petroleum projects.

Conclusions

In its inquiry into the Australian mining and minerals processing industries (IC 1991g), the Commission concluded that a pure-rent royalty is the most efficient means of collecting a return for the community's natural resources. A resource rent tax is a variant of a pure-rent royalty, where losses are compounded forward rather than being partly borne by the government.

A resource rent tax obtains for the community all or part of any 'above normal' profits earned by producers as a result of being granted access to a public resource. It is not intended to be, nor should it be regarded as, an impost to be passed on. If, however, producers are able to pass on the PRRT in order to maintain previous profit levels, they are clearly exercising monopoly power and there is in fact scope for those producers to increase prices to their customers regardless of whether a resource rent tax is in place.

In the Commission's view, the PRRT should be a more efficient means of generating a community return than the system it replaced. As such, it could be expected to lead to greater economic efficiency and a better use of resources.

The impact on users of the switch to a PRRT cannot be assessed at this stage as the question of its pass-on to users and related matters are still subject to negotiation between the parties involved.

ABBREVIATIONS

ABARE	Australian Bureau of Agricultural and Resource Economics
ABS	Australian Bureau of Statistics
AEEMA	Australian Electrical and Electronic Manufacturers' Association Limited
ANM	Australian Newsprint Mills Limited
APC	Altona Petrochemical Company
ASR	Australian Synthetic Rubber Co. Ltd
AUSTRADE	Australian Trade Commission
AWPA	Australian Wood Panels Association
COMEX	Commodity Exchange of New York
CPI	Consumer Price Index
CRA	CRA Limited
CSR	CSR Limited (Refined Sugars Group)
cu m	cubic metre
DC	Developing Country
DPIE	Department of Primary Industries and Energy
fob	free-on-board
IC	Industry Commission
kt	kilotonnes
LME	London Metal Exchange
LPG	liquid petroleum gas
MIM	M.I.M. Holdings Limited
PRRT	Petroleum Resource Rent Tax
PSA	Prices Surveillance Authority
PTM	Palmer Tube Mills Limited
QSC	Queensland Sugar Corporation
RAC	Resource Assessment Commission
SCL	Southern Copper Limited
Shell	Shell Chemical (Australia) Proprietary Limited
SMA	Statutory Marketing Authority
sub.	submission (to this inquiry)
TOA	Tubemakers of Australia Limited

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