
**INDUSTRY
COMMISSION**

BOOK PRINTING

REPORT NO. 54
23 OCTOBER 1996

**Australian Government Publishing Service
Canberra**

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ISBN 0 644 47498 X

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Forming the Productivity Commission

The Commonwealth Government, as part of its broader microeconomic reform agenda, is merging the Bureau of Industry Economics, the Economic Planning Advisory Commission and the Industry Commission to form the Productivity Commission. The three agencies are now co-located in the Treasurer's portfolio and amalgamation has begun on an administrative basis. While appropriate arrangements are being finalised, the work program of each of the agencies will continue. This report has been produced by the Industry Commission.

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23 October 1996

The Honourable Peter Costello MP
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 Book Printing.

Yours sincerely

Tor Hundloe
Presiding Commissioner

Nicholas Gruen
Associate Commissioner

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ABBREVIATIONS

ABS	Australian Bureau of Statistics
ACS	Australian Customs Service
APA	Australian Publishers Association
ASIC	Australian Standard Industrial Classification
BPA	Brown Prior Anderson
CAL	Copyright Agency Limited
CLRC	Copyright Law Review Committee
DFAT	Department of Foreign Affairs and Trade
IAC	Industries Assistance Commission
IC	Industry Commission
ORR	Office of Regulation Review
PC	Productivity Commission
PIAA	Printing Industries Association of Australia
PMP	Pacific Magazines & Printing
PSA	Prices Surveillance Authority
RRP	recommended retail price
R&D	research and development
TRIPs	Trade Related Aspects of Intellectual Property
UCC	Universal Copyright Convention
UNESCO	United Nations Educational, Scientific and Cultural Organisation
WIPO	World Intellectual Property Organisation
WTO	World Trade Organisation

OVERVIEW AND RECOMMENDATIONS

This report examines book printing in Australia. It was prompted by the anticipated expiry of the current book bounty scheme at the end of 1997. However, in its 1996 Budget, the Government announced that the bounty would cease from 20 August 1996, with some transitional arrangements for work in progress.

Despite this decision, announced after the Commission released its Draft Report, the Commission has completed its inquiry and report in accordance with its terms of reference.

The report examines the effectiveness of the book bounty. It examines the nature and extent of any possible future assistance to Australian book printing, concentrating on the post-1997 period. The report also comments on the early removal of the bounty.

The report also considers key factors affecting industry development and ways to encourage improved efficiency in book printing.

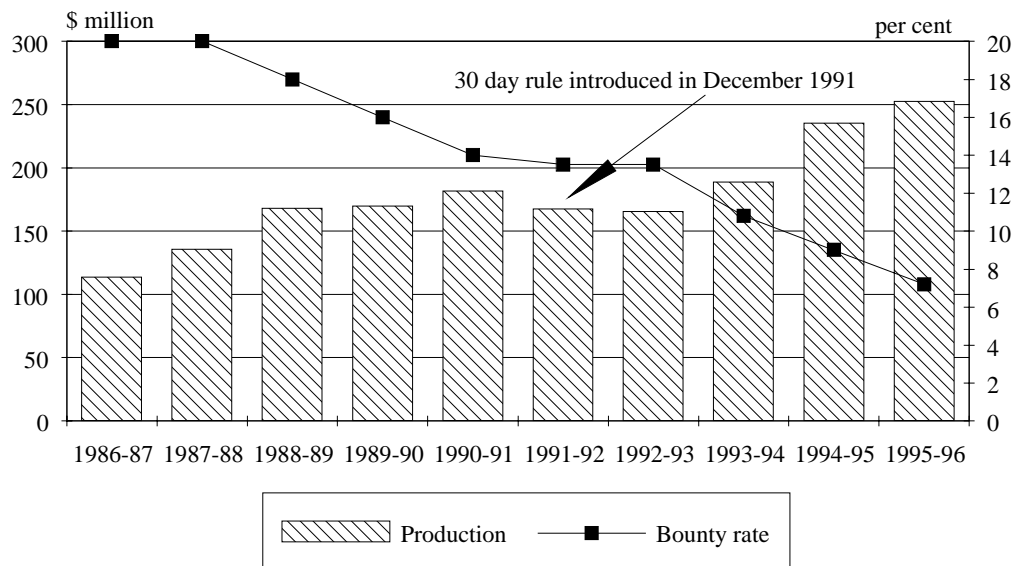
Recent trends

Book printing in Australia has expanded considerably over the last decade (Figure 1). Printers have become more competitive, even though the rate of bounty has declined quite markedly. With rapid changes in printing technology, printing and associated activities are becoming far more capital-intensive.

Printing activity

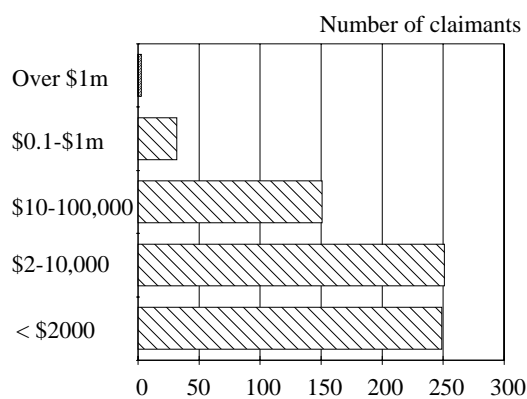
Production of bountiable books in 1995–96 totalled about \$270 million (excluding bounty payments). This is an increase of over 50 per cent, in real terms, since the Commission's 1992 inquiry into book printing. Non-bountiable directory printing in Australia for Telstra totals some \$140 million annually. Bountiable books and non-bountiable directory printing together account for the vast majority of Australian book printing.

Figure 1: Bountiable book production (in 1994–95 prices) and bounty rate



In 1995–96, almost 700 printers and publishers claimed book bounty (Figure 2), receiving in total about \$21.9 million. In that year, only 35 claimants received more than \$100 000 in bounty payments. Two large enterprise groups — Pacific Magazines & Printing, and the McPherson’s Printing Group — accounted for just under 35 per cent of total bounty payments. The third largest, Chertsey Fifty-Nine, received about 9 per cent of the bounty. Apart from these three groups, book printing remains fragmented with many small specialist and non-specialist printers.

Figure 2: Bounty payments by claimant 1995–96



Book demand

Comprehensive data on the demand for books in Australia are not available. But Australian Bureau of Statistics (ABS) survey data show that in 1994 revenue from domestic sales by Australian publishers of locally printed and imported books totalled some \$760 million. In addition, export sales by Australian publishers were about \$80 million. Almost 13 750 titles were published, and 125 million copies sold. Anecdotal evidence suggests that Australian demand for books has grown significantly in recent years.

In 1994, Australian publishers covered by the ABS survey spent nearly \$210 million on book printing. About two-thirds of that, some \$143 million, was placed with Australian printers. In other categories, Australian printers had a higher market share. For example, virtually all telephone directories for the domestic market are printed in Australia.

Assistance

Book bounty had applied since 1969 at rates as high as 33 1/3 per cent of the publisher's printing costs. It was originally intended to protect local printing activity against import competition, and to assist local industry to develop. Assistance had been afforded by bounty because Australia's adherence to the international Florence Agreement ruled out tariffs or import quotas on books of an educational, scientific or cultural nature.

Since the 1992 report, the level of bounty has gradually declined from 13.5 per cent. For 1996, bounty had been set at 7.2 per cent, and had been scheduled to decline further to 4.5 per cent on 1 January 1997. Total bounty payments have ranged between about \$21 million and \$23 million in recent years.

Not all Australian book printing activity has been assisted by bounty. Directories and timetables relating to Australia have been assisted by a tariff on imports — the current general tariff is 5 per cent. Some books have been neither eligible for bounty, nor assisted through tariffs.

Competitiveness

The increase in domestic book printing activity since 1992, in a period in which the bounty rate has declined significantly, is not only due to market growth, but also to improved overall competitiveness.

Several factors have contributed to this improvement, including: the effects of cost increases overseas; a change in the composition of domestic demand; and

the effects of changing printing technology, especially in the pre-press areas of typesetting, film preparation and platemaking.

- Competitors in Singapore and Hong Kong have become more expensive since 1992, largely because of higher labour costs, although this has been partly offset by their subcontracting to firms in lower cost countries. However, printers in countries such as Indonesia, Malaysia, India and China have yet to establish reputations for quality and reliability.
- Consumer demand in Australia has become more diverse, with the number of book titles published growing faster than total book sales. Australian printers have an advantage where short printing runs are involved. Demand has also moved away from four-colour 'coffee-table' books towards mono-colour paperbacks. Australian printers have traditionally been strong in this area of printing.
- New capital-intensive technology has reduced overall labour costs and has enhanced the role for skilled labour, particularly in the pre-press area.

Paperback fiction, educational books, and specialised publications (such as law reports) are the book categories in which Australian printers are most competitive. Overseas printers have often had the edge in printing four-colour casebound books, where longer lead times are acceptable and labour costs more significant.

Key factors affecting future development

Continuing technological change is expected to be of prime importance in the future development of Australian book printing. A number of other factors could also have some effect.

Technological change

The rapid technological change in book publishing and printing that has occurred over the last few years shows no sign of slowing. The industry is likely to continue to become more capital-intensive. Consequently, competitiveness should be less sensitive to labour costs.

Important recent and ongoing developments include: computer-based typesetting, composing, and image manipulation; and computer-to-plate technology (eliminating film). In addition, improved automation and quality control systems have increased the speed and output of printing presses and reduced staffing levels, and computer-assisted binding equipment is being used.

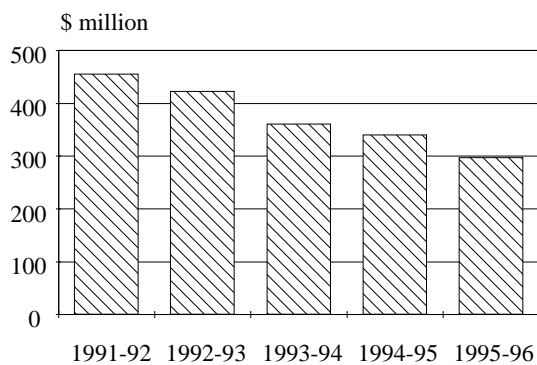
Developing digital printing technology allows information transfer direct from computer to page, eliminating plates entirely. As the cost of this technology declines, shorter print runs will continue to become more economic, enhancing moves by publishers to rationalise their costly sale-or-return distribution arrangements. Printing-on-demand will become more feasible.

At present, however, traditional offset printing still has a cost advantage for most medium to long print runs in areas such as paperbacks and colour work.

Although overseas printers also are adopting new technology, the continuing introduction of the newer, more capital-intensive technology should reduce the relative importance of labour costs and increase the competitiveness of Australian printers, especially in the domestic market. Printing costs worldwide are likely to converge, but the costs of shipping books to Australia will continue to cushion Australian printers against import competition. Indeed, there is evidence of improved competitiveness, with imports declining significantly since 1992 (Figure 3).

In the pre-press area, electronic delivery is becoming the norm and delivery costs are much less significant. Pre-press may therefore become subject to greater international competition. Australia's relatively skilled labour force could give it a competitive edge in pre-press work.

Figure 3: Imports of books
(1994–95 prices)



Electronic publishing

Electronic publishing, on CD-ROMs and the Internet, for example, has created an alternative means of distribution for publishers. CD-ROMs already have displaced some sales of encyclopedias and reference books, but in other areas electronic publishing has enhanced the demand for printed books (such as computer manuals).

Although some printers estimated that up to 30 per cent of printed text could be replaced ultimately by electronic versions, most participants considered that electronic publishing was largely complementary to printed books and stimulated book demand.

Demand for directories

Telstra publishes some 30 million volumes of directories annually for the Australian market. These directories are printed in Australia, at an average cost of about \$4.50. At present, telephone customers receive these directories every year without direct charge. According to Telstra, advertising revenue ensures the Yellow Pages are ‘very’ profitable, while the White Pages make a ‘small’ profit.

Under the current licensing provisions which run to mid-1997, Telstra is not able to charge customers directly for the provision of White Pages directories.

Telstra disagreed with the Commission’s draft recommendation that telecommunications providers should be entitled to offer consumers the choice of continuing to receive directories under present arrangements, or to offer an appropriate rebate to consumers not wishing to have a directory every year. It indicated that it had ‘in principle’ concerns about the commercial and customer implications of charging for directories.

The Commission can see no reasons why telecommunications providers operating on a commercial basis should not be free to determine their own arrangements for the supply of directories, and will recommend accordingly. Telstra’s comments, however, suggest that it would not vary its current arrangements even if it had that freedom.

Copyright and book importing

Prior to 1991, provisions in the *Copyright Act 1968* gave the holder of the Australian copyright in a book — generally an Australian or foreign publisher — the right to exclude parallel imports. That is, only an overseas supplier specifically authorised by the copyright holder could supply imported books, and imports from third parties were not permitted without the copyright holder’s permission. In a 1989 report, the Prices Surveillance Authority found that copyright holders had been able to set Australian prices at levels higher than those charged overseas.

Changes to Australia’s copyright legislation in 1991 restricted the ability of copyright holders to control imports of their books to Australia. This has had some consequent effects on Australian book printing activity.

Following the 1991 changes, the holder of Australian copyright for a new book must now supply copies of it for distribution in Australia within 30 days of its first publication overseas if it is to retain control over imports. Previously, there was no time limit. If copies are not, or cannot be, supplied within that time,

Australian booksellers become free to purchase copies from any overseas supplier for distribution within Australia.

These changes were intended to speed up the availability of new books for Australian consumers. Some printers indicated that it had also resulted in increased demand for Australian printing, as overseas publishers have used Australian printers to meet the 30 day limit. If the experience of one large printing group is typical, Australian printers as a whole may have benefited by about \$25 million per annum. The 1991 changes have thus benefited Australian book printers, as well as book readers.

Notwithstanding the changes, the copyright provisions still act as a non-tariff barrier to book imports. In 1995, the Prices Surveillance Authority found that there had been little impact on the differential between the prices of books sold overseas, and prices in Australia. The provisions still enable copyright holders to set higher prices in Australia than are set in overseas markets. This disadvantages Australian consumers, distorts consumption patterns, affects production efficiency and reduces the welfare of Australians overall.

Because of these adverse effects, the Commission considers that the provisions of the *Copyright Act 1968* which preclude parallel imports of legitimate copies of printed books should be removed.

At present, Australia is participating in discussions on copyright matters under the auspices of the World Intellectual Property Organisation. Issues under consideration include enforcement and extension of copyright protection, including the scope for creating exclusive transmission and distribution rights which would require countries to provide copyright regimes precluding parallel imports of legitimate copies of all goods subject to copyright.

The Commission considers that international discussions such as these should give due concern to the interests of users of intellectual property, as well as to the interests of producers. In particular, Australia's negotiators should give adequate and full regard to the interests of users. The Department of Foreign Affairs and Trade already holds consultations with industry and business on intellectual property issues so that their interests can be incorporated in Australia's negotiating objectives. The Commission considers that these consultations should be extended to include relevant users of intellectual property, both as inputs to business and as final consumers. The interests of users should be incorporated into Australia's negotiating objectives with weight appropriate to Australia's position as a net importer of intellectual property. Further, the Commission considers that the Government should strongly oppose moves to extend copyright unless an appropriate expert and independent body

indicates that to do so would clearly provide net benefits, taking into account the interests of users as well as producers.

Export prospects

Australian printers have had some notable export successes — Griffin Press, for example, exports significant volumes of books to Japan. Since 1992, however, exports of books (including directories) have fluctuated considerably. The value of exports in 1995–96 (in real terms) was some 5 per cent below that of 1991–92 (Figure 4).

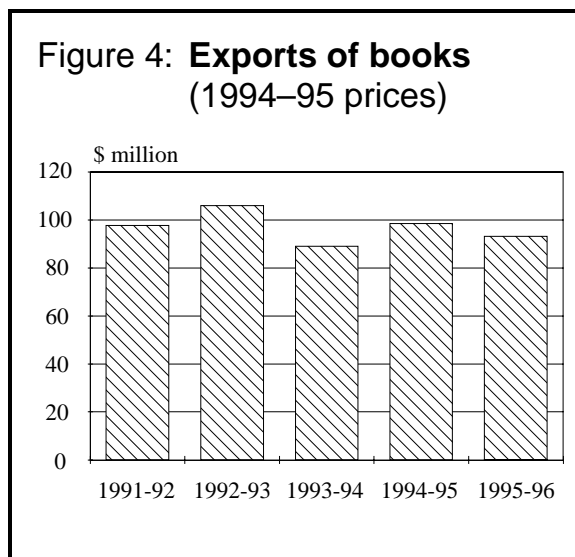
Given the crucial importance of the price of paper in the cost of printing, it is unlikely that Australia can become a major exporter of books.

Overseas printers in general can purchase paper more cheaply than in Australia. Australian exporters are disadvantaged not only by the costs of transporting the printed books overseas but, as import parity pricing applies, also by transport costs (and any tariffs) on paper used for printing.

Language and cultural barriers can also be significant, and overseas trade barriers can also inhibit exports of Australian printed books. For instance, a number of Asian countries have not yet implemented the provisions of the Florence Agreement.

Some other developments could be favourable — for example, the increasing capital intensity of book printing, and the declining relative importance of labour. In the pre-press area, particularly, there could be greater opportunities for Australia. Electronic delivery can make transport costs negligible in this activity, and Australia's skilled labour could be a competitive advantage. Further, there are opportunities for Australian firms to take advantage of their expertise in printing and pre-press technology through overseas investments.

The Commission considers that relevant government agencies should support Australian exporters by strongly pursuing multilateral and bilateral negotiations to remove overseas trade barriers to Australian exports of books.



Assistance for book printing post-1997

As noted above, the current book bounty scheme was terminated on 20 August 1996. However, Australia's adherence to the Florence Agreement has ruled out assistance by way of tariffs or import quotas on books of an educational, scientific or cultural nature. Thus, any examination of post-1997 assistance for book printing must consider whether some form of replacement book bounty scheme would be justified.

Most participants supported continuation of book bounty beyond 1997. Generally, a rate of 4.5 per cent was sought, although some requested a rounding to 5 per cent. Their rationale was that book printing should be treated no less favourably than other manufacturing activity.

Effectiveness of bounty

Participants argued that bounty had been effective in protecting local printers against import competition, even at the reduced rates applying in recent years. Some printers stated that bounty had also facilitated major investment, had supported employment and improved competitiveness.

Although not a specific aim, bounty also acted to offset cost penalties associated with tariff assistance on inputs into book printing, such as paper, inks and binding materials.

Administrative and compliance issues associated with determining eligibility for bounty in its early years had been largely overcome.

Thus, bounty has been effective, at least from the viewpoint of book printers and publishers. However, in considering whether bounty assistance has provided a benefit to the community as a whole, its overall impact on economic welfare needs to be considered. Relevant factors include the levels of assistance accorded to other manufacturing activity, assistance provided to inputs such as paper, and the level of administrative and compliance costs. These factors are also relevant to assessing what future assistance should apply.

Assessing the case for assistance

In seeking assistance for book printing, participants pointed to assistance accorded to other Australian manufacturing activities, and drew attention to the adverse effects of tariff assistance on inputs to book printing such as paper.

Assistance for manufactured commodities has been falling for many years. Phased general reductions in protection initiated in 1988 and 1991 mean that from 1 July 1996, tariffs on most goods are 5 per cent or less.

In its report to Government of 28 June 1996 on the *Stocktake of Progress in Microeconomic Reform*, the Productivity Commission argued that there would be benefits to Australia from continuing these phased tariff reductions beyond July 1996. It proposed that there be a further reduction to 3 per cent in July 1997, with tariffs for most goods being removed on 1 July 1998. (Assistance to the more heavily protected textile, clothing and footwear and passenger motor vehicles industries would be subject to separate review.)

If that proposal were accepted by the Government, there would have been no justification for continuing book bounty beyond its scheduled expiry at the end of 1997, particularly given its administrative and compliance costs (see below).

However, if that proposal were not adopted, or were delayed in implementation, there could be a case for continuing assistance to book printing, provided it could be demonstrated that this would enhance economic efficiency.

Economic efficiency is generally enhanced by greater uniformity of assistance between commodities and across industries. However, different types of books have received different forms and levels of assistance. As noted above, some books have been assisted by bounty and some by tariff. Others have received no assistance. Not all books are penalised through tariffs on their paper inputs.

In view of these disparate arrangements, it is difficult to judge whether providing bounty to book printing would provide greater uniformity of assistance or less. However, an assessment of the economy-wide implications of bounty must take account also of the administrative and compliance costs associated with a bounty.

Administrative and compliance costs

According to the Australian Customs Service (ACS), annual administrative costs for the book bounty had been about \$325 000. Allowing for overheads increases this to about \$410 000. The information on compliance costs which had been borne by bounty claimants is less certain, with estimates ranging between about \$150 000 and \$420 000 per annum.

Any net efficiency gain from providing assistance to book printers to enhance assistance uniformity has to be set against these administrative and compliance costs.

The net economic efficiency gain from a bounty is much less than the total bounty payable. More specifically, paying bounty on book printing which would be produced in the absence of bounty cannot provide any economic gains to Australia. Participants confirmed that a substantial proportion of current book printing activity would continue even if bounty were not available.

Further if, as is likely, administrative and compliance costs are relatively fixed irrespective of the level of bounty, at low rates of bounty these costs may outweigh any net benefits arising from enhancing assistance uniformity. The Commission's analysis (set out in Chapter 4 and Appendix I) indicates that any possible gain from providing uniformity arising from a bounty of 4.5 per cent would be offset to a large extent by the efficiency loss arising from administrative and compliance costs.

In summary, the maximum book bounty rate which could possibly be justified would be 4.5 per cent. However, there is no certainty that such a bounty would enhance uniformity of assistance. Further, at the rate of 4.5 per cent, any possible efficiency benefits from uniformity would be substantially offset by administrative and compliance costs. The Commission has concluded that there is no justification for bounty assistance for the production of books in Australia after the end of 1997.

Alternatives to bounty

The Commission has considered several alternatives to bounty. Specific measures examined include capitalisation of bounty (that is, paying a lump sum up-front), some other form of grant or subsidy, and ways of directly offsetting the effects of assistance on inputs.

The Commission has concluded that there would be no overall benefit to the community from providing any of these forms of assistance to book printers.

In particular, the Commission has concluded that accepting participants' requests for tariff concessions to apply to paper and other inputs into book production would not be justified. The associated administrative and compliance costs would offset, and possibly exceed, any benefit to book printers from the concessions. There could be significant costs imposed on Australian paper manufacturers. Further, singling out paper used in book printing for special treatment would be difficult to justify, as many types of paper are substitutable in use and it is difficult to see where the boundaries lie. Any request for variations to particular tariff concessions or by-laws should be handled within the usual framework administered by the ACS.

Books assisted by tariff

Australian telephone directories and Australian timetables — that is, directories and timetables relating to Australia — are currently assisted by tariff, whereas directories and timetables relating to other countries have received bounty.

Given that directories and timetables printed in Australia relating to other countries are no longer assisted by bounty, the Commission considers that the tariff on Australian directories and Australian timetables also should be removed. This would also serve to remove the different treatment of directories, for assistance purposes, depending on their content.

Effects of bounty removal

Participants expressed concern about the adverse effects of bounty removal. Some considered that up to 50 per cent of current work could be at risk, although some participants gave lower estimates. There was some concern about possible regional implications.

Clearly, and understandably, there is considerable uncertainty about the likely effects of bounty removal. However, in recent years, any adverse effects from the scaling down of bounty appear to have been more than offset by market growth and improvements in competitiveness. For instance, bountiable production in 1995–96 was more than 50 per cent higher (in real terms) than in 1991–92 (see Figure 1), despite a reduction in the average rate of bounty over that period of nearly 6 percentage points.

Some of the recent increase in Australian printing has been due to the effects of the 30 day rule — this would be removed under the Commission's recommendation to end restriction of parallel importations of books into Australia. However, the available evidence suggests that the significant majority of market growth has been due to other factors. These include a switch in the composition of demand towards mono-colour paperbacks, an area of book printing in which Australian printers have an advantage. As noted above, technological changes also have improved competitiveness of Australian book printers.

The Commission considers that adverse effects arising from removal of bounty (and the ending of the 30 day rule), will be significantly offset if the market trends evident in the last few years continue.

Submissions from participants indicate that some printing and publishing firms will incur significant costs as a result of the Government's decision to end the

book bounty, without notice, more than a year early. Continuation of bounty until its scheduled expiry at the end of 1997 would have allowed industry time to avoid these costs by adjusting its investment and production plans.

The Commission has no basis on which to judge the relative significance of the adjustment costs arising from early cessation of bounty. However, there is little doubt that the decision runs counter to the sound public policy principle of providing predictability and certainty in industry policy matters.

Leaving aside the adjustment costs arising from the early cancellation of bounty, the Commission's analysis of the benefits and costs of retaining bounty at a rate of 4.5 per cent beyond 1997 applies equally to 1997 itself. The analysis suggests that, leaving aside adjustment costs, there is no certainty that net community benefits would have arisen from the 4.5 per cent bounty scheduled to apply during 1997.

Recommendations

The Commission recommends that:

- the printing of books in Australia not be assisted by bounty after the end of 1997;
- book bounty not be replaced by any other form of assistance;
- the tariff on Australian directories and timetables be removed;
- telecommunications providers such as Telstra be free to determine, on a commercial basis, their own arrangements for the supply of directories to customers;
- the provisions of the *Copyright Act 1968* which preclude parallel imports of legitimate copies of printed books into Australia be removed;
- in international discussions on intellectual property matters, Australia's negotiators give adequate and full regard to the interests of users, by extending consultations with industry and business to include relevant users of intellectual property, both as inputs to business and as final consumers. Their interests should be incorporated into Australia's negotiating objectives with weight appropriate to Australia's position as a net importer of intellectual property;
- the Australian Government strongly oppose moves currently being discussed under the auspices of the World Intellectual Property Organisation to extend copyright protection into transmission and distribution, unless an appropriate expert and independent body indicates

that to do so would clearly provide net benefits, taking into account the interests of users as well as producers; and

- relevant government agencies strongly pursue multilateral and bilateral negotiations to remove overseas trade barriers to Australian exports of books.

BOOK PRINTING

CHAPTERS

- 1 THE INQUIRY**
 - 2 BOOKS AND BOOK PRINTING**
 - 3 KEY FACTORS AFFECTING DEVELOPMENT**
 - 4 ASSISTANCE**
-

1 THE INQUIRY

The terms of reference ask the Commission to inquire and report on the production of books in Australia. It is clear that, in the context of the terms of reference, 'production' refers to the manufacturing of books. A 'book' is considered to be a printed work of some length, on consecutive sheets of paper, fastened or bound together. Thus, the inquiry focuses on book printing and activities normally carried out as part of the printing process, including pre-press activity, rather than on activities normally carried out by book authors and publishers. For this reason, the report avoids the use of the term 'production' as far as possible, preferring instead the term 'printing'.

This report covers issues of relevance to the printing of books, and to the industries involved in the printing of books, in the context of aiming to improve the overall performance of the Australian economy.

1.1 Book bounty

A particular requirement of the reference received in January 1996 (see Appendix A) is that the Commission:

- 'advise whether assistance should be accorded to the production of books in Australia after the current bounty scheme terminates on 31 December 1997 and, if so, the nature and extent of that assistance, including capitalisation of bounty'.

The book bounty applied at a rate of 7.2 per cent of publishers' printing costs during 1996, and had been scheduled to apply at 4.5 per cent during 1997. However, in its 1996 Budget the Government announced that the bounty would cease from 20 August 1996, with transitional arrangements to apply for work-in-progress (see Section 2.3).

Despite this decision of the Government, which was announced after the Commission had released its Draft Report, the Commission has, in accordance with its terms of reference, completed its inquiry and report. In considering possible assistance measures, the report concentrates on the post-1997 period, although some comments are made about the early removal of bounty.

1.2 Topics for consideration

A specific requirement of the terms of reference is that the Commission identify and report on key factors affecting industry development and ways to encourage improved economic efficiency and international competitiveness of the industry.

In this context, the Commission has reported on the effectiveness of the book bounty scheme which, as noted above, has recently been terminated.

The Commission has also examined whether assistance should be accorded to the production — ie printing — of books in Australia and, if so, the nature and extent of that assistance.

A similar inquiry to this was undertaken by the Commission during 1992. This current inquiry, therefore, has concentrated on significant changes in book printing activity since then, and any assistance arrangements which should apply.

1.3 Scope of the inquiry

In Australia, book printing is a small part of the larger printing industry. Some printers specialise in book printing, but many firms which print books also engage in other types of printing, for example, magazine, advertising and job printing. This inquiry does not cover the entire printing industry — however some of the factors and issues relevant to printing generally are also relevant to book printing. Stationery such as exercise books, account books and books of tickets are considered to be excluded from this inquiry.

The printing of books involves a number of steps in converting a manuscript into the printed and bound page. Although changing as technology changes, these steps traditionally include the pre-press activities of typesetting, film preparation, colour separation and platemaking. Following printing, the post-press activities of folding, collating, sewing, casemaking, binding, and packaging for delivery are carried out. Post-press activities are also changing as technology changes. Pre-press and post-press activities are all included within the scope of this inquiry, along with book printing.

Although publishing is not covered in the terms of reference, printing and publishing are closely associated activities. Some issues of relevance to publishers can also affect book printers. Further, with the increasing use of desktop publishing and other significant changes in technology, publishers are becoming increasingly involved in areas once the domain of printers.

While this inquiry is primarily concerned with printed books, some issues affecting electronic publishing can affect book printers, and are therefore relevant to this inquiry.

1.4 Inquiry procedures

During the inquiry, the Commission held informal discussions with individuals, firms and organisations to identify issues and to seek views on those issues (see Appendix B). As well, participants provided relevant data about their own operations and about book printing generally.

To assist participants prepare submissions, an Issues Paper was released by the Commission in early March 1996. At the time the Draft Report was finalised, 18 submissions had been received (see Appendix B).

Following the release of the Draft Report in early August 1996, an additional 12 submissions were received. A public hearing was held at Melbourne on 12 September 1996 to receive comments on the Draft Report from participants — five groups of participants attended the hearing. The names of those making submissions in response to the Draft Report or appearing at the public hearing are included in Appendix B.

1.5 Structure of the report

Book printing activity in Australia has been subject to significant change in recent years. Since the Commission's 1992 inquiry, technological change has continued, with significant investment by Australian printers. Local book printing has become more internationally competitive, even though the rate of bounty assistance has declined. Chapter 2 outlines recent trends in the demand for books and in book printing activity, describes recent changes in assistance, and looks at changes in competitiveness. Chapter 3 examines key factors affecting industry development, including changing technology, electronic publishing and copyright arrangements. This chapter also examines export prospects.

Assistance issues are dealt with in Chapter 4. The chapter considers the effectiveness of the book bounty, examines whether any forms of assistance to book printing should continue, and the nature and extent of such assistance.

2 BOOKS AND BOOK PRINTING

In 1992, there were few large scale specialist book printers in Australia. Most firms printing books were small and non-specialist. Book printing activity accounted for only a small proportion of turnover and employment in the printing, publishing and bookbinding industries as a whole.

These findings are still generally valid. However, since the 1992 inquiry, book printing activity in Australia has grown, with an increasing share of books for the Australian market being printed in Australia. The reasons for this are discussed in Chapter 3, which also considers key factors likely to affect the future development of book printing in Australia.

This chapter presents facts and figures summarising changes since the 1992 inquiry. It considers the market for books in Australia, imports and exports, the extent of book printing activity, changes in assistance to book printers, and describes changes in competitiveness.

2.1 The market for books

Demand for book printing services is a consequence of the demand for books (what is termed 'derived' demand). The level of Australian book printing activity, therefore, is influenced by book sales in the Australian market, import penetration, and overseas demand for Australian book printing services. It appears that the domestic market for books has grown significantly since 1992. Imports have declined significantly. Although exports have fluctuated from year to year, they have remained relatively static over the period as a whole.

2.1.1 Book sales

Comprehensive information about total book sales in Australia is not available. However, a 1994 Australian Bureau of Statistics (ABS) survey of Australian publishers showed domestic book sales in that year of \$760 million, plus some \$80 million in exports (ABS 1996). Almost 125 million books were sold by these publishers (including 52 million imported books), with a total number of 13 741 titles published. Anecdotal evidence suggests that Australian demand for books has grown significantly in recent years.

The ABS estimated that about 40 per cent of domestic sales of books in 1994 were educational. Non-fiction hardback was the next largest category with 17 per cent of sales, followed by fiction paperback at 15 per cent and non-fiction paperback at 13 per cent. Books available on electronic media accounted for less than 1 per cent of those publishers' sales (see Table 2.1).

In total, the 186 publishing organisations included in the ABS survey results spent \$210 million on printing purchases in 1994. Sixty-eight per cent of that total, or \$143 million, was contracted to Australian book printing establishments (ABS 1996).

Table 2.1: Domestic book sales^a, 1994

<i>Category</i>	<i>Domestic sales</i>	<i>Proportion of total</i>
	<i>\$ million</i>	<i>per cent</i>
<i>Education</i>		
Primary	60.3	7.9
Secondary	72.9	9.6
Tertiary	83.8	11.0
Professional and reference	83.6	11.0
Total education	300.6	39.5
<i>General hardback</i>		
Non-fiction	127.5	16.8
Fiction	24.7	3.2
Children's	53.9	7.1
Total hardback	206.0	27.1
<i>General paperback</i>		
Non-fiction	102.3	13.4
Fiction	114.1	15.0
Children's	34.6	4.5
Total paperback	251.0	33.0
Electronic	3.0	0.4
Total	760.6	100.0

a The ABS surveyed all specialist Australian publishers employing staff in 1994. The results are for 186 publishing organisations.

Source: ABS (1996).

2.1.2 Imports

The value of printed books imported into Australia has declined by about 25 per cent in nominal terms and 35 per cent in real terms since 1991–92 (see Table 2.2). Imports in all categories of books have declined significantly over the total period, although imports of 'other paperbound books' have fluctuated since 1993–94. In the table, an imported book is one which is printed overseas and brought into Australia, irrespective of whether the publisher is Australian or foreign.

Despite the common perception that low cost printers in Asian countries provide the main source of competition to Australian printers, it is apparent from Table 2.3 that the major proportion of books imported into Australia are printed in the United States of America or the United Kingdom. Imports from these countries declined over the period shown, as did those from Hong Kong. Imports from Singapore fluctuated. (Some of the imports from Hong Kong and

Singapore may be books subcontracted to printers in lower cost countries such as China.)

Table 2.2: Imports of books, by category (\$ million)

<i>Category</i>	<i>1991–92</i>	<i>1992–93</i>	<i>1993–94</i>	<i>1994–95</i>	<i>1995–96</i>
Dictionaries etc	17.9	13.6	11.8	13.5	11.3
Fashion books	5.9	1.1	1.1	0.8	1.2
Other books					
Hardbound	173.7	178.9	160.6	139.1	125.2
Paperbound (or unbound) ^a	218.0	199.2	170.7	177.5	173.0
Children's picture books	6.0	5.7	4.7	3.5	3.3
Maps, etc in book form	5.6	6.2	3.4	5.8	4.5
Total	427.1	404.6	352.3	340.2	318.5
In constant (1994–95) prices	455.8	422.5	361.5	340.2	297.2

a Proportion of unbound books unknown.

Source: ABS.

Table 2.3: Major sources of imports of books (\$ million)

<i>Country</i>	<i>1991–92</i>	<i>1992–93</i>	<i>1993–94</i>	<i>1994–95</i>	<i>1995–96</i>
United States of America	151.5	145.5	135.6	120.3	110.9
United Kingdom	163.4	136.8	108.9	105.9	104.9
Hong Kong	39.8	42.8	35.6	33.9	29.1
Singapore	28.8	32.0	26.6	32.4	28.1
China	1.4	3.4	4.0	6.4	6.8
Italy	4.0	4.8	5.5	4.8	5.3
Malaysia	1.6	2.6	4.6	5.6	5.3
Other	36.7	36.7	31.4	30.9	28.1
Total	427.1	404.6	352.3	340.2	318.5
In constant (1994–95) prices	455.8	422.5	361.5	340.2	297.2

Source: ABS.

It is noticeable that direct imports of printed books from China more than quadrupled over the period, and those from Malaysia tripled. However, imports from those countries are still a very small proportion of the total.

As for the other countries mentioned by participants as providing competition to Australian book printers, imports of hardbound books from Thailand have grown — but from a very low base — as have imports of paperbound books

from Taiwan. Imports from South Korea have changed little over the period. Imports from Indonesia and India are still insignificant.

2.1.3 Exports

Exports since 1992 have fluctuated considerably from year to year (see Table 2.4). Over the period since 1992 as a whole, however, they have declined in real terms by about 5 per cent in total.

Table 2.4: Exports of books^a (\$ million)

<i>Category</i>	<i>1991–92</i>	<i>1992–93</i>	<i>1993–94</i>	<i>1994–95</i>	<i>1995–96</i>
Dictionaries	27.7	28.3	30.4	28.6	26.6
Comic books	..	0.2	0.6	0.2	0.6
Other paperbound books	29.4	29.0	12.4	17.0	20.9
Other hardbound books	13.5	16.8	11.8	10.1	11.1
Other books, brochures, etc ^b	19.9	24.7	29.1	40.7	38.6
Children's picture books	1.0	2.0	2.4	1.7	1.8
Maps etc in book form	..	0.5	0.1	0.1	0.2
Total	91.6	101.5	86.7	98.5	99.8
In constant (1994–95) prices	97.8	106.0	89.0	98.5	93.1

a The ABS has advised there is some misclassification between the categories for 'other paperbound books', 'other hardbound books' and 'other books, brochures, etc' prior to 1995–96.

b Proportion of books not known.

Source: ABS.

Table 2.5 presents information about the destination of exports. The major export destination for Australian books is New Zealand, which represents almost 40 per cent of exports.

Bounty has generally applied to exports of books. Because of the Australia New Zealand Closer Economic Relations Trade Agreement, bounty on export to New Zealand was withdrawn on 1 July 1990. The export data show that this appears to have had relatively little effect on exports. In 1990–91, exports to New Zealand totalled some \$32.8 million (\$37.0 million in 1994–95 prices) compared with some \$34.3 million (\$41.2 million in 1994–95 prices) the year before, a fall of about 5 per cent in nominal terms and 10 per cent in real terms. In 1991–92, exports to New Zealand increased to about \$40.7 million (\$43.4 million in 1994–95 prices), increases of around 18.7 per cent and 5.5 per cent on 1989–90 levels, in nominal and real terms respectively.

Table 2.5: Exports of books by country of destination (\$ million)

<i>Country</i>	<i>1991–92</i>	<i>1992–93</i>	<i>1993–94</i>	<i>1994–95</i>	<i>1995–96</i>
New Zealand ^a	40.7	45.9	31.2	39.6	38.9
Hong Kong	12.9	12.9	4.7	8.7	7.9
United Kingdom	6.3	7.9	6.6	9.5	7.9
United States of America	7.2	8.7	13.3	11.5	11.9
Singapore	3.0	3.9	4.8	5.0	5.6
Japan	3.0	1.2	2.1	5.5	7.2
Other	18.5	21.0	24.0	18.7	20.4
Total	91.6	101.5	86.7	98.5	99.8
In constant (1994–95) prices	97.8	106.0	89.0	98.5	93.1

a Exports to New Zealand totalled \$34.3 million in 1989–90 and \$32.8 million in 1990–91.

Source: ABS.

2.2 Book printing activity

Judging from book bounty payments, the volume of books printed in Australia has increased markedly over the last decade. This is due not only to opportunities provided by the increased demand for books in Australia, but also to improvements in competitiveness. Section 2.4 describes how competitiveness has changed, while Chapter 3 covers key factors affecting development.

Despite its overall growth, book printing continues to be a small part of the much larger printing industry and there are still only a few large specialised book printers. There has been ongoing investment in new technology by Australian book printers. Little up-to-date information is available about employment in book printing, although the adoption of new technology is expected to have an impact on the level and composition of employment (see Section 2.2.3 and Chapter 3).

2.2.1 Output

No comprehensive data are available about book printing activity in Australia. Book bounty information shows that the value of bountiable book production has increased significantly since the Commission's last inquiry in 1992. In 1995–96 bountiable production was about \$270 million (excluding bounty), an increase of over 50 per cent in real terms since 1991–92 (see Figure 2.1 and

Table 2.6). This increase has occurred despite the decline in the bounty rate from 13.5 per cent in 1992 to 7.2 per cent in 1996.

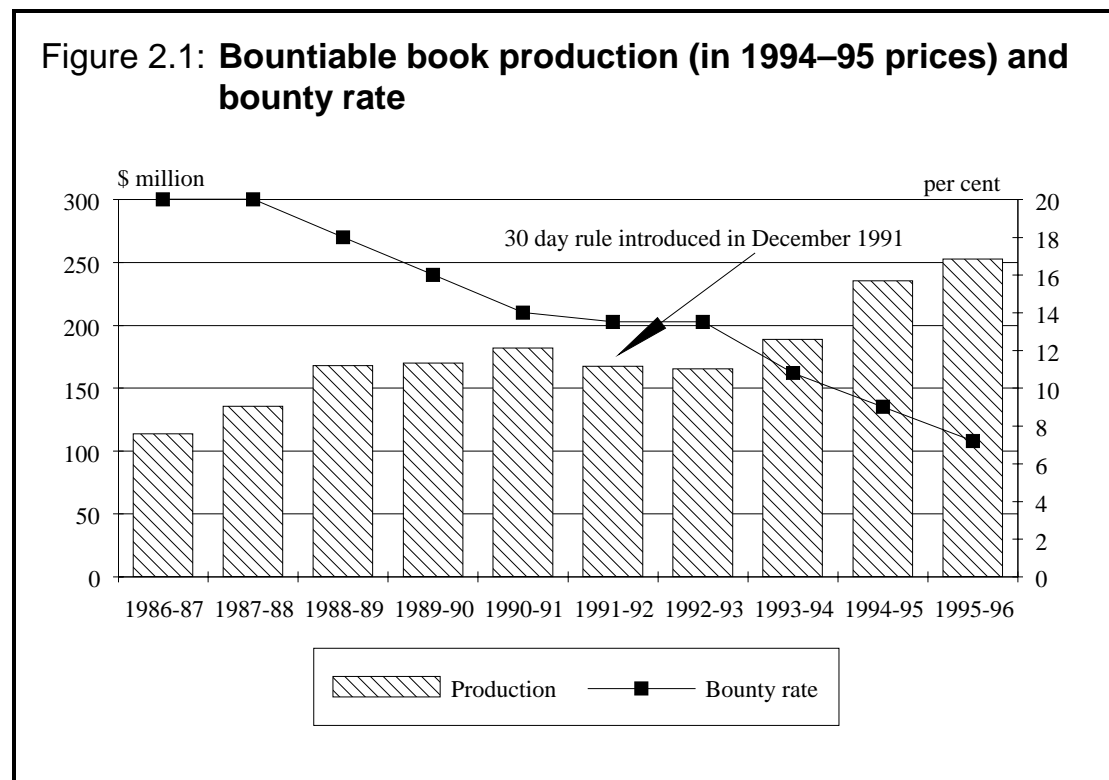


Table 2.6: Selected book bounty statistics (\$ 000)

	1991–92	1992–93	1993–94	1994–95	1995–96
Value of bountiable production ^a					
In nominal prices	157 048	158 411	184 076	235 351	^b 270 802
In constant (1994–95) prices	167 602	165 402	188 892	235 351	252 670
Bounty paid	21 594	21 386	22 273	23 300	21 935
Mean amount received per claimant	34.1	31.6	32.4	34.0	32.0
Median amount received per claimant	3.6	3.5	3.9	3.6	3.4
Number of recipients	636	677	687	686	686

a Does not include the value of bounty.

b Estimate.

Note: Bounty payments for 1996–97 are estimated at \$10.1 million.

Source: ACS (1996a).

Not all books printed in Australia have been bountiable. Directories and timetables whose subject matter relates to Australia are assisted by tariffs. And

some categories of books have not been assisted either by bounty or tariff (see Section 2.3 and Box 2.3).

Information about production in Australia of non-bountiable books is not complete. In regard to directories, Telstra indicated that it produces some 30 million directories each year, with a printing and paper cost of some \$140 million (Sub. 10, p. 1). There is, however, no specific information available about production of books which are not assisted by bounty or by tariff.

2.2.2 Distribution of bounty

Data on bounty payments indicate that a large number of firms produce books. In 1995–96, there were 686 recipients (printers and publishers) of book bounty, with the total bounty paid being about \$21.9 million (see Table 2.6).

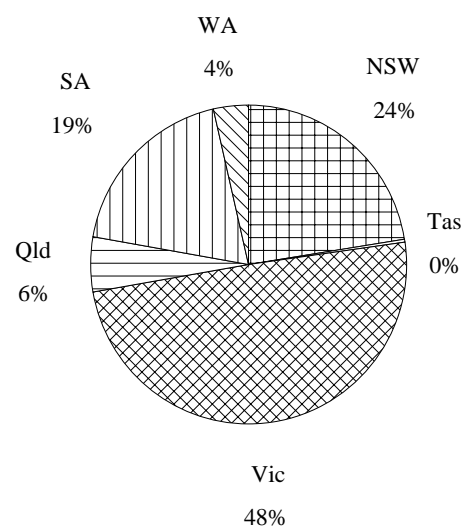
Australian Customs Service (ACS) data show that 249 of these book bounty claimants (35 per cent) received less than \$2000 in bounty. As the average bounty rate in 1994–95 was 8.1 per cent, a bounty payment of \$2000 indicates bountiable activity of about \$25 000. Only 35 claimants received more than \$100 000 in bounty, of whom three received more than \$1 million.

According to the Printing Industries Association of Australia (PIAA), the Australian book printing industry is ‘highly fragmented’ in the sense that it ranges from those printers that print one book title per year to those that specialise in book printing. The PIAA indicated that:

[in 1994–95] the three major groups specialising in book printing ... received \$10.8 million or 46.4 per cent of total bounty payments. Fragmentation then occurs in the long tail with the industry being highly specialised and fiercely competitive for the bulk of book production. (Sub. 8, p. 2)

Book printing activity is concentrated in Victoria, mainly in Melbourne but with some printing at Maryborough. In 1995–96, book printers in Victoria received almost half of

Figure 2.2: Distribution of book bounty by State, 1995–96



Source: ACS (1996a).

total book bounty payments of \$22 million, followed by New South Wales and South Australia (see Figure 2.2 and Appendix C).

Data on major book bounty recipients (see Table 2.7), show that bounty payments to the Pacific Magazines & Printing (PMP) group and the McPherson's Printing group comprised about 36 per cent of book bounty payments in 1995–96. A third group, Chertsey Fifty-Nine, received about 9 per cent of total bounty.

Table 2.7: Major book bounty recipients, 1995–96 (\$ 000)

<i>Company</i>	<i>Payments</i>	<i>Per cent</i>
Griffin Press Pty Ltd (PMP)	3 439	15.7
McPherson's Printing Pty Ltd	2 938	13.4
Chertsey Fifty-Nine Pty Ltd	1 985	9.1
Wilke & Company Pty Ltd (PMP)	1 263	5.8
Southbank Pacific Pty Ltd	678	3.1
Australian Postal Corporation	462	2.1
Reed International Books Aust. Pty Ltd	440	2.0
Others	10 695	48.8
Total	21 934	100.0

Source: ACS (1996a).

PMP companies receiving bounty in 1995–96 were: Griffin Press, Wilke and Co., and Prestige Litho. PMP also has printing operations in New Zealand, Indonesia, Singapore, Hong Kong and China. PMP received nearly \$5 million in bounty payments and produced over \$58 million worth of bountiable books in 1995–96, an increase of about a third in real terms since the 1992 inquiry.

Griffin Press, a PMP subsidiary operation in Adelaide, is a fully integrated book manufacturing plant, producing a range of books from four-colour casebound to mono-colour paperbacks. In 1993, Griffin Press won a contract from Harlequin Enterprises to print paperback novels for export to Japan (see Box 2.1).

Wilke Directories, PMP's directory printing operation in Melbourne, produces one-colour and multi-colour telephone directories for Australia, Hong Kong, Papua New Guinea, Fiji, Macau and the Solomon Islands. The use of four-colour printing for Australian and international directories has increased over the past year.

Box 2.1: Selling paperbacks into Asia

Harlequin Enterprises produces romance fiction novels under the Harlequin, Harlequin Mills & Boon and Silhouette brand names. In Australia, Harlequin Enterprises prints over 10 million paperback books per year in the English-language, 90 per cent of which are for the domestic market.

In 1993, a feasibility study of the Harlequin Japan company resulted in the contract for the printing of Japanese language books being moved to Griffin Press in Adelaide in 1994 on a three-year contract which expires in December 1997. Griffin won the contract on the basis of price and quality, and was aided by the opening of Harlequin's regional headquarters in Sydney (Harlequin Asia-Pacific). Griffin now annually prints over 14 million paperback novels in Japanese for export.

Harlequin saw the availability of bounty as 'significant insurance as regards the basic printing costs' and both firms have shared the reduction in the bounty rate over the life of the contract.

Since the contract commenced, Griffin Press has introduced a comprehensive quality control system and is currently undertaking joint total quality management with Harlequin (through assistance provided by AusIndustry).

Source: Harlequin Enterprises (Australia) (Sub. 3).

PMP's Indonesian operation on Batam Island has recently commenced producing telephone directories for the Asian region. International operations account for about 18 per cent of PMP's sales revenue.

In June 1996, PMP acquired Shomega Limited to provide new media and digital imaging operations in Australia, New Zealand and Thailand. This has allowed PMP to position itself as 'a major communications company' (PMP 1996, p. 1).

McPherson's Printing Group received \$2.9 million in bounty payments in 1995–96. It trades as: The Book Printer (Maryborough, Vic.), Macarthur Press (Parramatta, NSW), Globe Press (Brunswick, Vic.) and Owen King Printers (Mulgrave, Vic.). In August 1994, it commissioned a new dedicated directory printing facility at Chullora, New South Wales. In 1995–96, Telstra Yellow Pages directories were printed in four colours for the first time by McPherson's.

2.2.3 Investment and employment

Little information is available on investment and employment in Australian book printing. The Commission sought information from participants about the impact of technological change on the level and composition of employment in book printing. Only a limited response was received.

PMP indicated that it had invested over \$42 million in capital equipment since 1992 (Sub. 2, p. 8). Its employment has remained steady, despite greatly increased production (Sub. 2, p. 3).

It appears that technological change has had some effect on total employment. However, without precise information from printers, it is difficult to separate the effect of increased production (which could increase employment) from technological change (which should decrease employment). Technological change has led to the need for more highly skilled staff, in particular in the pre-press area. The highest proportion of skilled employment is in pre-press, followed by the printing operation, with the lowest levels of skilled employment being in the finishing operations.

Responses from participants indicated that in future ongoing technical change could be expected to reduce overall numbers in the printing and finishing operations. Further adoption of digital and computer-to-plate technology could render many traditional pre-press skills obsolete, and necessitate the adoption of new skills. In summary, it is likely that adoption of new technology will continue to reduce total employment, particularly in pre-press operations, but increase overall skills levels (also see Chapter 3).

2.3 Trends in government assistance to book printers

As noted above, assistance to Australian book printers has been provided by way of a bounty on some books and tariffs on others. The level of assistance accorded to book printing through bounty and tariff has fallen significantly since 1992. Some printed books have not been eligible for either form of assistance. Assistance arrangements are described below in more detail.

2.3.1 Book bounty

The book bounty was introduced in 1969 as an interim measure to assist Australian book printers to compete against duty free imports of printed books. The Government introduced a bounty because its decision to abide by the United Nations *Agreement on the Importation of Educational, Scientific and Cultural Materials* (also known as the 'Florence Agreement', see Appendix D) ruled out tariffs on imported books of an educational, cultural or scientific nature. Although abiding by its provisions, Australia did not formally accede to the Florence Agreement until 5 March 1992.

Bounty was initially paid at a rate of 25 per cent of the price charged to the publisher by a book printer. The bounty rate was increased to 33.3 per cent on 7 March 1975.

The bounty rate has been declining since January 1983, and it was to be lowered from 7.2 per cent to 4.5 per cent on 1 January 1997. However, the Government

terminated the bounty scheme on 20 August 1996. A history of the book bounty, showing how the bounty rate has changed over the last 27 years, is presented in Box 2.2.

Box 2.2: History of the book bounty

1 June 1969	Book bounty introduced as an interim measure at a rate of 25 per cent of the price (net of bounty) charged to the publishers by book printers.
7 Mar 1975	Bounty rate increased to 33.3 per cent to 31 December 1978 in accordance with 1973 Tariff Board report on <i>Products of the Printing Industry</i> .
31 July 1978	Bounty rate continues at 33.3 per cent until 31 December 1982.
1 Jan 1983	Bounty rate reduced to 30 per cent.
1 Jan 1984	Bounty rate reduced to 25 per cent.
1 Jan 1987	Bounty rate reduced to 20 per cent, in accordance with IAC <i>Book Production</i> report 1987. <i>Bounty (Books) Act</i> 1986 established a minimum claim per title per production run of \$200.
11 May 1988	Minimum claim raised to \$500
1 Jan 1989	Bounty rate reduced to 18 per cent.
1 Jan 1990	Bounty rate reduced to 16 per cent.
1 Jan 1991	Bounty rate reduced to 14 per cent.
1 Jan 1992	Bounty rate reduced to 13.5 per cent.
1 Jan 1994	Bounty rate reduced to 10.8 per cent, and minimum claim per title replaced by requirement for a minimum publisher's production cost per title per production run of \$3700 in line with recommendations in IC <i>Book Production</i> report 1992.
1 Jan 1995	Bounty rate reduced to 9.0 per cent.
1 Jan 1996	Bounty rate reduced to 7.2 per cent.
20 Aug 1996	Bounty scheme terminated.

Bounty could be claimed by either the printer or the publisher of an eligible book. In order to claim, the publisher or printer had to be registered with the ACS and could only claim for work undertaken in Australia.

All stages of book production commencing with typesetting through to packaging for distribution were bountiable. However, pre-press work (typesetting, film preparation and platemaking) undertaken in Australia was not bountiable if printing was not undertaken in Australia.

The scope of the bounty scheme was also modified over time as definitions of eligible books have been settled, anomalies were removed, and the administration of the scheme was streamlined.

Bounty was not paid on every printed book produced in Australia. Box 2.3 summarises the main eligibility criteria. The full range of eligibility criteria which applied are set out in Appendix E, which reproduces a guide to the book bounty produced by the ACS.

Box 2.3: Book bounty eligibility criteria

The main eligibility criteria ensured that bounty was only payable where:

- the book, if imported, would not be subject to a tariff;
- the cost to the publisher of producing the book (net of bounty), per production run, was \$3700 or more;
- the book was bound in an appropriate way;
- at least 1000 copies of the book were printed in each production run; and
- the book contained at least 49 printed pages (with some exceptions), excluding covers and pages which were not an essential part of the book (eg blank pages).

Even if a publication met these criteria it might still have been ineligible for bounty. This would have been the case if the publication was considered to be a periodical, if it was a government publication, or if it was destined for New Zealand.

2.3.2 Tariffs on books

Australia imposes a general tariff of 5 per cent on imported directories and timetables, if their subject matter relates to Australia or places in Australia.

In line with general tariff phasing, the tariff on such directories and timetables has been phasing down since 1988. It was reduced to the 5 per cent level on 1 July 1996.

2.3.3 General assistance measures

Book printers may benefit from a host of Commonwealth and State/Territory Government assistance programs. Relevant Commonwealth programs generally target enterprise improvement (eg under AusIndustry, the Commonwealth Government provides subsidies to implement quality assurance systems), export development (eg the Export Market Development Grants scheme, which provides grants and subsidies for market research and export market

development) and industrial research and development (eg a tax concession for business expenditure on eligible R&D), and are not industry-specific. Assistance from State and Territory Governments and Local Governments generally focuses on industry and regional development.

2.3.4 Tariffs on some inputs

While most book printers could benefit from the provision of bounty assistance, and some have been eligible for generally available assistance measures, all can be adversely affected by the effects of tariffs applying to imported inputs used in book production. Some papers, inks, graphic arts materials, binding materials and equipment are subject to tariffs if imported.

Book printers can be adversely affected directly if they use imported inputs, and indirectly if Australian suppliers of these inputs raise prices to take advantage of those tariffs.

As the level of bounty assistance on printed books and tariff assistance on Australian telephone directories and timetables came down under the general tariff reduction program, so too tariffs on the inputs to book printing were reduced. However, while the book bounty was removed on 20 August 1996, tariffs applying to most inputs to book printing remain. A maximum rate of 5 per cent applies.

Not all inputs are dutiable at 5 per cent if imported. Some are not dutiable at all, and some are dutiable at a lower rate than 5 per cent, either substantively or under a tariff concession. Australian Paper estimated that the weighted average tariff for imported book papers is around 3 per cent or less (Sub. 7, p. v, and Transcript, p. 6).

Changes to the tariff concession system implemented in July 1996 also resulted in an increase in tariffs on some inputs to book printing. For example, before the changes, some imported graphic arts materials entered Australia duty-free under the tariff concession scheme. These materials, if imported, became dutiable at 3 per cent.

2.3.5 Assistance to publishers

Although most assistance to publishers is provided for cultural, rather than economic reasons, Australian book printers may benefit indirectly from government assistance to authors and publishers.

At the Commonwealth level, various schemes to assist authors and publishers are administered by the Commonwealth Department of Communications and the

Arts and by the Australia Council. However, none of the schemes make printing in Australia a condition for providing assistance.

2.4 Competitiveness

When the Commission examined the book printing industry in 1992, it found that for certain categories of books, Australian book printers' advantages in terms of timeliness, reliability of delivery and proximity to the author/publisher outweighed any disadvantage in price arising from higher costs. For those categories, such as low value-added paperback books requiring quick delivery to market, Australian book printers could obtain the work even if their prices were somewhat higher than those of overseas book printers. However, in other categories of book printing, for example, for four-colour books where the need to hurry books to market was not as great, price played a more important role.

These findings are still generally valid. The Australian Publishers Association's (APA) survey of publishers presented to this inquiry indicates that although price is an important consideration, other factors are important too. The results showed that the most important factors influencing whether to print in Australia or overseas are, in order of priority: scheduling advantages/ requirement of speed of delivery; price; quality; supporting Australian industry; ease of communication; and service (Sub. 9, Attachment D, p. 6).

The survey also found that an increasing number of Australian book printers were prepared and able to match overseas quotes. This suggests that price competitiveness of Australian book printing has improved since 1992. The PIAA also considered that international competitiveness of Australian book printers had increased since the 1992 inquiry on the basis that market share had been maintained or increased despite the decline in bounty (Sub. 8, p. 4).

The remainder of this section further discusses how Australia's book printing competitiveness has changed since 1992. Chapter 3 examines how developments in printing technology may have acted to improve overall competitiveness of book printing in Australia.

2.4.1 Competitiveness by book category

Available evidence suggests that three main factors have had an effect on competitiveness since 1992: a change in the composition of demand; changes in printing technology, especially in the pre-press area; and changes in Australia's copyright laws (discussed in Chapter 3). Each of these factors have acted to improve the overall competitiveness of Australian book printing.

In regard to the composition of demand, the APA and PMP remarked that consumer demand in Australia has moved away from four-colour ‘coffee table’ books towards mono-colour paperback books. PMP attributed this partially to economic conditions, but mainly to more efficient book production technology which lowered retail prices of paperback books and made titles available more quickly (Sub. 2, p. 10).

PMP also remarked that the printing of mono-colour, cased-in and paperback books in Australia had increased due to changes in Australia’s copyright laws (see Chapter 3). According to PMP, the simultaneous launch of titles (in Australia and overseas), which meant book titles were ‘more topical on the news stand’, had increased consumer demand for these books (Sub. 2, p. 11).

However, differing views were expressed about whether the increase in overall competitiveness extended to all book categories.

PMP considered that Australian book printers had lost competitiveness in the colour book area:

Multicoloured books have not been so successful in withstanding overseas competition. ... colour books usually have long lead-times for production. This makes off-shore production very practical despite uncertain shipping and delivery times.

... Duty on the heavy-weight woodfree coated papers mostly used [in colour books] and the drop in bounty-rate have caused Griffin Press, the Group’s specialist colour book printer, to lose ground in its fight to remain a viable multi-coloured cased-in book manufacturer. (Sub. 2, p. 5)

In contrast to PMP, the PIAA considered that competitiveness had increased across the whole range of book printing:

Competitiveness has increased in all book types — mono-colour to six-colour, paperback to casebound. Perhaps the rapid advances in pre-press has meant that it is in the colour work area that competitiveness has increased the most. (Sub. 8, p. 5)

Australian Paper also considered that the competitiveness of the Australian book printing industry had extended to areas of book printing other than those in which it was traditionally considered competitive:

increased competitiveness appears to be extending to the production of higher quality casebound/printed books in [addition] to the production of paperback books and other books requiring local content, particularly where short lead times and/or quick deliveries are required. (Sub. 7, p. 7)

The differences in participants’ comments about multi-colour casebound printing may merely reflect particular experiences of different firms, or it may indicate that any improved competitiveness for that category has been concentrated in the pre-press area, rather than in the printing itself. PIAA’s comment suggests the latter.

2.4.2 Competitiveness by country

Participants' comments concentrated on competition from printers in Asian countries. As noted in Section 2.1.2, however, the main sources of imports are the United States and the United Kingdom. Imports from Hong Kong and Singapore are significant, but much less than those from the United States and the United Kingdom. Some of the imports from Hong Kong and Singapore may represent printing subcontracted to lower cost operators in countries such as China. Direct imports from Asian countries other than Hong Kong and Singapore are still small, although those from China and Malaysia have grown rapidly.

According to PMP, major competitors to Australian book printers operate in China, Singapore, Korea and Malaysia (Sub. 2, p. 4). Some participants considered that the source of Asian competition for Australian book printers has shifted over time. The PIAA stated that:

When book bounty was first introduced Japan was the main competitor. As costs in Japan increased Japanese book printers moved into Hong Kong and then Singapore. In recent years we have noted the emergence of Malaysia, China and Korea and now publishers are receiving enquires from other sources such as India. (Sub. 8, p. 5)

Brown Prior Anderson said that as the traditional suppliers in Singapore and Hong Kong have become less competitive as a result of increased labour costs, printers in China, Malaysia and New Zealand emerged as new threats in the sector (Sub. 1, p. 1).

Harlequin Enterprises nominated Indonesia and India as sources of strong competition in printing, particularly in terms of cost.

The APA stated that the optimum usage of plant and equipment contributed to the competitiveness of Asian book printers:

The sector is still not world competitive. It experiences strong competition from South-East Asian countries, notably Singapore and Hong Kong, with some latter emergence of the People's Republic of China, Malaysia and India. In all these countries, competitiveness is enhanced by optimum usage of plant and equipment. Such high productivity is not offset by natural protection, as the costs of freight and insurance from Australia's near neighbours are relatively moderate. (Sub. 9, p. 11)

From the evidence presented to the Commission, it appears that book printing activity is relocating to lower labour cost countries in Asia, such as China, India and Indonesia, as the cost of labour and other inputs in Hong Kong and Singapore is rising. However, some of the lower cost countries have yet to develop a reputation for quality and reliability. Until they do, Australian book printers will retain their competitive advantage in the printing of certain types of books and hold a competitive advantage in factors other than price.

Furthermore, as discussed in the next chapter, as printing continues to become more capital intensive, the influence of labour costs will diminish.

3 KEY FACTORS AFFECTING DEVELOPMENT

Chapter 2 suggests that book printing in Australia has become more competitive since 1992. This chapter considers the reasons for this, and examines important supply and demand factors likely to affect the future development of Australian book printing. Technological change has the potential to alter the basic economics of printing. Market developments including electronic publishing, and possible changes to parallel importation provisions could also have an important impact. This chapter also considers export prospects for Australian book printers.

Many factors interact to influence the competitiveness of Australian book printing activity and its development prospects. It is important that Australian book printers continue to take advantage of opportunities to reduce costs, and of developing market opportunities. As the Australian Publishers Association (APA) commented:

To survive into the future, book producers must continue to adopt new ideas and technology. Cost containment remains a priority as books are highly price sensitive and many alternative outlets compete for the discretionary consumer dollar. (Sub. 9, p. 1)

3.1 Supply factors

Apart from considering the potential impacts of technological change, this section examines issues relating to labour training, labour relations, paper costs and supply, and industry structure.

3.1.1 Technological change

Technological change in book printing has continued rapidly over the last few years. In the APA's view, technology continues to advance at an exponential rate and shows 'no prospect of slowing' (Sub. 9, p. 13). Technology has affected each stage of the book production process, including pre-press, press and post-press activities (see Appendix F).

According to the Printing Industries Association of Australia (PIAA), Australian book printers have kept pace with world trends by investing in this new technology (Sub. 8, p. 10). Mimosa Publications and Impact Printing said

Australian printers and colour separators have invested heavily in technology 'in order to compete with offshore printers' (Sub. D26, p. 1).

At the draft report hearings, Impact Printing said:

All our equipment is basically state of the art from pre-press in the digital area, through to film output ... multi-colour printing with the latest Heidelberg equipment, state of the art bindery ... when you compare yourself worldwide to other printers, we have all the right equipment. (Transcript, p. 85)

Reed Books, however, said that the improvements in Australian book manufacturing were a result of 're-engineering and restructuring and rationalisation, rather than investment' (Transcript, p. 18).

Pre-press developments

A feature of changing pre-press technology is the blurring of the distinction between publishing and printing. Computer-based typesetting, computerised composing, photo-typesetting and imagesetting are increasingly becoming the domain of publishers at the front end of the process. Both publishing and printing are affected by developments in digital storage and transmission, computer-to-plate technology, and digital printing.

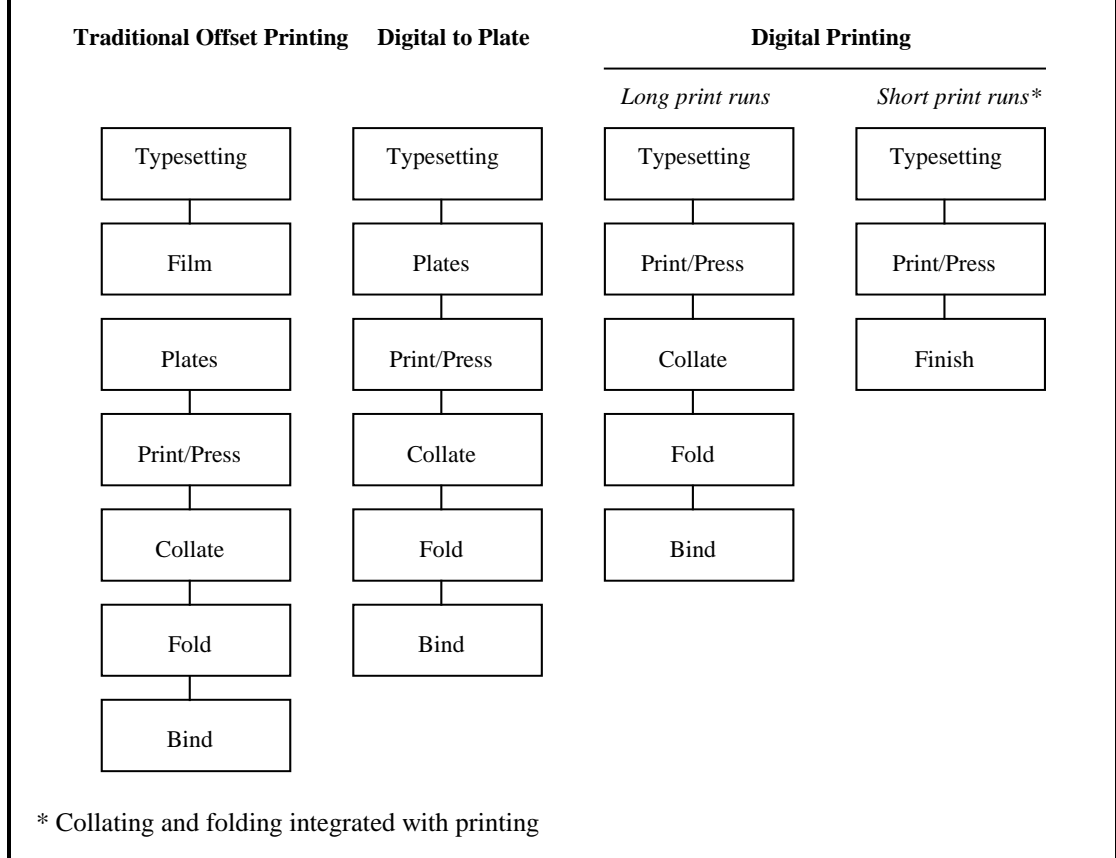
Developments in the pre-press area potentially offer significant savings in time and cost, and provide substantial productivity improvements. For example, digital storage and transmission of files can reduce costs and delays in delivery and computer-to-plate technology, eliminating the film stage, can facilitate shorter set-up times. As digital printing technology develops further (see below), the expensive pre-press stages of film and platemaking could be eliminated for some categories of printing.

Figure 3.1 illustrates how developments in pre-press technology can affect the book production process.

Printing presses

In addition to changes in pre-press technology, changing printing press technology can bring significant cost reductions. Increased automation and quality control systems enable increased speed and output of traditional printing presses, and reduced staffing levels. The PIAA said that increased automation has reduced make ready times, improved material handling and reduced the time required for functions traditionally undertaken manually (Sub. 8, p. 12).

Figure 3.1: Effects of technological developments in pre-press



In competition with the traditional offset press, digital presses (black and white, and colour) are now being manufactured which can transfer digitised information direct to the printed page eliminating the need for printing plates entirely. This can considerably reduce pre-press costs. But at the present stage of their technological development, digital presses have a relatively high marginal printing cost per page. Anecdotal evidence suggests that the switching point between traditional offset printing and digital printing lies somewhere between about 500 and 1000 copies for a representative book.

At the draft report hearings, Reed Books said:

[for the next few years] short-run printing is not going to have a dramatic impact on our industry. ... even though it is cheaper to print ... 500 books using electronic digital technology versus conventional web offset or sheet-fed technology ... an industry norm would be a run length of somewhere between 3000 and 10 000 ... the sums still don't work in terms of making projects viable. (Transcript, p. 22 and p. 23)

The current market niche of digital presses appears to be for relatively short runs of time-sensitive material, which may need regular updating, such as

technical guides, documentation, business reports and catalogues. As noted in Section 3.2.1, however, digital printing offers significant potential advantages to book publishers.

Post-press

There has been technological change in post-press technology as well. Computer controllers and other developments in microelectronics have improved the productivity of cutting, folding and binding equipment and reduced labour costs. Higher operating speeds are now possible, with closer monitoring of machine performance, and less scope for error.

Assessment

As new technology is being developed and adopted, the capital intensity of book printing is increasing, with a consequent decrease in the importance of labour costs (see Section 2.2.3). The PIAA highlighted the potential impact of new technology on labour costs:

Technology, particularly in the pre-press area, continues to develop at a rapid rate and, as it is readily embraced by Australian producers, labour costs become far less important. (Sub. 8, p. 4)

Australian book printers are investing in new technology as it becomes available and economically viable. Although overseas book printers are also investing, the competitiveness of Australian book printing should improve as the influence of higher Australian labour costs is reduced. This should be true in all categories of book printing, from paperbacks to four-colour casebound. As technology advances, press room costs could become more equal worldwide, with the costs of transport of books serving to protect printers in each country from import competition in their own domestic market.

Indeed, it is noticeable that the import share of the domestic market for books is declining, as is the share of Australian production exported. This is in contrast to most Australian manufacturing activities, where both import penetration and export orientation are increasing.

As well as lowering costs overall, technological change is improving the economics of shorter production runs. As the PIAA indicated:

The need to generate sizeable production runs to offset make ready time and obtain maximum economies is rapidly disappearing and small but frequent production runs are now an economic method of producing books. (Sub. 8, p. 4)

Such a trend towards shorter production runs should further improve the competitive position of Australian printers, which have traditionally been strong in that area.

In the pre-press area, in contrast to the press room, electronic delivery is becoming the norm, and so the protective effect of transport costs would be lessening. However, Australia's relatively highly skilled operators could give Australian pre-press operators a competitive advantage.

In conclusion, the introduction of new technology has substantial scope to improve the competitiveness of Australian book printers and enhance the development of Australian book printing. However, although substantial reductions in cost could be expected as the technology develops and is introduced, its marginal cost of printing per page is still relatively expensive. Many printers will continue to use existing technology in the press room for some time, particularly for medium to long print runs.

3.1.2 Labour training

The opportunities arising from new technology can only be maximised if the Australian printing workforce is appropriately trained and skilled. The PIAA argued that current institutional arrangements for training are not optimal. It suggested that training institutions would have to investigate more flexible arrangements for the delivery of training, the use of distance learning, and ways of providing training on modern equipment (Sub. 8, p. 16).

3.1.3 Industrial relations

Participants were invited to comment on the effects of recent changes in the industrial relations environment. They considered that recent changes in industrial relations had yet to reach their full potential. For example, the PIAA said the trend towards company enterprise agreements had so far been mainly confined to the larger companies. While Brown Prior Anderson stated that its enterprise agreement has produced some benefits in productivity, it considered that many of the underlying award provisions still restricted its ability to compete (Sub. 1, p. 3). Pacific Magazines & Printing (PMP) remarked that, to date, enterprise bargaining has had little effect on productivity in the book industry, but that greater flexibility in employment practices could be negotiated as the system develops (Sub. 2, p. 10).

3.1.4 Paper costs and supply

The competitiveness and development of Australian book printing is influenced by the price of paper and its availability. Paper generally accounts for the majority of the material cost of producing a book, and can represent a

significant proportion of the book's total value. The major Australian producer of paper, Australian Paper, estimated that in 1994–95 paper costs on average accounted for 45 per cent of the value of bountiable book production (Sub. 7, p. 9)

Australian Paper produces three categories of paper:

- uncoated woodfree papers, which account for a small proportion of the market;
- uncoated mechanical papers (used in production of paperbacks and telephone directories), which account for over 60 per cent of the market; and
- coated woodfree papers (for higher quality/casebound books), which account for almost 30 per cent of the market (Sub. 7, p. 11).

The other Australian paper producer, Australian Newsprint Mills, produces newsprint and uncoated papers used in the printing of telephone directories and paperback books.

These two Australian paper producers have insufficient capacity to supply total Australian demand. According to the PIAA, Australian Paper has capacity for less than half of the industry's requirements for fine papers used in book printing. The PIAA said that the 'book industry ... must of necessity use a substantial range of imported papers' (Sub. 8, p. 13).

Australian Paper submitted that apart from the duties levied on some of these papers, Australian printers did not face any disadvantages regarding paper costs:

the domestic market for printing and writing papers is highly competitive. While this provides Australian Paper with continuing challenges, it has at the same time provided users including book producers with competitively priced papers over a long period. (Sub. 7, p. 6)

With the continuing reduction in tariffs on a programmed basis since 1988, the average tariff on papers is not high. Some imported papers are dutiable at substantive rates, while some enter Australia duty free. As noted in Section 2.3.4, Australian Paper estimated that the weighted average tariff rate for imported book papers was around 3 per cent or less.

However, Australian manufactured paper used in book printing is priced to compete with imports (ie import parity pricing is used). Local paper suppliers thus take advantage of the freight margin applying to imports (as well as any tariffs). PMP remarked:

We estimate that prices of book papers in Australia are around 15 per cent higher than similar paper overseas due to the freight component and uncertainty regarding our isolated market. (Sub. 2, p. 9)

In the domestic market for books this freight disadvantage on paper could be offset by the freight disadvantage faced by importers of books. However, for exports, Australian printers are disadvantaged not only by the freight on exported books, but also by the freight component incorporated into the price of paper.

Paper prices vary cyclically depending on supply and demand factors, and there have been large cyclical movements in price. Recently, worldwide demand has been strong and international paper prices peaked in August 1995 as a result of a worldwide shortage of paper. There has been a significant decline during the first half of 1996.

Some participants suggested that the Australian printing industry's cost disadvantages in paper purchases are less during such a seller's market phase, than during a period of over supply. It was suggested that during periods of strong worldwide demand for paper, overseas printers are less able to take advantage of supplies of paper at 'dumped' prices. The PIAA commented that:

During the 'buyers market' phase of the paper cycle supply far outstrips demand and world paper producers tend to sell in many markets at dumped prices. This is particularly so in Asia which provides most of the competition for Australian book printers who cannot avail themselves of paper at dumped prices because of the ready availability of anti-dumping action to Australian Paper. (Sub. 8, p. 14)

Thus, the disadvantages of Australian printers in purchasing paper are lessened during periods of strong demand.

3.1.5 Industry structure

A few large printers compete successfully for printing of mono-colour paperbacks and casebound books in relatively long production runs and many smaller printers take advantage of book printing work requiring relatively short runs and close liaison with authors and publishers.

As noted in Chapter 2, two printing groups account for about 35 per cent of bountiable book production in Australia, with the third largest group another 10 per cent. The remaining bountiable book printing is undertaken by a large number of small to medium-sized firms. Thus, the structure of the industry remains similar to that in 1992. Brown Prior Anderson said: 'the industry has been quite stable for the past five years although several new players are emerging' (Sub. 1, p. 3). PMP stated:

We are unaware of any significant changes in the structure of the Australian book printing sector in the last few years with the exception of one new major operator in Melbourne. (Sub. 2, p. 10)

Even though the overall structure has remained largely unchanged since the last inquiry, there have been some takeover and merger activities. The PIAA said:

takeovers and mergers have seen some of the medium sized firms merge or be absorbed into the larger groups. The restructuring then is for the medium size to decline as a force, the big get bigger and the substantial tail continue on their merry way, although there have been a significant number of failures and bankruptcies at the small end and an equal number of small entrants. (Sub. 8, p. 17)

3.2 Demand for book printing

Changes in the nature and extent of demand for books can affect the future development of Australian book printing. Chapter 2 explained how a change in the composition of demand by Australian consumers towards paperback books has improved the overall competitiveness of Australian book printers. Other factors of potential importance in the domestic market include a move towards printing-on-demand, and possible changes to copyright and parallel importation provisions.

3.2.1 Printing-on-demand

Many publishers distribute books on a sale-or-return basis — booksellers do not need to pay for unsold books, which can be returned to the publisher. This system is costly for publishers, often involving high levels of returns and the need to ‘remainder’ or dump unsold copies.

Publishers have been seeking to reduce the costs of this distribution system by more closely matching the numbers of copies printed to estimated demand. However, there is a trade-off involved between:

- longer print runs with lower per unit printing costs, but the risks and costs of unsold copies; and
- shorter print runs at higher unit printing costs, with savings in the costs of distribution, inventory and wastage, but the risk of running short of copies and having to reprint.

The technological developments outlined in Section 3.1.1 are improving the economics of shorter print runs, and facilitating the moves by publishers towards shorter print runs. As noted there, smaller and more frequent print runs are becoming more economic. Digital printing offers publishers advantages in terms of lower stocks, fewer returns, faster turnaround, and facilitates revision of copy.

Indeed, although this would not necessarily be the most cost-effective method, with the newest digital technology it is feasible to literally 'print-on-demand', copy-by-copy as required. The PIAA indicated that with this technology, a customer could order a title in a book store and have it printed and packed in a few minutes (1996, p. 31). The APA stated that:

Whereas in the past, a book was produced as a mass-print item, its production in [the] future must also be positioned so that excerpts of the main text may be printed simultaneously, perhaps in different centres, using more cost-effective technology to service minuscule runs of custom-dictated editions. (Sub. 9, p. 13)

As well as benefiting publishers, the moves towards shorter print runs and printing on demand have implications for book printers. As noted in Section 3.1.1, it could reduce competitive pressure from imports. It could also alter the division of work between printers and publishers. Publishers themselves may gradually take more control of the printing process.

As Mimosa Publications submitted:

the relationship between printer and publisher is getting closer and closer and the roles are merging to some extent ... only those who are extremely up with the technology and competent can survive, whether it's a printer or a publisher. (Transcript, p. 75)

3.2.2 Electronic publishing

Electronic publishing, such as on CD-ROMs and the Internet, is creating an alternative means of distribution for publishers. The important issue for book printers is whether electronic publishing will reduce or stimulate book demand.

According to the PIAA, some printers estimated that up to 30 per cent of printed text eventually would be replaced by CD-ROM technology. At present, the amount of electronic publishing is much less than that.

Some traditional printing of encyclopedias and other reference books has already been replaced by electronic publishing, and PMP believes that CD-ROMs will gradually replace much of this market. PMP recently released its 1996 Annual Report on CD-ROM in addition to the printed version. PMP, however, did not believe electronic publishing would necessarily lead to less conventional printing: 'Long term they may even increase awareness of books and cause greater need for operator instruction books' (Sub. 2, p. 11).

Harlequin Enterprises (Australia) said:

evidence to date indicates that new media stimulates rather than detracts from demand, and providing alternative formats to books simply broadens the market, rather than resulting in substitution. (Sub. 3, p. 4)

Similar views were expressed by the Department of Communications and the Arts (Sub. 11) and the APA (Sub. 9).

3.2.3 Demand for directories

Telstra publishes some 30 million volumes of directories annually for the Australian market: the White Pages, Yellow Pages and various community guides and directories.

Telstra indicated that these publications are printed in Australia by independent Australian printing businesses. These are paid about \$60 million annually for printing costs, plus another \$80 million annually for the paper used.

Telstra's current licensing arrangements (which run until 30 June 1997) require it to prepare an industry development plan, which set targets for local sourcing and commitments in relation to exports, research and development and training. Further, those licensing arrangements also require it to publish and distribute White Pages directories to consumers without separate charge. Although both these factors advantage Australian book printers, their effects on economic efficiency warrant examination.

Telstra considered that 'its industry development plans represent a form of assistance to the industry' (Sub. 10, p. 2). It considered that the benefits of its industry development plans flow through not only to the book production industry but to the Australian economy generally. It commented that 'by enabling local industry to increase its production capacity, efficiencies and economies of scale through larger production runs are achieved. This contributed to making the Australian industry viable' (Sub. 10, p. 2).

According to Telstra, the book bounty has 'encouraged the development of a competitive world standard industry', which gave it the 'benefit of an efficient and competitive Australian printing industry' (Sub. 10, p. 3). If it did not have such an industry, Telstra said it would be 'forced to look towards overseas printers' for its needs (Sub. 10, p. 3).

In principle, an industry development policy could enable Australian suppliers to charge more for their services than would be the case if they had to compete with imports. In the case of directories, however, there are good reasons for Telstra to print in Australia. Telstra commented that its purchasing activities operate on a 'commercial' basis, and that 'there are often commercial and practical advantages in sourcing locally, where factors such as continuity of supply, service support and retention of design and development capabilities are critical' (Sub. 17, p. 4).

At present, consumers receive directories every year, without separate charge, although Telstra's information shows that printing and paper costs average about \$4.50 per directory. Advertising revenue must be set against these costs, however, and account taken of any relevant competition.

Telstra indicated that the Yellow Pages are 'very profitable'. Competitors supplying business directories also rely on advertising, and supply those directories without charge. Thus it could be that the current commercial price for the Yellow Pages is zero.

Telstra indicated that the White Pages are produced at a 'small profit', taking into account the 'cost of paper, printing, distribution and recycling, against the advertising revenue generated from business' (Sub. 17, p. 2).

Telstra indicated that it had some 'in principle concerns' about the commercial and customer implications of charging for directories (Sub. 17, p. 2). For instance, it could increase customer usage and the costs of operator assisted directory services (such as 013/0175). Also, Telstra commented that 'the value of White Pages to advertisers as a mass directory would be reduced' (Sub. 17, p. 2). There would also be other costs involved in implementing a system of charging for telephone directories. For example, a wholesale and distribution network might have to be established.

In the Draft Report, the Commission proposed that telecommunications providers such as Telstra should be permitted to determine, on a commercial basis, whether to continue with the supply of directories under present arrangements, or whether to offer an appropriate rebate to consumers wishing to reduce the frequency with which they are supplied with directories.

Telstra disagreed with this proposal. In its submission following the release of the Draft Report, Telstra stated that allowing customers to decline delivery of its directories could increase, rather than reduce, costs to consumers, and could undermine the value of one of Telstra's major assets. Further, it could lead to increased costs for Telstra if consumers were to decline the White Pages and instead rely on toll-free directory assistance.

The Commission can see no reasons why telecommunications providers operating on a commercial basis should not be free to determine their own arrangements for the supply of directories, and will recommend accordingly. Allowing this freedom could usefully drive change in substitute services as well, for example in directory assistance. Telstra's comments, however, suggest that it would not vary its current arrangements even if it had that freedom.

Recommendation

Telecommunications providers such as Telstra should be free to determine, on a commercial basis, their own arrangements for the supply of directories to customers.

3.2.4 Copyright

Prior to 1991, provisions in the *Copyright Act 1968* gave the holder of the Australian copyright in a book — generally a publisher, either Australian or foreign — the right to control imports of that book. Only the Australian copyright holder or a distributor specifically authorised by the Australian copyright holder could supply imported books — other importers, ie those making parallel imports, were subject to the threat of legal action from the Australian copyright holder.

Changes to Australia's copyright legislation in 1991 restricted the ability of copyright holders of books to control imports into Australia. This has had some consequent effects on Australian book printing activity. (Appendix G gives more information about some of the matters covered in this section.)

The changes made in 1991 followed inquiries into the importation provisions of the *Copyright Act 1968* by the Copyright Law Review Committee (CLRC), and the Prices Surveillance Authority (PSA).

In a report released in 1988, the CLRC considered whether Australia's Copyright Act should be modified to allow parallel imports of goods protected by copyright.

The CLRC recognised that 'Australia is a net importer of copyright material and the more competition in the market the better it will be for its balance of payments and those members of the public who buy overseas books' (CLRC 1988, p. 109). It also felt that Australian authors would not be disadvantaged by moves to allow parallel imports of printed books.

However, the CLRC said:

it has insufficient evidence that books are being sold at unreasonably high prices and has not the powers or resources to make an adequate investigation into the matter. Nor is there a great deal of evidence that there is any marked unavailability of books in Australia. (1988, p. 107)

The CLRC also recognised the long-standing concept that ownership of copyright was determined on a territorial basis, and that most English-speaking

countries, including Australia, based their copyright law on this principle. It considered that to modify Australia's copyright law when comparable legislation was unlikely to be passed in these other countries, would 'put Australia out of step internationally' (pp. 108–109). Some members of the CLRC were concerned that by acting unilaterally, Australia may have invited retaliatory action from other nations on intellectual property and other trade fronts, and that the costs to Australia from such actions could outweigh the benefits from unilaterally allowing parallel imports of books protected by copyright.

After weighing up these competing considerations, the CLRC recommended that, apart from some minor exceptions (eg where the material in question was unavailable in Australia), Australia should continue to preclude parallel imports of printed books and other material protected by copyright.

In 1989, the PSA conducted an inquiry into book prices in Australia. The PSA found that:

The importation provisions of the Copyright Act 1968 have been used by publishers to exercise international price discrimination, which has resulted in excessively high prices for books in Australia. Although retail price maintenance for books was rejected by the TPC [Trade Practices Commission] in 1972, effective price competition by retailers has been thwarted by the operation of the closed market. (1989, p. 39)

The PSA also found that Australian consumers 'frequently wait 12 months for books published overseas' (p. 36). The PSA recommended that the importation provisions of the Copyright Act be repealed to allow parallel imports of legitimate copies of printed books.

In 1991, after taking into consideration the views of both the CLRC and the PSA, the Australian Government modified the *Copyright Act 1968* as it applied to books by introducing the 30 and 7/90 day rules.

The 30 day rule applies to new overseas titles when first published in Australia and the 7/90 day rule applies to overseas titles previously published in Australia. In the case of new titles, the holder of the Australian copyright must make the title available in Australia within 30 days of first publishing the title overseas, in order to retain protection against parallel imports of the title. In the case of previously published titles, the copyright holder has seven days in which to respond to a written request to supply a title, indicating whether they can supply it within 90 days or not. The copyright holder then has 90 days in which to meet the written order. If these time limits are not met, Australian booksellers then become free to purchase copies from any overseas supplier for distribution within Australia.

The changes were mainly intended to speed up the availability of new books in Australia. And there is evidence that Australian consumers of copyright protected material have gained from the 1991 amendments in this respect. The APA said that consumers have benefited from the 1991 amendments because they now can expect to gain access to new titles faster than they did before the amendments were introduced:

On balance, the 30/90 rules work well in that they give booksellers and others a legal remedy if a publisher does not perform satisfactorily with respect to supply. (Sub. 9, p. 18)

Australian printers have also benefited: Box 3.1 explains how this can occur. Some printers indicated that the 1991 changes had resulted in increased demand for Australian printing, as publishers have books printed in Australia to guarantee their availability with the 30 day period. PMP estimated that the introduction of the 30 day rule generated additional revenue of \$6 million for its book printing operations in 1995, with a similar volume of work from overseas publishers in 1996:

Changes to the copyright law attracted some UK publishers to test out Australian book production for the first time. Whilst it was intended by them to be a short term fix, the quality and competitiveness of the Australian market, with the assistance of the bounty scheme, has enabled significant import replacement to continue. (Sub. 2, p. 4)

The benefits to Australian printers of the 30 day rule were also referred to in submissions responding to the Commission's Draft Report. PMP said:

... we have highlighted the importance that this rule has been to the Australian book industry, possibly having a greater positive effect on the industry than even the bounty. (Sub. D22, p. 2)

The PIAA noted that imports of printed books into Australia declined by 34 per cent in real terms between 1991–92 and 1995–96, and considered this clearly demonstrates the impact of the 30 day rule. The PIAA and other participants requested that the 30 day rule therefore be retained.

Box 3.1: Estimating the level of protection provided to producers of printed books by the 1991 amendments to Australia's *Copyright Act 1968*

According to the Australian Book Publishers Association (now Australian Publishers Association) printing costs in Australia for an 'average' title are around 17 per cent of the title's recommended retail price (RRP) (PSA 1995, p. 51). Sea freight, taking around two months from the United States and three months from the United Kingdom, accounts for around 2 per cent of the 'average' title's RRP. The PSA noted that air freight is generally two to four times as expensive as sea freight, increasing the freight component of an 'average' title to between 3.9 and 7.5 per cent of the title's RRP.

Assuming that retaining import protection is worth the additional cost of air freighting a title, a publisher will print a title in Australia to ensure it meets the 30 day deadline when printing costs in Australia (and any additional costs imposed on printing the title overseas because the overseas printing run has been reduced) are equal to or below the cost of printing and air freighting sufficient copies of the title from overseas.

Take the simple case of a book with a RRP of \$10.00, with a printing cost per copy of \$1.70 and sea freight of \$0.20. If air freight costs are double those of sea freight, and a publisher decides to air freight to meet the 30 day rule, then printing costs in Australia could rise to \$1.90 (an increase of 11.8 per cent) before it becomes cheaper to air freight copies. If air freight is four times that of sea freight, printing costs in Australia can rise to \$2.30 per copy (a 35 per cent increase).

Koorong Books requested that the import provisions be removed. Koorong noted that under the amendments:

More books are available earlier than previously, but prices under exclusive licence and agency arrangements have not been impacted. In fact in some cases, margins of distributors appear to have increased to cater for exchange rate volatility, higher distribution costs, etc. (Sub. D30, p. 4)

Copyright laws are in place to balance the competing needs of producers of copyright-protected material and purchasers of that material. Producers of material are protected against illegal copying and dissemination of their works, while purchasers are guaranteed access to that material.

Copyright laws are not, and should not be used as, a means of assisting manufacturing industries associated with the production of copyright-protected materials. If the Government chooses to assist such industries (eg book printers), it should do so directly, by providing bounties for example.

Given that a number of changes have occurred in the Australian book printing sector, it is difficult to determine what impact the 30 day rule has had on the demand for books to be printed in Australia. If PMP's judgment about the effect of the 30 day rule on its own operations is correct, and if this is typical of Australian printers generally, the 30 day rule may have allowed market growth

of about \$25 million annually. This suggests that the significant majority of market growth has been due to other factors. (Also see Section 4.4.)

Despite the changes made in 1991, Australian copyright holders still have considerable power to control imports of overseas titles into Australia. There is evidence that, in a few cases, copyright holders have allowed parallel importing to occur. But in most cases, copyright holders have met the 30 day requirements, either by importing books themselves, or by having sufficient copies of the books printed locally, and so prevented parallel importation.

This has enabled them to continue to set prices higher in Australia than are set in overseas markets. An inquiry by the PSA in 1995 into the impact of the 1991 amendments found:

The 1991 amendments to the Copyright Act 1968 have improved the speed with which most new releases become available in Australia. The pressure on publishers and distributors to make books available within 30 days of overseas release has led to efficiency gains in distribution. These are welcome developments. The amendments have also had some price impact by increasing the threat of parallel imports.

Nevertheless, prices of some books continue to be high relative to overseas, particularly in the technical and professional and mass market paperback areas. Booksellers have also found the 1991 amendments to be difficult and costly to implement. These problems have impaired their ability to take advantage of the opportunities to parallel import which the 1991 amendments have generated. (1995, p. 111)

Continuing higher prices for books in Australia have a number of adverse consequences. They distort consumption patterns, and leave consumers with less to spend on other goods and services. They affect production efficiency by drawing additional resources into book printing in Australia when those resources are likely to be more productive elsewhere.

Prohibitions on parallel importation can raise prices in a way which is more damaging than tariffs. Although tariffs also increase the price of imports, much of the higher price accrues to the Government as revenue. In contrast, a substantial proportion of the benefit of higher prices accrues to foreign copyright holders and foreign air freight operators.

In conclusion, the parallel importation provisions of the Copyright Act continue to act as a non-tariff barrier to imports of books despite the 1991 changes. While providing assistance to copyright owners, authorised distributors and Australian printers, it disadvantages Australian book buyers who face higher book prices as a result.

Recommendation

The provisions of the *Copyright Act 1968* which preclude parallel imports of legitimate copies of printed books into Australia should be removed.

International negotiations

Copyright laws protect the expression of ideas, rather than the ideas themselves. Existing copyright laws protect a variety of expressions of ideas including printed books, illustrations, songs, theatre productions, photographs and cinematographic productions. In the case of printed books, the author's contribution is protected under copyright law as a literary work, while the publisher's contribution is protected as a published edition. Illustrations in books are usually protected under copyright in their own right.

Australia's copyright laws are based on several international agreements covering the protection of intellectual property, including the *Berne Convention* for the protection of literary and artistic works. As a signatory to such conventions, Australia takes an active part in international negotiations to extend or limit the granting of intellectual property rights.

Just as Australia's copyright laws have changed over time in response to developments in technology which affect the copyright industries, so too the international agreements to which Australia is a signatory need to be revised to cope with such developments. At present, there is considerable international debate about how to provide effective copyright protection to forms of expression which may be stored and transmitted in an electronic format (eg written works stored on a computer server, music transmitted over telephone lines).

The World Intellectual Property Organisation which administers the Berne Convention has established a Working Group to discuss the creation of a protocol to the Convention. One matter the Working Group is considering is the scope for creating exclusive transmission and distribution rights for copyright holders. Such rights would require countries to provide copyright regimes which would preclude parallel imports of legitimate copies of all goods subject to copyright.

For some countries, accession to the proposed protocol would require them to extend existing copyright protection. Australia could be affected, for example, because the 1991 amendments to its Copyright Act (the 30 day and 7/90 day rules) could be inconsistent with such exclusive rights, and because the protocol

would curtail Australia's sovereignty should it seek to remove existing prohibitions on the parallel importation of goods protected by copyright (eg printed books, sound recordings, videos).

Where changes have been made to intellectual property laws in the past, it has usually been to extend them. In some cases, extensions have been appropriate (eg in order to control piracy) and may have improved global welfare. But generally speaking, the development of international intellectual property law has been dominated by the interests of producers of intellectual property. Less attention has been paid to the interests of users. For example, the Australian Department of Foreign Affairs and Trade (DFAT) said:

Our [DFAT's] negotiating objectives include the improved protection of Australian intellectual property right holders in Australia and overseas, the increased protection of our intellectual property exports, in particular in the Asia-Pacific region, and the attraction of foreign investment into Australia. (Sub. D19, p. 2)

DFAT indicated that it holds consultations with industry and business on matters relating to intellectual property, but its submission made no mention of any consultation with users of intellectual property.

Neglect of the interests of users has led, on several occasions, to countries agreeing to extend intellectual property rights in ways which have clearly reduced global economic welfare. For instance, following the Uruguay Round agreement on Trade Related Aspects of Intellectual Property, many countries — including Australia — extended patent terms from 16 to 20 years, including for patents already running. Whatever the economic arguments for and against extending the life of patents yet to be granted, there was no economic justification for extending patent life retrospectively (see Gruen et al. 1996).

Australia, as a net importer of intellectual property (including material protected by copyright), is well placed to redress the present imbalance by ensuring that the interests of users of intellectual property are considered alongside those of producers in international discussions concerning intellectual property law. Because of the large US trade surplus in intellectual property, many countries are net importers of intellectual property. Most, if not all, of Australia's regional trading partners fall into this category. It is in their interests, individually and collectively, to resist attempts to extend intellectual property rights through international agreements, unless those proposing the changes can demonstrate net benefits, taking into account the interests of users as well as producers.

As Gruen et al. (1996, p. 30) have argued, intellectual property stands in contrast to many matters negotiated within the auspices of the GATT. In trade and investment liberalisation negotiations, 'concessions' made by one country to another are typically measures which will improve the national economic

welfare of the country making the concession, even if it imposes some domestic adjustment cost. And in the rare events where trade liberalisation ‘concessions’ actually harm national economic welfare, there is a strong likelihood that they will increase global economic welfare.

By contrast, there is no presumption for or against stronger intellectual property protection. Accordingly, it is appropriate for mechanisms to be developed to enhance international understanding of the economic consequences of proposed changes to intellectual property law, so that international negotiation can be more fully informed. Such a mechanism would be analogous to domestic requirements for regulatory impact statements before domestic regulatory change, as called for by the OECD (1995).

In the Draft Report, the Commission proposed that Australia should oppose the introduction of measures which would extend global copyright protection unless those measures had been examined by an appropriate expert and independent body, and the measures had been shown to create a global net benefit.

Gallery Press Publishing (Sub. D27) and Koorong Books (Sub. D30) supported this recommendation. Gallery Press considered that authors, distributors and users of copyright protected material needed to be adequately represented in the forums at which copyright is discussed.

The Copyright Agency Limited (CAL), however, expressed concerns about the Commission’s draft recommendation. CAL considered that recent reforms at the international level have focussed on strengthening existing law, rather than extending it per se.

The Commission concurs with CAL’s views on the need for appropriate enforcement of existing copyright laws. It recognises that the ability to control the copying and dissemination of copyright-protected material is being undermined by developments in digital technology, and recognises the need for international discussions on this matter.

The Commission agrees with CAL that Australian negotiators should represent all Australian stakeholders in such international negotiations: rights holders and users alike. In particular, Australia’s negotiators should give adequate and full regard to the interests of Australian users of intellectual property. As the data relating to trade flows in copyright-protected material show, Australia is a net importer of copyright-protected material, and thus any attempts to extend or strengthen copyright protection are likely to have a net cost on Australia as a nation.

Recommendation

In international discussions on intellectual property matters, Australia's negotiators should give adequate and full regard to the interests of users, by extending consultations with industry and business to include relevant users of intellectual property, both as inputs to business and as final consumers. Their interests should be incorporated into Australia's negotiating objectives with weight appropriate to Australia's position as a net importer of intellectual property.

Further, the Commission reaffirms its draft recommendation, which is also aimed at ensuring that sufficient weight is given to the interests of users of intellectual property in international discussions and decisions on copyright issues.

Recommendation

The Australian Government should strongly oppose moves currently being discussed under the auspices of the World Intellectual Property Organisation to extend copyright protection into transmission and distribution, unless an appropriate expert and independent body indicates that to do so would clearly provide net benefits, taking into account the interests of users as well as producers.

3.3 Export prospects

Although export sales represent a significant market for Australian book printers, exports over the period from 1992 as a whole have remained relatively static, although there has been considerable fluctuation from year to year (see Table 2.4). In the 1992 inquiry, the Commission concluded that export prospects for book printers in Australia were limited because, for some products at least, they were not cost competitive.

Bounty is payable on the production of books for export to all countries, except New Zealand where, as noted above, the Australia New Zealand Closer Economic Relations Trade Agreement applies.

Few participants commented on the export prospects for Australian book printers. The PIAA suggested that despite increasing competitiveness Australian

book printers had still not made ‘great inroads into export markets’ (Sub. 8, p. 7). PMP suggested that smarter production methods in Australia, better quality controls and ‘more efficient rationalised printing facilities’ had enabled exports to increase (Sub. 2, p. 8). This comment refers to competitors in Japan, India and South Africa.

PMP also suggested that cost disadvantages of transporting books overseas still remained. Australian printers are disadvantaged not only by these costs, but the transport costs (and any tariffs) on paper used for printing.

However, Griffin Press’s contract for export of mono-colour paperback novels to Japan shows that Australian printers can succeed in winning substantial export orders (see Box 2.1).

Ongoing technological developments, described in Section 3.1.1 and Appendix F, are likely to have an effect on export prospects, as well as in the domestic market. It is likely that production costs worldwide will tend to equalise, and scale economies lessen, with the increasing capital intensity of book printing and the increasing economics of shorter print runs. As noted in Section 3.1.1, this could increase the competitiveness of Australian printers in the domestic Australian market. It could also enhance export prospects, although the costs of freight will still protect overseas printers in their own countries. Further, Australian printers would still have to overcome the extra costs imposed on them, relative to overseas printers, in the purchase of paper. Given the crucial importance of the price of paper in the cost of printing, it is unlikely that Australia will become a major exporter of books.

In the pre-press area there could be greater opportunities for export. With electronic delivery, transport costs are negligible, and skilled labour could give Australia an edge in competing for overseas pre-press work. There are also opportunities for Australian firms to take advantage of their expertise in printing and pre-press technology through overseas investment.

Factors other than cost also affect export prospects. A recent survey by the Australian Bureau of Statistics found that language and cultural barriers were also important (ABS 1996). Although the survey did not find that trade barriers were particularly important, a number of countries in the Asian region are not signatories to the Florence Agreement or to the Berne and Universal Copyright Conventions (UCC) (see Table 3.1 and Appendix D).

Table 3.1: Signatory status to the Florence Agreement and Berne and Universal Copyright Conventions

<i>Country</i>	<i>Signatory to Florence Agreement</i>	<i>Signatory to Berne Convention</i>	<i>Signatory to UCC</i>
Thailand	Yes	Yes	No
Malaysia	Yes	Yes	No
Singapore	Yes	No	No
Indonesia	No	No	No
South Korea	No	No	Yes
Hong Kong	No	Yes	Yes
China	No	Yes	Yes
Taiwan	No	No	No
Japan	Yes	Yes	Yes

Sources: DFAT (personal communication), Bowman and Harris (1984, 1995).

The Commission sought advice from DFAT about what steps Australia has taken to have these overseas trade barriers lowered or removed.

In response, DFAT stated that ‘by comparison with most other traded goods, formal trade barriers to the export of books and other printed materials are low’ (Sub. D19, p. 1). In particular, tariff rates are generally negligible. However, DFAT noted that a variety of non-tariff barriers affected international trade, including trade in books and printed materials.

The Commission also sought information about the extent to which Australia seeks to link negotiations on intellectual property protection matters to other international trade negotiations. According to DFAT:

The TRIPS negotiations were an essential part of the Uruguay Round trade negotiations, and its adoption by consensus as part of a single undertaking includes consideration of cross-sectoral trade-offs ... In intellectual property negotiations, the US and the European Union (EU) tend to be demandeurs and, therefore, they have the lead-role in securing outcomes and concessions. (Sub. D19, p. 3)

According to DFAT, Australia has taken ‘no particular action’ to encourage other countries to ratify the Florence Agreement (Sub. D19, p. 2).

Recommendation

Relevant government agencies should strongly pursue multilateral and bilateral negotiations to remove overseas trade barriers to Australian exports of books.



4 ASSISTANCE

Manufacturing industry assistance has been reducing across the board since 1988, and is now generally at 5 per cent or less. In its recent report into the progress of microeconomic reform, the Productivity Commission proposed that general tariff reductions should continue beyond July 1996, with tariffs for most goods removed by July 1998.

In this case, there would have been no justification for continuing the book bounty beyond its scheduled expiry date of December 1997.

However, even if that proposal were not adopted, or were delayed in implementation, continuing bounty beyond its scheduled expiry date would not have been justified. At a rate of 4.5 per cent, any economic efficiency benefits would have been significantly offset by administrative and compliance costs.

The Government's decision to end bounty prematurely has adversely affected some Australian printing and publishing activity. Leaving aside adjustment costs arising from the cancellation of bounty, however, there is no certainty that net community benefits would have arisen from the 4.5 per cent bounty scheduled to apply during 1997.

In this chapter, the Commission firstly assesses the effectiveness of the book bounty arrangements, as the terms of reference require. The Commission then considers whether assistance to book printing should be provided, taking into account assistance provided to other activities, as well as administrative and compliance costs. Various alternative forms of assistance are considered.

In its Draft Report, the Commission considered what changes to bounty criteria should be made if the Government were to decide that bounty should continue after 1997. That material has less relevance now that the bounty has been terminated. For completeness, and to comply with the terms of reference, however, that material is reproduced in Appendix H.

4.1 Bounty

Book bounty applied for many years, phasing down to a rate of 7.2 per cent of the publisher's printing costs in 1996. From 1 January 1997, it had been scheduled to apply at a rate of 4.5 per cent.

Australia's adherence to the Florence Agreement has ruled out assistance by way of tariffs or import quotas on books of an educational, scientific or cultural nature. Thus, any examination of future assistance for book printing must consider whether some form of book bounty scheme would be justified.

4.1.1 Effectiveness of bounty

Bounty was originally intended to protect local printing activity against import competition. The scheme has been successful in this regard. Without the bounty, it is highly likely that book printers would have had lower market share over the years. Even at the reduced rates applying recently, it was argued that bounty has helped keep book printing in Australia. The Printing Industries Association of Australia (PIAA) stated that:

The feedback ... received from book printers indicates that even at a reduced rate, the book bounty [has been] instrumental in winning work from offshore competitors. Smaller printers have indicated that a significant proportion of total turnover (as much as 18 per cent) [has been] attributable to printing work secured with the use of the book bounty. (Sub. 8, p. 10)

Other participants pointed to what they considered to be the positive effects of past assistance in terms of investment, development of Australian book printing activity, employment and improved competitiveness. For example, citing its recent investment in computerised binding equipment, Brown Prior Anderson (BPA) considered that 'the bounty scheme has allowed major plant investment to take place in recent years' (Sub. 1, p. 4). Telstra considered bounty has 'encouraged the development of a competitive world standard industry' (Sub. 10, p. 3). And Pacific Magazines & Printing (PMP) commented that in its firm 'bounty has assisted employment to be maintained' (Sub. 2, p. 8).

Although not originally a specific aim of the book bounty, it also has acted to offset tariff assistance on inputs into book printing, such as paper, inks and binding materials. As the rate of bounty assistance has been at least as high as the rate of assistance on inputs, bounty has been effective in this regard.

In its early years, there were significant administrative and compliance issues (and costs) associated with the bounty. However, participants considered that the existing eligibility criteria implemented after the 1992 inquiry worked well from an administrative point of view.

The Australian Customs Service (ACS) indicated that:

prior to ... 1992 the book bounty had proved to be a somewhat troublesome bounty to administer [but revised legislation implemented from 1 January 1994 appeared] to be clearer to clients and to Customs officers, and the same level of disputation has not been experienced. (Sub. 13, pp. 2–3)

According to the PIAA, printers had been ‘generally happy’ with bounty arrangements (Sub. 8, p. 18). From the publishers’ point of view, the Australian Publishers Association (APA) considered that:

The APA [has been] satisfied with the adequacy of the structure and thresholds of the ... book bounty scheme. It [was] reluctant to propose change as existing arrangements [had been] working better than at any time in the 27-year history of the scheme. (Sub. 9, p. 20)

Thus, the bounty appears to have been effective in achieving its aims, at least from the viewpoint of book printers and publishers. However, in considering whether bounty assistance has provided an overall benefit to the community other factors also need to be considered. These include whether the bounty overcame any market failures or other barriers and impediments to growth of book printing, the levels of assistance provided to book printing compared with those provided to other activities, assistance provided on inputs such as paper, and the level of administrative and compliance costs associated with the bounty. These factors are also relevant to assessing what future assistance should apply.

4.1.2 Participants’ requests

Most participants supported continuation of assistance for book printing beyond 1997. Generally, assistance was requested in the form of bounty to be continued at the scheduled 1997 rate of 4.5 per cent, although some participants requested a rounding of the rate to 5 per cent.

In justifying assistance, participants pointed to assistance being accorded in Australia to other manufacturing activities, and they commented on the adverse effects of tariff assistance applying on inputs such as paper.

For example, the PIAA argued that:

while government policy is to maintain a duty rate of 5 per cent for industry generally and this applies to major book input materials such as paper, ink and a wide range of printing consumables, then the book industry should also be assisted by the bounty equivalent of a 5 per cent duty rate. (Sub. 8, p. 2)

PMP (Sub. 2) and the APA (Sub. 9) expressed similar sentiments.

As noted in the previous section, participants pointed to the positive effects of bounty for Australian book printers. In submissions made before the Draft

Report was finalised, and before the Government's announcement to cancel book bounty, several participants considered that there would be adverse effects if assistance were to be discontinued. (Comments made by participants about the effects of removing bounty subsequent to the Government's announcement are considered in Section 4.4.) BPA considered that despite recent improvements in competitiveness 'there remains an underlying fragility that could place the industry in jeopardy if assistance was removed completely' (Sub. 1, p. 4). The PIAA reported that:

if assistance were not to be continued then estimates from individual members are that up to 50 per cent of the book work would be lost to overseas competitors. (Sub. 8, p. 17)

The APA considered that, should bounty be abolished, 'onshore production could be expected to diminish by \$80 million, with the loss of 800 jobs' (Sub. 9, p. 16). This is about one-third of current bountiable production. And PMP said that elimination of bounty would place 'in serious jeopardy' its contract to print the Mills & Boon series for Japan (Sub. 2, p. 6). This was supported by Harlequin Enterprises (Australia) which indicated that 'maintenance of bounty could have a material effect on retaining the contract in Australia' (Sub. 3, p. 2). In considering such comments, however, it should be noted that bountiable production has increased substantially since 1992, despite a significant reduction in the bounty rate (see Section 2.2.1).

4.1.3 Assessing the case for assistance

This section considers the main themes arising from participants' arguments for continued assistance to Australian book printing. It then considers administrative and compliance costs which can assume particular importance when rates of assistance are low. Finally, a weighing up is undertaken.

Benefits to book printers

It was argued that bounty had enabled Australian book printers to retain and/or increase their market share, and that bounty had facilitated industry employment, investment and development. Even without the low level of assistance scheduled to apply in 1997 (ie 4.5 per cent), participants feared that book printing activity would decline and that employment would be lost.

Certainly, as noted above, bounty has expanded the market share of local book printers. And, by adding to their revenue, bounty is likely to have facilitated industry investment and development. Conversely, taking that assistance away could lead to a contraction in market share, adversely affect employment, and reduce future investment by book printers.

One justification for assistance could be that it would offset market failures or impediments to the development and growth of book printing activity. However, with the exception of assistance given to inputs into book printing such as paper, no evidence of any significant barriers or impediments were drawn to the Commission's attention.

In assessing the overall merits of providing assistance to book printing, the positive effects for book printers have to be set against the possibly negative effects elsewhere in the economy. Taxes to fund bounties reduce the funds available for investment in other industries, and reduce consumer spending on other goods and services.

In general, assistance for particular firms, activities or industries cannot be justified on the basis of the effects on those firms, activities or industries alone. Both the Commission's Act and the terms of reference for this inquiry require it to take an economy-wide viewpoint.

Uniformity of assistance

Governments have sought to enhance Australia's economic performance by reducing average levels of assistance to industry over time. Since 1988, assistance to manufacturing commodities has been gradually lowered on a programmed basis.

From 1 July 1996, most goods which are subject to duties if imported have been subject to tariffs of 5 per cent or less. Many goods are not subject to duties at all. (Tariffs for the passenger motor vehicles industry and the textiles, clothing and footwear industries are set at higher rates, declining to rates of up to 25 per cent by the year 2000.) The rate of book bounty had been gradually lowered along with the reductions in tariff assistance.

In its report to the Government of 28 June 1996 titled the *Stocktake of Progress in Microeconomic Reform*, the Productivity Commission proposed that general tariff reductions should continue beyond July 1996 (PC 1996). It proposed that there be a further reduction to 3 per cent in July 1997, with tariffs for most goods being removed on 1 July 1998.

If that proposal were to be accepted by the Government, there would have been no justification for continuing book bounty beyond its scheduled expiry at the end of 1997, particularly given the administrative and compliance costs of bounty (see below).

However, the Commission has considered whether continuing assistance to book printing is justified if the proposal for general reductions were not taken up by the Government. Thus, the Commission has addressed

participants' concerns that while tariffs continue to apply generally at 5 per cent, then book bounty should also continue, either at 4.5 per cent, or rounded to 5 per cent.

In many reports, the Commission has argued that economic efficiency would be enhanced by lower, and more uniform, assistance between economic activities. The Commission has sought to achieve greater uniformity of nominal and effective rates of assistance, through lining up assistance rates between commodities and across industries. Box 4.1 describes the meaning of the nominal and effective rates of assistance.

Box 4.1: Nominal and effective rates of assistance

The *nominal rate of assistance* is a measure of assistance accorded to the output of an activity. It expresses output assistance in terms of the percentage increase in gross returns brought about through that assistance.

From an economy-wide perspective, the contribution of an industry or activity (such as book printing) to the economy can be measured by its value added. Essentially, this measures the value of output in the industry or activity, less the value of materials and other inputs bought in for production. Value added in a particular industry or activity can be increased by assistance on its outputs, but reduced by assistance on its inputs.

Changes in value added brought about by the structure of assistance are a measure of the resource allocation effects of that assistance. The *effective rate of assistance* measures such changes. The effective rate of assistance is defined as the percentage change in returns per unit of output to an activity's value-adding factors due to the assistance structure. Comparison of effective rates between activities or industries indicates the extent to which the overall structure of assistance advantages or disadvantages particular activities or industries relative to other activities or industries.

For a simplified example, assume that a printer charges a publisher \$5 for printing a book, including paper inputs of \$1.50. Then value added (by the printer) is \$3.50. In the absence of book bounty and of tariffs on paper, the effective rate is 0. Now suppose that book bounty at a rate of 5 per cent applies, but that no tariffs apply to the paper. In this case, value added increases to \$3.75 (boosted by 25 cents from bounty), and the proportionate increase — the effective rate — is 7.1 per cent. Now also suppose that a tariff of 5 per cent applies to paper inputs. This would increase the cost of paper used to \$1.575, with value added falling back to \$3.675. The effective rate in this case becomes 5 per cent.

A major difficulty in the case of books and book printing is in determining an appropriate benchmark. Different types of books have received different types and levels of assistance. In terms of nominal assistance, some books have been assisted by bounty, some are assisted by tariff, while some receive no assistance. Table 4.1 shows that effective rates for different types of books also differ, depending on the form and level of output assistance, and whether the books are printed on dutiable paper or not.

Table 4.1: Indicative effective rates of assistance for a range of tariff assisted, bountiable and unassisted printed books (per cent)

<i>Type of book</i>	<i>Assisted at 1996–97 scheduled bounty and tariff rates</i>	<i>Unassisted</i>
<i>Hardback</i>		
Using dutiable paper	4.6 to 5.0	-3.1 to -5.3
Using duty free paper	6.6	-1.2
<i>Paperback</i>		
Using dutiable paper	4.6 to 4.9	-2.6
Using duty free paper	6.1 to 24.7	-1.2 to -2.9

Source: Based on indicative unit cost information from participants.

Due to the lack of comprehensive data it is not possible to estimate average levels of nominal and effective rates of assistance for book printing. Further, those industries most closely allied with book printing have differing levels of assistance themselves. Tables 4.2 and 4.3 present information on nominal and effective assistance for those industries, as well as for manufacturing generally.

It is difficult to judge whether providing bounty to book printing (in the situation where general tariff reductions do not continue) would enhance or detract from uniformity of assistance. Before a final judgment can be made about whether economy-wide efficiency would be enhanced or lost, the negative impact of the administrative and compliance costs associated with a bounty needs to be considered.

Table 4.2: Average output (nominal) rates of assistance for the printing and allied industries and all manufacturing, 1995–96 and 1996–97 (per cent)

	<i>1995–96</i>	<i>1996–97^a</i>
Printing and publishing
Printing and bookbinding	4	3
Printing trade services nec	1	..
Printing and allied industries	3	2
Total manufacturing^b	4	3

a Assuming book bounty continued as scheduled.

b Excluding passenger motor vehicles and textiles, clothing and footwear.

Source: IC (1993).
 Between -0.5 and 0.5 per cent.

Table 4.3: Average effective rates of assistance to the printing and allied industries and all manufacturing, 1995–96 and 1996–97 (per cent)

	1995–96	1996–97 ^a
Printing and publishing
Printing and bookbinding	5	4
Printing trade services nec
Printing and allied industries	3	2
Total manufacturing^b	5	4

a Assuming book bounty continued as scheduled.

b Excluding passenger motor vehicles and textiles, clothing and footwear.

.. Between -0.5 and 0.5 per cent.

Source: IC (1993).

Administrative and compliance costs

This section argues that, at low levels of assistance such as those which had been scheduled to apply to book printing during 1996 and 1997, administrative and compliance costs assume special significance.

The discussion assumes that the administrative and compliance costs of a replacement bounty scheme would be similar in magnitude to those of the scheme which was terminated on 20 August 1996.

Administrative costs

These are defined for the purposes of this inquiry to be the costs of the ACS in administering a bounty scheme.

The total level of these costs would depend on a number of factors. The number of claims would have an important influence on costs. In addition, costs would be incurred in registering claimants, resolving eligibility issues and attending to appeals. Data on the administrative costs of the previous bounty are given in Table 4.4.

Table 4.4: Estimated cost of bounty administration

	<i>Unit</i>	<i>1984</i>	<i>1990–91</i>	<i>1994–95</i>
Administrative cost	\$	900 000	589 358	325 000
Average bounty paid per admin. dollar	\$	18	41	72
Admin. cost (proportion of total claims)	%	5.2	2.4	1.4
Total number of claims	no.	10 830 ^a	9 538	4204 ^b
Average administrative cost per claim	\$	83	62	77
Total bounty payments	\$m	17.4 ^c	24.2	23.3
Value of bountiable production (excl. bounty)	\$m	70 ^c	161	235
Bounty rate	%	25	15 ^d	9.9 ^d

a Estimate (see IAC 1985, p. 18).

b Lodged (4151 were approved).

c For 1984–85.

d Average.

Sources: IAC (1985), IC (1992), ACS.

Total administrative cost had reduced markedly since 1984, along with the reduction in the number of claims. According to the ACS, full-time staff equivalents dedicated to book bounty administration had declined to approximately 4.7 persons with an annual cost of approximately \$220 000. In addition, the ACS indicated there were policy and administrative overheads which ran at about 50 per cent of this direct expenditure. The resulting total of about \$325 000, however, excluded general administrative overheads and the costs of superannuation. For the Commercial Services program of the ACS in 1994–95, general administrative overheads worked out at about 12 per cent of employee expenses (see ACS 1995, p. 193). And a markup of about 15 per cent needs to be made for superannuation liabilities (Finance 1991). Adding these in would bring the administrative costs of the book bounty to just over \$410 000 per annum.

The ACS commented that the overall costs of administering the bounty were as ‘streamlined as possible under current operational arrangements’, and that ‘processing of book bounty claims [was] a relatively simple procedure’ (Sub. 13, p. 5). The bounty was administered under a risk management regime (ie auditing was undertaken according to the perceived risk of fraud) and ‘very limited audit work [needed to be] undertaken at the claimant’s premises’ (Sub. 13, p. 5).

Even so, on the basis that bounty would continue, the ACS suggested some possible changes designed to reduce administrative costs.

It noted that to facilitate its risk management regime and a move towards self-assessment by claimants ‘an administrative penalty regime should be applied to the legislation to ensure that a proper level of compliance is achieved in the long term’ (Sub. 13, p. 2). Administrative penalties already apply under the Customs Act for underpayment of customs duties, but cannot exceed 200 per cent of the underpayment. In a submission to the Commission’s recent Machine Tools and Robotics Industries inquiry, the ACS said:

Over claiming can be significant in bounty claims leading to a higher level of checking of claims before payment than under a system where administrative penalties apply. (1996b, p. 4)

In that submission, made before the Government’s budget decision to abolish the bounties, the ACS also suggested there was merit in covering all bounties in the one piece of legislation.

Mr Lindsay Somerville suggested that more self-assessment could be used, saying this would reduce the paperwork, with random audits utilised instead of each claim being rigorously inspected (Sub. 6, p. 4).

In its submission to this inquiry, the ACS argued that the registration procedures should be abolished, because they were ‘superfluous to modern administrative practice’ (Sub. 13, p. 4). This would make minimal difference to administrative costs, according to the ACS. It would reduce compliance costs, although it is difficult to estimate to what extent.

Compliance costs

These are the costs which applicants for bounty would have to meet themselves, in applying for bounty registration and in claiming bounty payments for individual print runs. A range of views about the significance of these costs was presented by participants.

PMP considered that:

Computerised costing and invoicing within the group means that there [was] virtually no cost to the group in applying for book bounty and complying with the bounty requirements. (Sub. 2, p. 8)

BPA said that:

the cost of bounty and compliance administration [ie to it] has been estimated at \$7200 per annum, representing less than 2 per cent of bounty receipts. (Sub. 1, p. 2)

The PIAA considered that:

Based on feedback received from book bounty recipients, it has become evident that administrative costs of the book bounty [varied] from one printer to another printer. Some large book bounty recipients [employed] full time staff to administer the bounty,

while smaller recipients have estimated that the cost of making an application [was] around \$100 per application. (Sub. 8, p. 18)

Results of an APA survey of its publisher members indicated that 21 firms on average spent about \$2700 in 1995 in applying for bounty, a combined cost for those firms of about \$57 000 (Sub. 9, Attachment D). Total bounty received by them was just over \$9 million.

In terms of the time taken to prepare a claim, half an hour at most was said to be an average for a publisher to claim bounty for a complex book, and significantly less for a mono-colour paperback. According to the APA, there was little difference between firms in their costs per claim of applying for bounty.

Obviously, information about compliance costs is not as precise as for the costs of ACS administration. Leaving aside PMP's comment about there being 'virtually no cost' to it of applying for bounty, annual total compliance costs appeared to range between about \$150 000, on the basis of the APA's information, and about \$420 000 on the basis of the possible \$100 cost per claim indicated by the PIAA.

4.1.4 Weighing up

The above information suggests that administrative and compliance costs of the bounty totalled between about \$560 000 and \$830 000 annually. Any net efficiency gains arising from reinstating or replacing bounty so as to maintain or achieve more uniform levels of assistance, would need to be set against administrative and compliance costs of this order.

As noted above, it is not unambiguously clear that bounty would enhance uniformity of assistance. Even if it were enhanced, however, any net efficiency gains arising from more uniform assistance could not be merely equated to the total amount of bounty payable. Despite participant's claims about the adverse effects of bounty removal (see Sections 4.1.2 and 4.4), it is likely that a sizeable proportion of bounty would be paid in respect of printing which would continue even if bounty were not available. There can be no efficiency gain in respect of paying bounty on that printing. Any net gain only comes from the expansion in printing engendered by bounty. This net gain equals the revenue (including bounty) from that extra printing, less its production costs. Thus, in efficiency terms, any benefit from bounty can only be a small part of total bounty payments.

If administrative and compliance costs are relatively fixed irrespective of the level of assistance provided — in the case of a book bounty they are more likely to be related to the number of bounty claims which, in turn, is related to the

level of bountiable production — then at low levels of assistance these costs may outweigh any net benefits gained from continuing assistance. Box 4.2 explains this in graphical terms.

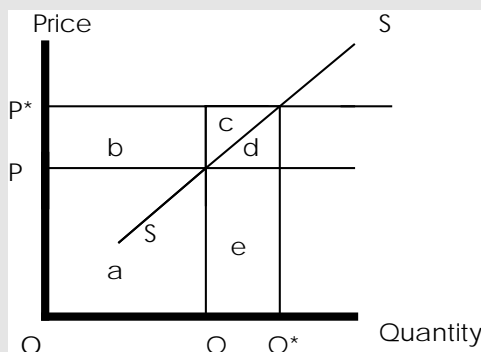
The analysis given in Appendix I explores the relationship between the net economic efficiency benefits of a bounty and its administrative and compliance costs. While the analysis in the appendix is neither precise nor conclusive, it suggests that any possible economic efficiency gain arising from a bounty of 4.5 per cent would be significantly offset by the efficiency loss arising from administrative and compliance costs.

As noted above, some suggestions were made by participants for ways to reduce administrative and compliance costs. If bounty assistance were to apply, the Commission would support the suggestions for implementing adequate administrative penalties to facilitate greater use of claimant self-assessment, to abolish registration procedures, and to rationalise bounty legislation.

In regard to administrative penalties the Commission notes that a penalty limit of 200 per cent currently applies to underpayment of duty under the Customs Act. However, such a limit for book bounty arrangements could be too low for a satisfactory self-assessment regime to operate. A higher limit would minimise the incentives for over claiming, thus enabling the ACS to optimise its auditing of claims, and reduce administrative costs. The ACS indicated that bounty administrative costs could possibly be halved if all cost savings methods were implemented — the introduction of an electronic interface (ie lodging claims electronically), user pays, amalgamation of bounty legislation, and the introduction of an administrative penalty regime.

Box 4.2: Comparing the benefit of bounty with administrative and compliance costs

In the following diagram, SS represents the supply curve for book printing. Without bounty, production occurs at quantity Q and price P. So area 'a' represents the revenue from production.

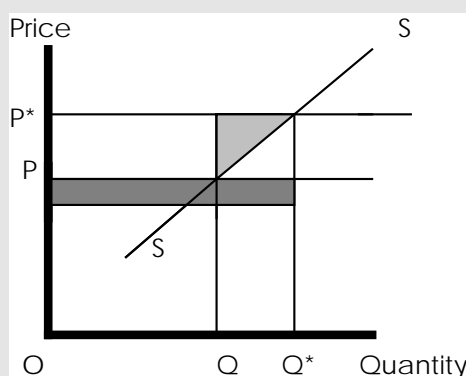


Provision of bounty induces an increase in production to quantity Q^* , with a price received by book printers of P^* , including the bounty. Total revenue from book production then becomes $'a+b+c+d+e'$ with bounty payments equal to $'b+c+d'$.

The area 'b', however, represents bounty payments on production which would have continued to occur in the absence of bounty. Thus, bounty area 'b' has no efficiency effect.

It is assumed that providing bounty provides an efficiency gain if other similar industries are also assisted at the same level. This can be measured as the net gain from the increased production represented by $Q^* - Q$. The revenue from this increase is equal to $'c+d+e'$, and the cost of its production is equal to $'d+e'$. Thus, the net economic gain — the efficiency effect of the bounty — is represented by area 'c'.

The next diagram shows this area as the shaded triangle. The imposed shaded rectangle shows administrative and compliance costs, on the basis that they equal a fixed proportion of the value of bountiable production.



As the rate of bounty reduces, the price P^* reduces towards P and production reduces from Q^* towards Q . As this occurs, the area of the triangle reduces towards zero, but the area of the rectangle reduces only towards the shaded area above OQ .

Thus, as the bounty rate reduces towards zero, any efficiency effect of bounty will be outweighed by administrative and compliance costs.

However, even if total administrative and compliance costs were significantly reduced from those which applied in the past — and it should be noted that some of the possible changes would merely transfer costs from the ACS to bounty applicants — much of any economic efficiency gain from a bounty (of 4.5 per cent, say) would still be offset by administrative and compliance costs.

Changes to bounty eligibility criteria could also serve to reduce administrative and compliance costs from those which applied in the past (see Appendix H). At the extreme, those criteria could be so tight as to minimise the number of bounty claims, and thus administrative and compliance costs. However, this would also significantly reduce bounty payments, and consequently any economic efficiency gains which might otherwise arise from bounty uniformity could be lost.

In summary, the maximum book bounty rate which could possibly be justified would be 4.5 per cent. However, there is no certainty that such a bounty would

enhance uniformity of assistance. Further, at the rate of 4.5 per cent, any possible efficiency benefits from uniformity would be significantly offset by administrative and compliance costs. The Commission has concluded that there is no justification for bounty assistance for the production of books in Australia after the end of 1997.

Recommendation

The printing of books in Australia should not be assisted by bounty after the end of 1997.

4.2 Alternatives to bounty

The Commission has considered several alternatives to bounty to assess their assistance effects, as well as their administrative and compliance costs. Specific measures examined include capitalisation of bounty, and direct ways to offset the effects of assistance on inputs.

4.2.1 Capitalisation

In considering whether assistance to book printing in Australia should continue after 1997, and its form, the Commission has been asked to consider the possible 'capitalisation' of bounty. Under such an arrangement, a lump-sum up-front payment would be made, rather than a succession of smaller bounty payments over time. But the size of the lump-sum payment would be closely related to the expected future payments which would have otherwise been made, with those expected payments discounted to present-day values.

Only in one case in Australia has a capitalisation arrangement operated as an alternative to bounty. The Textile Yarns Capitalisation Grants Scheme operated from 1990 to mid-1995, and provided an optional alternative to the textile yarns bounty.

There was some support for a capitalisation scheme for books. According to the PIAA:

A number of book bounty recipients have indicated to us that they will support capitalisation if it is based on at least five years of bounty receipts and if the capitalisation grant is not subject to company tax as it could then be fully utilised on capital purchases to maintain international competitiveness. (Sub. 8, p. 19)

The APA considered that a capitalisation scheme for books could be complex, but that ‘significant budgetary and industry development benefits’ could arise (Sub. 9, p. 21). BPA said that:

Subject to eligibility and examination of any proposed formula, BPA would opt for capitalisation of bounty. If bounty capitalisation were to be tied to future capital investment plans BPA would be at a disadvantage after committing to heavy investment in 1996. (Sub. 1, p. 5)

PMP opposed capitalisation in favour of maintaining bounty arrangements, indicating that it:

does not believe that capitalisation is a significant advantage for the long term competitiveness of the Australian industry. The diversity of bounty claimants means that any capitalisation scheme would be necessarily fragmented. This fragmentation would lead to inequities and, for smaller book producers, the money received would be ineffectual. It is our view that the industry is currently well equipped ... (Sub. 2, p. 12)

The ACS indicated that it does not support capitalisation on administrative feasibility grounds:

[it] could only be applicable to the large printers where there is a quantifiable and generally constant volume of bounty work undertaken. Even in these cases the work that is claimed may not necessarily reflect the volume of work that has been completed on an annual basis over the last couple of years. (Sub. 13, p. 6)

Given that a capitalisation arrangement would provide the same amount of assistance as a bounty scheme, albeit up-front rather than over time, the merits of capitalisation hinge on its administrative and compliance costs, and its administrative feasibility.

Capitalisation of bounty would avoid the need for ongoing preparation of bounty claims by firms, their ongoing assessment by the ACS, and the costs involved with making bounty payments. On the other hand, a capitalisation scheme could add to costs in other areas. For instance, there could be a greater need for vetting and assessment of applicants. This could include the need for applicants to prepare business plans, with supporting financial and legal documents. The ACS might need to collect sureties from firms, to guard against them ceasing book printing. There would be the need for ongoing monitoring of successful applicants. It is difficult to judge whether overall administrative and compliance costs would be less with capitalisation than with a bounty although, *prima facie*, it should be less with capitalisation.

In estimating future bounty payments, a first step would be to decide the period over which capitalisation would apply. Capitalisation payments under an open-ended scheme could be extremely high, even at low alternative bounty rates.

Once this period was decided, likely future bounty payments could be assessed and the total calculated in terms of present day values. In the case of books previously eligible for bounty estimating future payments would be extremely difficult, even five years ahead.

There has been significant structural change within book printing activity in the last five to ten years, and there is nothing to suggest that would not continue. This factor would make assessing expected bounty payments for particular firms five years ahead very problematical. A capitalisation scheme would also need to make provision for assistance to new entrants into book printing, or it would act as a barrier to entry.

Further, while output of books eligible for the recently terminated bounty had generally grown in recent years it is difficult to forecast the future. This is so especially as books compete in a market which is currently undergoing substantial change due to the emergence and growing adoption of new methods of delivering information and entertainment.

Bounty had been based on the price paid to the printer by the publisher. It would be hard to forecast these prices with confidence for books which may be produced up to five years hence. A significant factor influencing prices could be the cost of paper — and this is subject to significant fluctuations over time.

A major difficulty with capitalisation is that it would lock in assistance to book production for some years ahead. This is undesirable, given the Productivity Commission's view that assistance (including tariffs) generally should continue to fall.

In conclusion, the Commission sees no overall benefit from a capitalisation arrangement. There is no guarantee of significant administrative and compliance cost savings. The appropriate level of grant would be virtually impossible to calculate with any certainty. And it would undesirably lock in assistance to one particular manufacturing activity.

Some of the problems of a capitalisation grants scheme could be overcome if the link with production levels were to be broken, and a grants scheme were set up to address directly specific problems being faced by book printers.

However, the Commission is unaware of problems which are specific to book printing activity which would justify any special grants scheme.

4.2.2 Directly offsetting assistance on inputs

A final way to provide assistance to book printers would be to directly offset the effects of assistance applying to inputs into book printing. This could be done through by-laws, for example.

PMP and the APA requested that Australia should accede to Annex H of the Nairobi Protocol to the Florence Agreement which, among other things, would ensure the duty free availability of all inputs into book printing (see Appendix D).

Any such by-law would have to specify the end-use of the inputs, for example, paper, and significant administrative and compliance costs would be incurred. These could possibly outweigh any benefits of the duty concession.

As well as making its general request covering all inputs in book printing, PMP specifically requested that the words ‘and books’ be added to the current policy by-law that allows duty free entry of coated paper over 67 gsm used in magazines. It also requested that a by-law be established to allow cover boards to enter at world prices duty free, claiming that ‘there are no suitable cover boards made in Australia for paperbacks’ (Sub. 2, p. 17).

In commenting on the Draft Report, the PIAA requested that:

if the Government fails to reverse its decision to prematurely end the book bounty ... consideration be given not to tax by way of tariffs, raw materials used in book printing and production. This could be done simply and without administrative cost through the policy by-law system as is the case with assistance to the magazine production industry. (Sub. D20, p. 4)

Australian Paper, however, considered that:

The coated magazine paper by-law is unwarranted in our view and has had a particularly negative effect on current and future development in this area. The company would not like to see any extension of these arrangements for coated papers used in book production ... (Sub. 7, p. 14)

According to Australian Paper, this could have:

quite substantial adverse effects on [its] \$50 million current expansion plans for its coated paper production in Tasmania and the \$330 million planned construction of a paper machine in Maryvale ... (Sub. D23, p. 1)

Further, Australian Paper stated that it had ‘serious concerns’ about administration of such a by-law by the ACS and compliance by many hundreds of users (Sub. D29, p. 6).

The Commission considers that accepting PMP’s and the PIAA’s requests for these particular by-laws would be difficult to justify. As with the request for all inputs into book printing to be made duty free, there would be administrative

and compliance costs which would offset, and possibly exceed, any benefit to book printers from the by-law concession. And there could be significant costs imposed on Australian Paper. Further, singling out this form of paper and the cover board for special treatment would be difficult to sustain. Many types of paper are substitutable in use and it is difficult to see where the boundaries lie. Any request for variations to particular tariff concessions or by-laws should be handled within the usual framework administered by the ACS.

Recommendation

Book bounty should not be replaced by any other form of assistance.

4.3 Books assisted by tariff

Australian telephone directories and Australian timetables are currently assisted by tariff, whereas telephone directories and timetables relating to countries other than Australia have been assisted by bounty.

In the past, there have been administrative difficulties in distinguishing between directories and timetables in assessing eligibility for bounty. However, evidence from participants suggests that this problem had been overcome.

The Commission has considered two alternatives: remove the tariff so that the rate of assistance for Australian telephone directories and timetables lines up with that of books which are no longer assisted by bounty; or continue the tariff in line with the continuation of tariffs on many other goods, including other forms of printing.

According to Telstra, which arranges the printing in Australia each year of directories to the value of about \$140 million:

Tariffs at such minimal levels [of 5 per cent] offer Australian industry little protection and may not be seriously seen as a barrier to imports. Anecdotal evidence suggests the effect of such low tariffs can easily be negated by even small fluctuations in currency exchange rates. (Sub. 10, p. 2)

Given that directories and timetables relating to countries other than Australia are no longer assisted by bounty, the Commission considers that the tariff on Australian directories and Australian timetables should also be removed. This would also serve to remove the different treatment of directories and timetables, for assistance purposes, depending on their content.

Recommendation

The tariff on Australian directories and timetables should be removed.

4.4 Participants' response to bounty removal

As well as responding to the Commission's draft recommendation that book bounty not be continued beyond the end of 1997, participants commented on the Government's decision to end bounty prematurely on 20 August 1996.

4.4.1 Response to the Draft Report

Several participants queried the reasoning which led to the Commission's draft recommendation. Particular emphasis was given by participants to the perceived benefits of bounty, and the adverse consequences of its removal.

For example, the APA stated that it does not accept the rationale behind the abandonment of bounty:

The Draft Report seems to take every conceivable negative line to arrive at preconceived conclusions. It inflates Customs administration costs; treats with scepticism the industry's low compliance cost estimates, favouring instead a worst case scenario developed from a selected response; spurns industry predictions of the employment and production loss consequences of termination of bounty; is indifferent to investment, import replacement and export gains of significant proportions; and relies overwhelmingly on the Commission's own wishful agenda for a zero tariff regime by 1 July 1998. (Sub. D21, p. 1)

The PIAA believed that:

the Draft Report places too much emphasis on book bounty administration and compliance costs while undervaluing the economic benefits generated by the operation of the book bounty scheme. (Sub. D20, p. 1)

It considered that 'based on industry feedback' more than \$120 million of book production will be lost to offshore printers, with consequent effects on the balance of payments, employment, supplying industries, and regions.

According to PMP:

the Commission has reversed all previous policies, and now requires the industry to operate without assistance and yet pay duty on imported paper and other imported book production materials. (Sub. D22, p. 1)

In view of these and other similar comments, it is worth briefly restating the Commission's reasoning:

- assistance for particular firms, activities or industries cannot be justified on the basis of the effects on those firms, activities or industries alone. An economy-wide viewpoint must be taken;
- there are potential efficiency benefits from uniformity of assistance;
- it is difficult to judge whether continuing bounty would enhance, or detract from, uniformity of assistance;
- the maximum bounty rate which could possibly be justified would be 4.5 per cent;
- at that rate, any possible efficiency benefit from uniformity — and it is not unambiguously clear that there would be in fact such benefit — would be significantly offset by administrative and compliance costs.

The Commission rejects the APA's contention that it has favoured a worst case scenario in respect of compliance costs. In fact, Appendix I considers the full range of compliance cost estimates provided by participants. In every case, any possible efficiency gain from uniformity is significantly offset by administrative and compliance costs.

In view of participants' comments, the possible adverse effects of removing the bounty warrant examination in some more detail.

As noted above, the PIAA considered that about \$120 million of book work could be lost to overseas printers. This is about 45 per cent of 1995–96 bountiable production. The APA earlier estimated that about one-third of production could be lost offshore. According to Mimosa Publications, a more recent APA survey indicated that printing worth some \$19 million would be transferred offshore in 1997 due to cessation of bounty. This figure relates to some 42 respondents with a combined turnover of about \$533 million. In percentage terms, this represents about 4 per cent of current work, but Mimosa considered that this was 'a most conservative estimate' (Sub. D26, p. 2).

Some participants considered that the removal from bounty eligibility of exports to New Zealand on 1 July 1990 gave some indication to the possible effects of total removal of bounty. On that date, some 16 percentage points of bounty were removed from exports to New Zealand. However, although exports declined from about \$41.2 million in 1989–90 to about \$37.0 million in 1990–91, they then increased in 1991–92 to about \$43.4 million (all figures in 1994–95 prices).

Clearly, and understandably, there is considerable uncertainty about the likely effects of bounty removal. However, in recent years, any adverse effects from the scaling down of bounty appear to have been more than offset due to market growth, and improvements in competitiveness. For instance, bountiable production in 1995–96 was more than 50 per cent higher, in real terms, than in 1991–92 (see Section 2.2.1), despite a reduction in the average rate of bounty over that period of nearly 6 percentage points.

According to participants, some of the market growth has been due to the 1991 amendments to the Copyright Act, in particular the introduction of the 30 day rule. For instance, PMP indicated that the 30 day rule had enabled it to replace imports worth about \$6 million in the past year. These amendments would be removed if the Commission's recommendations to end restrictions on the parallel importation of books were to be adopted (see Section 3.2.4). If PMP's judgment about the effects of the 30 day rule on its own operations is correct, and if this is typical of the effect on Australian printers generally, the 30 day rule may have allowed market growth of about \$25 million annually. This suggests that the bulk of market growth has been due to other factors. These include a switch in the composition of demand towards mono-colour paperbacks, an area of book printing in which Australian printers have an advantage. Technological changes also have improved competitiveness of Australian book printers.

The PIAA considered that the regional implications of removal of bounty needed to be considered. It gave the example of Maryborough, Victoria, which it said was 'virtually dependent on book printing and the ancillary services that go with book printing in maintaining their population' (Transcript, p. 50).

To the extent that Australian book printing activity is adversely affected by removal of bounty, there will be regional implications. However the magnitude of any adverse effects is uncertain. The Commission considers that adverse effects arising from removal of bounty (and the ending of the 30 day rule) will be significantly offset if the market trends evident in the last few years continue.

As Telstra noted in relation to tariffs of 5 per cent and directories, the effects of a bounty of 4.5 per cent could easily be negated by small fluctuations in exchange rates.

4.4.2 Response to the Government's decision

Some participants indicated that Australian printers and publishers had been adversely affected by the Government's decision to end bounty prematurely.

PMP indicated that since the announcement about cessation of bounty it had taken the commercial step of acquiring the remaining shareholding in a joint venture printing operation in Indonesia. It said that it 'can now produce in Indonesia many of the books and directories ... it has previously produced in Australia' (Sub. D22, p. 1).

It also indicated that plans for the upgrading of its South Australian book manufacturing complex, Griffin Press, had been cancelled. Indeed, it has already transferred equipment valued at about \$1 million from Adelaide to Indonesia.

Mimosa Publications said that Australian printers:

have invested heavily in new technology in order to compete with offshore printers, and were, they thought, secure in the knowledge that a modest amount of assistance would be available at least until the end of 1997. (Sub. D26, p. 1)

For example, Impact Printing has presses valued at \$4 million on order for installation in November 1996.

Reed Books stated that the publishing industry plans up to three years ahead:

costings are done ... way ahead of publication dates ... major publishers are contractually obligated ... (Transcript, p. 15)

As a result of the withdrawal of bounty on 20 August, Reed considered it would lose about \$200 000 from its 'bottom line' in 1996, and up to \$500 000 in 1997.

It is apparent that Australian printers and publishers have planned their company strategies on the basis that bounty would continue until the end of 1997. Production and investment commitments have been entered into. Premature removal of bounty has adversely affected Australian printers and publishers.

The Commission has no basis on which to judge the relative significance of the adjustment costs arising from early cessation of bounty. However, there is little doubt that the decision runs counter to the sound public policy principle of providing predictability and certainty in industry policy matters.

Leaving aside the adjustment costs arising from the cancellation of bounty, the Commission's analysis of the benefits and costs of retaining bounty at a rate of 4.5 per cent beyond 1997 applies equally to 1997 itself. The analysis suggests that, leaving aside adjustment costs, there is no certainty that net community benefits would have arisen from the 4.5 per cent bounty scheduled to apply during 1997.

BOOK PRINTING

APPENDICES

- A** **TERMS OF REFERENCE**
- B** **INQUIRY PARTICIPANTS AND VISITS**
- C** **THE DISTRIBUTION OF BOOK BOUNTY
PAYMENTS**
- D** **RELEVANT INTERNATIONAL AGREEMENTS**
- E** **GUIDE TO THE BOOK BOUNTY**
- F** **TECHNOLOGICAL DEVELOPMENTS IN BOOK
PRINTING**
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- H** **POSSIBLE CHANGES TO BOUNTY CRITERIA**
- I** **ECONOMIC EFFICIENCY EFFECTS OF
BOUNTY**

REFERENCES

A TERMS OF REFERENCE

I, George Gear, Assistant Treasurer, in pursuance of Part 2 of the Industry Commission Act 1989, hereby:

1. refer the production of books in Australia to the Industry Commission for inquiry and report within nine months of the date of receipt of this reference [29 January 1996];
2. specify that in making its recommendations the Commission aim to improve the overall performance of the Australian economy;
3. request that the Commission:
 - (a) report on the effectiveness of the current bounty scheme;
 - (b) identify and report on key factors affecting industry development and ways to encourage improved efficiency and international competitiveness of the industry; and
 - (c) advise whether assistance should be accorded to the production of books in Australia after the current bounty scheme terminates on 31 December 1997 and, if so, the nature and extent of that assistance, including capitalisation of bounty;
4. specify that, in conducting its inquiry and presenting its report, the Commission should have regard to:
 - (a) the administrative implications and cost effectiveness of the options identified;
 - (b) the need for clear definitions of eligible books and eligible recipients; and
 - (c) Australia's commitment not to impede by tariffs or quota restriction the importation into Australia of those goods covered by the United Nations Educational, Scientific and Cultural Organisation (UNESCO) Agreement on the Importation of Educational, Scientific and Cultural Material (Florence Agreement) and the Nairobi Protocol to the Agreement;
5. specify that the Commission:
 - (a) take account of any recent substantive studies undertaken elsewhere; and
 - (b) have regard to the established economic, social and environmental objectives of governments.

GEORGE GEAR

B INQUIRY PARTICIPANTS AND VISITS

B1 Inquiry details

The terms of reference were received by the Commission on 29 January 1996.

An issues paper was prepared and distributed in early March 1996 to individuals, organisations and associations with an interest in book production activity in Australia.

A number of visits and discussions were held with interested parties during the course of the inquiry. Visits were undertaken and discussions held in Melbourne, Adelaide, Sydney and Canberra. Those visited are listed in Section B2.

A total of 18 submissions were received prior to the release of the Draft Report — see Section B3.

Following the release of the Draft Report, a public hearing was held in Melbourne on 12 September 1996. Participants at the hearing are marked in Section B3.

Twelve submissions were received by the Commission subsequent to the release of the Draft Report — see Section B3.

B2 Informal discussions and visits

The following organisations and companies were visited.

New South Wales

Australian Publishers Association Ltd (formerly the Australian Book Publishers Association)

Australian Manufacturing Workers' Union – Printing and Kindred Industries Division

Butterworths

Fuji Xerox Australia

Harlequin Enterprises (Australia)

McGraw-Hill Book Company Australia

Printing Industries Association of Australia

Victoria

Addison-Wesley-Longman

Brown Prior Anderson

Craftsman Press

Jenkin Buxton Press

McPherson's Printing Group

Pacific Magazines & Printing

Reed Books

Wilke Colour

Wilke Directories

South Australia

Gillingham Printers

Griffin Press

Hyde Park Press

Australian Capital Territory

Australian Customs Service

B3 Inquiry participants

Organisations and individuals who made submissions are listed below. Submissions marked with a 'D' were received after the release of the Draft Report. Organisations marked * participated at the public hearings.

<i>Participant</i>	<i>Submission No.</i>
Australia Council	12
Australian Customs Service	13
Australian Paper Limited*	7, D23, D29
Australian Publishers Association Limited	9, 14, D21
Brown Prior Anderson Pty Ltd	1, 15
Copyright Agency Limited	D28
Department of Communications and the Arts	11
Department of Foreign Affairs and Trade	D19
Galley Press Publishing	D27
Harlequin Enterprises (Australia) Pty Limited	3
Koorong Books Pty Limited	D30
Mimosa Publications and Impact Printing*	D26
Mr Lindsay Somerville	6
Pacific Magazines & Printing Limited*	2, 18, D22
Printing Industries Association of Australia*	8, 16, D20
Printing Industries New Zealand	5
Reed Books*	
Telstra Corporation	10, 17, D24
The Hannan Group	4, D25

C THE DISTRIBUTION OF BOOK BOUNTY PAYMENTS

C1 Total book bounty payments

Total bounty payments in nominal terms have ranged between about \$21 million and \$24 million per annum over the period 1989–90 to 1995–96 (see Table C1). In real terms total annual payments declined between 1989–90 and 1992–93.

Table C1: Total book bounty payments in nominal and real terms, and number of recipients, 1989–90 to 1995–96

	1989–90	1990–91	1991–92	1992–93	1993–94	1994–95	1995–96
<i>In nominal prices</i>							
Bounty paid (\$ 000)	24 058	24 214	21 594	21 386	22 273	23 300	21 934
Value of bountiable production (\$ 000)	141 518	161 426	157 048	158 411	184 076	235 351	270 796
Mean amount received ^a (\$)	34 917	36 033	34 060	31 589	32 421	33 965	31 974
Median amount received ^b (\$)	3 861	3 526	3 642	3 517	3 938	3 612	3 436
<i>In constant 1988-89 prices^c</i>							
Bounty paid (\$ 000)	23 066	21 814	18 409	17 836	18 257	18 610	16 347
Value of bountiable production (\$ 000)	135 684	145 429	133 886	132 119	150 882	187 980	201 822
Mean amount received (\$)	33 478	32 462	3 105	26 346	26 575	27 128	23 830
Median amount received (\$)	3 702	3 177	3 105	2 933	3 228	2 885	2 561
Number of claimants	689	672	636	677	687	686	686

a Sum of bounty payments divided by the number of claimants.

b Middle value of bounty payments made to claimants.

c Calculated using the manufacturing price index of articles produced by the paper, paper products, printing and publishing industries (ASIC 26).

Sources: ABSa, ACS (1996a).

The rate at which book bounty is paid has declined over the period, from an average of 17 per cent of the publisher's Australian production cost in 1989–90, to an average of 8.1 per cent in 1995–96.

Claimant numbers dipped in 1991–92, but have been relatively constant over the rest of the period shown in Table C1. Accordingly, with the number of claimants stable, and a declining real value of total payments, measures of the average amount of bounty received generally declined, in real terms, over the period.

However, interpreting the distribution of bounty payments among claimants is not straightforward. The Australian Customs Service identifies a claimant of book bounty on the basis of the address to which payments are sent. A book producer with several establishments at different addresses may lodge separate claims in respect of each establishment. Alternatively, all claims for that producer might be lodged from the one address.

C2 Distribution of bounty payments

Book bounty payments are not evenly distributed among claimants. Many claimants receive relatively little bounty while a few receive very large payments.

For example, in 1995–96, about 1 per cent of claimants received half of the \$21.9 million paid out under the scheme, while 81 per cent of claimants shared just 10 per cent of the amount paid out. As shown in Table C2, there have been only minor variations in these proportions since 1989–90.

Table C2: Percentage of book bounty received by percentage of claimants

<i>Percentage of total bounty received</i>	<i>Percentage of claimants</i>						
	<i>1989–90</i>	<i>1990–91</i>	<i>1991–92</i>	<i>1992–93</i>	<i>1993–94</i>	<i>1994–95</i>	<i>1995–96</i>
	<i>%</i>	<i>%</i>	<i>%</i>	<i>%</i>	<i>%</i>	<i>%</i>	<i>%</i>
25	0.3	0.4	0.6	0.4	0.3	0.3	0.3
50	1.3	1.3	1.6	1.5	1.5	1.2	1.3
75	5.5	5.7	6.5	6.7	6.3	5.1	5.8
90	18.9	16.7	19.1	19.8	21.1	17.2	18.8

Source: ACS (1996a).

Since 1989–90, around 35 per cent of claimants have received less than \$2000 in bounty payments per annum (see Table C3). This is equivalent, at the average 1995–96 bounty rate, to claims for less than \$25 000 worth of books.

Table C3: Number of recipients of book bounty by amount received

<i>Total bounty payment</i>	<i>1989–90</i>	<i>1990–91</i>	<i>1991–92</i>	<i>1992–93</i>	<i>1993–94</i>	<i>1994–95</i>	<i>1995–96</i>
	<i>No.</i>	<i>No.</i>	<i>No.</i>	<i>No.</i>	<i>No.</i>	<i>No.</i>	<i>No.</i>
< \$2000	234	237	215	230	231	242	249
\$2000 to \$10 000	257	254	247	259	246	259	251
\$10 000 to \$100 000	162	143	137	153	180	146	151
\$100 000 to \$1m	31	33	30	31	26	36	32
Over \$1m	5	5	5	4	4	5	3
Total	689	672	634	677	687	686	686

Source: ACS (1996a).

Similarly, the share of total bounty payments received by those claiming less than \$2000 in bounty each year has remained reasonably steady since 1989–90 (see Table C4). But in 1994–95 there was a significant change in the distribution of the total bounty payment for claimants receiving higher amounts of bounty.

Table C4: Percentages of total bounty payments by amount received

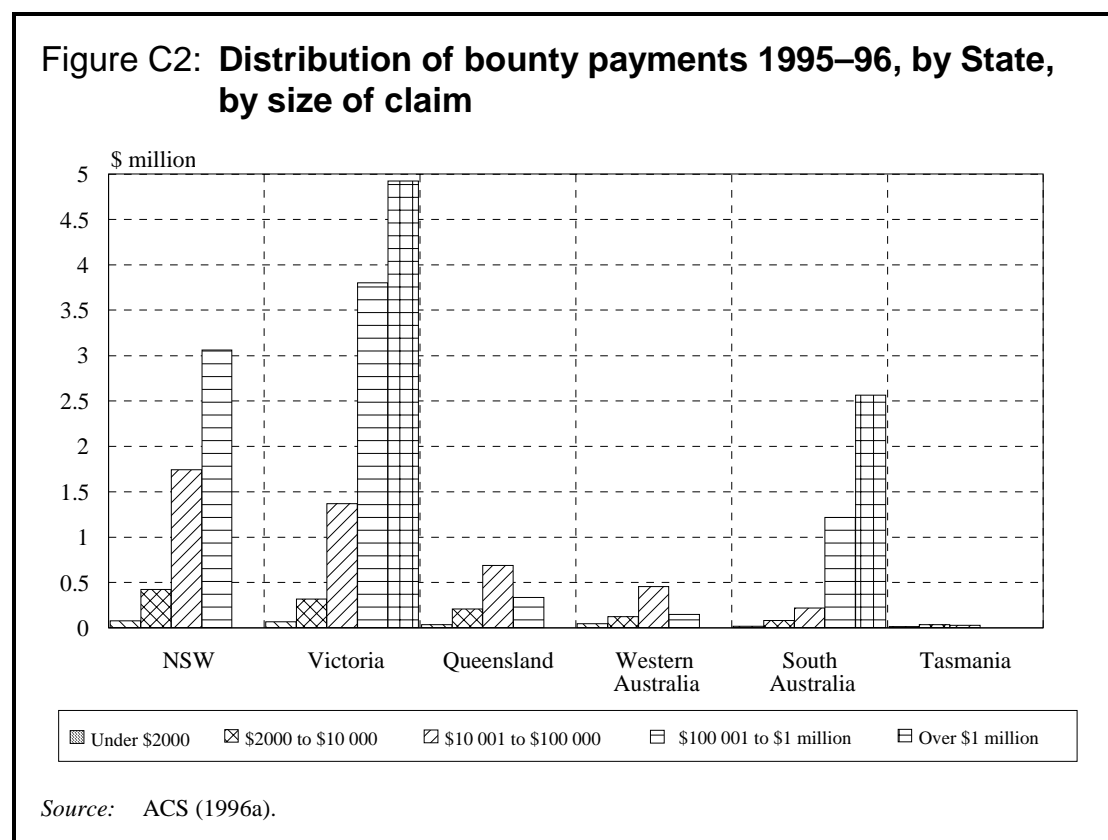
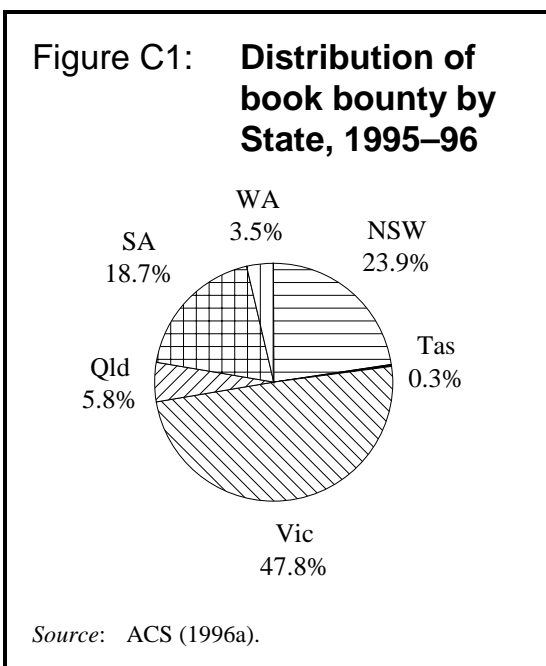
<i>Total bounty payment</i>	<i>1989–90</i>	<i>1990–91</i>	<i>1991–92</i>	<i>1992–93</i>	<i>1993–94</i>	<i>1994–95</i>	<i>1995–96</i>
	<i>%</i>	<i>%</i>	<i>%</i>	<i>%</i>	<i>%</i>	<i>%</i>	<i>%</i>
< \$2000	1.1	1.1	1.1	1.2	1.2	1.2	1.2
\$2000 to \$10 000	5.1	4.9	5.5	5.6	5.1	5.2	5.4
\$10 000 to \$100 000	19.5	18.8	20.7	22.8	23.6	16.7	20.4
\$100 000 to \$1m	32.2	36.7	36.8	32.4	35.1	41.4	38.9
Over \$1m	42.1	38.6	35.9	38.0	35.0	35.6	34.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: ACS (1996a).

In that year, claimants receiving between \$10 000 and \$100 000 shared 17 per cent of the total bounty payment, while those receiving between \$100 000 and \$1 million shared 41 per cent, changes of about 6 per cent on the previous year. These changes were partly reversed in 1995–96.

C3 State statistics

Figure C1 depicts the percentage of book bounty paid in 1995–96 to claimants in each State. Bounty payments to claimants in New South Wales and Victoria accounted for about three quarters of all the book bounty outlays. Bounty payments by State, by size of claim are shown in Figure C2.



Bounty payments and claimant numbers, by State, over the period 1989–90 to 1995–96 are shown in Table C5.

Table C5: Book bounty payments and number of recipients by State, 1989–90 to 1995–96

	1989–90	1990–91	1991–92	1992–93	1993–94	1994–95	1995–96
<i>New South Wales^a</i>							
Payment (\$ 000)	6 470	7 479	5 832	5 556	6 002	5 270	5 236
No. of recipients	247	255	218	263	254	260	243
<i>Victoria</i>							
Payment (\$ 000)	10 336	10 298	9 342	9 189	10 309	11 501	10 482
No. of recipients	196	178	176	169	180	195	188
<i>Queensland</i>							
Payment (\$ 000)	1 142	1 100	864	949	1 040	1 289	1 270
No. of recipients	103	100	86	96	99	91	97
<i>Western Australia</i>							
Payment (\$ 000)	1 036	983	1 130	1 191	943	818	774
No. of recipients	65	69	81	79	83	71	90
<i>South Australia</i>							
Payment (\$ 000)	4 953	4 249	4 297	4 434	3 897	4 327	4 097
No. of recipients	57	47	53	49	51	47	45
<i>Tasmania</i>							
Payment (\$ 000)	121	106	71	76	82	95	76
No. of recipients	21	23	22	21	19	22	23
Total							
Payment (\$ 000)	24 058	24 214	21 536	21 396	22 273	23 300	21 934
No. of recipients	689	672	636	677	687^b	686	686

a Includes figures for the Australian Capital Territory.

b Includes 1 payment to the United Kingdom.

Source: ACS (1996a).

D RELEVANT INTERNATIONAL AGREEMENTS

D1 Agreements concerning intellectual property

Australia is a signatory to three main multilateral agreements covering the protection of intellectual property by way of copyright. These are the *Berne Convention*, administered by the World Intellectual Property Organisation (WIPO), the *Universal Copyright Convention*, administered by the United Nations Educational, Scientific and Cultural Organisation, and the *Agreement on Trade Related Aspects of Intellectual Property (TRIPs Agreement)*, administered by the World Trade Organisation (WTO).

D1.1 Berne Convention

The Berne Convention for the protection of literary and artistic works was first completed in Paris on 4 May 1886. Under the convention, copyright holders are protected for a period of the life of the author plus 50 years, or in the case of copyright works which are unpublished at the time of their author's death, for a period of 50 years from when the work is first published.

D1.2 Universal Copyright Convention

There are two significant differences between the Universal Copyright Convention (UCC) and the Berne Convention. Under Article IV of the UCC, copyright protection must be provided for a period of not less than the life of the author of the work plus 25 years. If a signatory to the convention did not use the life of the author as a basis for determining the length of protection offered before they acceded to the Convention, then the minimum period of protection offered must exceed 25 years.

Secondly, a work must carry a copyright notice to obtain copyright protection under the UCC. Australia acceded to the UCC in 1969, and is bound by the 1971 Paris Revision of the Agreement. As it is also a signatory to the Berne Convention, Australia's copyright laws more than satisfy most of its obligations under the UCC.

D1.3 Trade Related Aspects of Intellectual Property (TRIPs) Agreement

The TRIPs Agreement came into force on 1 June 1995. For intellectual property protected by copyright, the Agreement requires signatories to comply with Articles 1 through 21 of the Berne Convention (1971). Where a country's term of protection is not based on the life of a natural person, then the work is to be protected for a minimum period of 50 years from the date the work was published.

As Australia was already a signatory to the 1971 revision of the Berne Convention, its accession to the TRIPs Agreement did not extend copyright protection for books in Australia.

Australia was, however, obliged to give producers of sound recordings and authors of computer programs an exclusive right to authorise or prohibit the commercial rental of their works to the public. The Agreement also required Australia to protect performers from unauthorised recording and broadcasting of their live performances, and to allow producers of sound recordings to authorise or prohibit the direct or indirect reproduction of their sound recordings.

D1.4 Bilateral agreements on intellectual property

Australia seeks to negotiate bilateral agreements on intellectual property with other countries where those countries are not signatories to the major international conventions on intellectual property protection. These agreements may be formal (ie an Agreement or Memorandum of Understanding) or informal (ie an arrangement for reciprocal treatment), and generally provide a lower level of protection for Australian owners of intellectual property than the multilateral agreements provide.

D2 Agreements concerning trade in printed books

D2.1 Extract from the Florence Agreement

No. 1734. Agreement on the importation of educational, scientific and cultural materials, opened for signature at Lake Success, New York, on 22 November 1950

The contracting States ... have therefore agreed to the following provisions:

1. The contracting States undertake not to apply customs duties or other charges on, or in connexion with, the importation of:
 - (a) Books, publications and documents, listed in Annex A to this Agreement;
 - (b) Educational, scientific and cultural materials, listed in Annexes B, C, D and E to this Agreement;which are the products of another contracting State, subject to the conditions laid down in those annexes.
2. The provisions of paragraph 1 of this article shall not prevent any contracting State from levying on imported materials:
 - (a) Internal taxes or any other internal charges of any kind, imposed at the time of importation or subsequently, not exceeding those applied directly or indirectly to like domestic products;
 - (b) Fees and charges, other than customs duties, imposed by governmental authorities on, or in connexion with, importation, limited in amount to the approximate cost of the services rendered, and representing neither an indirect protection to domestic products nor a taxation of imports for revenue purposes.

ANNEX A

Books, Publications and Documents

- (i) Printed books.
- (ii) Newspapers and periodicals.
- (iii) Books and documents produced by duplicating processes other than printing.
- (iv) Official government publications, that is, official, parliamentary and administrative documents published in their country of origin.
- (v) Travel posters and travel literature (pamphlets, guides, time-tables, leaflets and similar publications), whether illustrated or not, including those published by private commercial enterprises, whose purpose is to stimulate travel outside the country of importation.
- (vi) Publications whose purpose is to stimulate study outside the country of importation.
- (vii) Manuscripts, including typescripts.
- (viii) Catalogues of books and publications, being books and publications offered for sale by publishers or booksellers established outside the country of importation.

- (ix) Catalogues of films, recordings or other visual and auditory material of an educational, scientific or cultural character, being catalogues issued by or on behalf of the United Nations or any of its specialised agencies.
- (x) Music in manuscript or printed form, or reproduced by duplicating processes other than printing.
- (xi) Geographical, hydrographical or astronomical maps and charts.
- (xii) Architectural, industrial or engineering plans and designs, and reproductions thereof, intended for study in scientific establishments or educational institutions approved by the competent authorities of the importing country for the purposes of duty-free admission of these types of articles.

(The exemptions provided by Annex A shall not apply to:

- (a) Stationery;
- (b) Books, publications and documents (except catalogues, travel posters and travel literature referred to above) published by or for a private commercial enterprise, essentially for advertising purposes;
- (c) Newspapers and periodicals in which the advertising matter is in excess of 70 per cent by space;
- (d) All other items (except catalogues referred to above) in which the advertising matter is in excess of 25 per cent by space. In the case of travel posters and literature this percentage shall apply only to private commercial advertising matter.)

D2.2 Extract from the Nairobi Protocol

Protocol to the Agreement on the importation of educational, scientific and cultural materials

Nairobi, 26 November 1976

The Contracting States, parties to the Agreement on the Importation of Educational, Scientific and Cultural Materials, adopted by the General Conference of the United Nations Educational, Scientific and Cultural Organisation at its fifth session held in Florence in 1950, ... have agreed as follows:

- 1 The Contracting States undertake to extend to the materials listed in Annexes A, B, D and E and also, where the annexes in question have not been the subject of a declaration under paragraph 16 (a) below, Annexes C.1, F, G, and H, to the present protocol exemption from customs duties

and other charges on, or in connexion with their importation as set out in Article 1, paragraph 1, of the Agreement, provided such materials fulfil the conditions laid down in these annexes and are the products of another contracting State.

- 2 The provisions of paragraph 1 of this protocol shall not prevent any contracting State from levying on imported materials:
 - (a) internal taxes or any other internal charges of any kind, imposed at the time of importation or subsequently, not exceeding those applied directly or indirectly to like domestic products;
 - (b) fees and charges, other than customs duties, imposed by governmental or administrative authorities on, or in connexion with, importation, limited in amount to the approximate cost of the services rendered, and representing neither an indirect protection to domestic products nor a taxation of imports for revenue purposes.

ANNEX A

Books, Publications and Documents

- (1) Printed books, irrespective of the language in which they are printed and whatever the amount of space given over to illustrations, including the following:
 - (a) luxury editions;
 - (b) books printed abroad from the manuscript of an author resident in the importing country;
 - (c) children's drawing and painting books;
 - (d) school exercise books (workbooks) with printed texts and blank spaces to be filled in by the pupils;
 - (e) crossword puzzle books containing printed texts;
 - (f) loose illustrations and printed pages in the form of loose or bound sheets and reproduction proofs or reproduction films to be used for the production of books.
- (2) Printed documents or reports of a non-commercial character.
- (3) Microforms of the articles listed under items (1) and (2) of this Annex, as well as of those items listed under items (i) to (vi) of Annex A to the Agreement.
- (4) Catalogues of films, recordings or other visual and auditory material of an educational, scientific or cultural character.

- (5) maps and charts of interest in scientific fields such as geology, zoology, botany, mineralogy, palaeontology, archaeology, ethnology, meteorology, climatology, and geophysics, and also meteorological and geophysical diagrams.
- (6) Architectural, industrial or engineering plans and designs and reproductions thereof.
- (7) Bibliographical information material for distribution free of charge.

ANNEX H

(not agreed to by the Australian Government)

Materials and machines used for the production of books, publications and documents

- (i) Material used for the production of books, publications and documents (paper pulp, recycled paper, newsprint and other types of paper used for printing, printing inks, glue, etc.).
- (ii) Machines for the processing of paper pulp and paper and also printing and binding machines, provided that machines of equivalent technical quality are not being manufactured in the importing country.

E GUIDE TO THE BOOK BOUNTY

This appendix reproduces information set out in the Australian Customs Services' brochure *Guide to the Book Bounty*.

GUIDE TO THE BOOK BOUNTY

Bounty (Books) Act 1986

Contents

Overview

Eligible Books

Ineligible Books

Eligible Production Processes

Claim Process

- who can claim
- how to claim
- amount payable
- calculating bounty

Bounty Rates

Location of Customs Houses [not reproduced]

This brochure is an introduction to Book Bounty. It should be read in conjunction with the Bounty (Books) Act 1986 (as amended) which can be purchased from the Australian Government Publishing Service.

The guide has no legal force and is intended purely to assist people unfamiliar with the Book Bounty to obtain an overall picture of the scheme.

If your particular situation is not covered, or you would like more information, please contact your nearest Customs House ...

Overview

A bounty on the production of books in Australia has existed since 1969. It is designed to assist the Australian **book printing** industry to compete with overseas printers.

The bounty is paid as a percentage of the publisher's production cost incurred in Australia.

The current bounty will finish on 31 December 1997.

Eligible Books

Not every book printed in Australia is eligible for bounty.

If your book meets all of the following general conditions it may be eligible for bounty.

1 Binding

Your book must have its pages securely fastened together in covers of paper, cardboard, cloth or other binding material by sewing, perfect or burst binding, saddle or side stapling, comb, spiral, ring or post binding, or 'velo-bind'.

Publications which have the page content shrink-wrapped and placed loose inside ring binders are not eligible for bounty.

2 Minimum Net Production Cost

Bounty is only payable where the net publisher's production cost for a book is \$3700 or greater (net publisher's production cost is the publisher's production cost less any bounty that would be payable).

3 Minimum Print Run

There must be an absolute minimum of 1000 copies of the book in each production run.

4 Minimum Number of Pages

Except for the following special cases, the book must contain an

absolute minimum of 49 printed pages, excluding the covers or any pages which are not an essential part of the book eg blank pages.

Special Cases:

Case bound books: no minimum number of pages.

Educational books: 'Educational book: a book of 16 or more pages (excluding covers and non-essential pages) which is intended for, or suitable for, use in connection with education provided at recognised educational institutions. (Collections of past examination papers are not regarded as educational books.)'

('recognised educational institutions' include Australian pre-school playgroups, pre-schools and kindergartens; primary and secondary schools, technical colleges, colleges of advanced education and universities in Australia, Papua New Guinea, Fiji and most South Pacific countries; but do not include any school or institution conducted for the profit of an individual or individuals.)

Children's books: books of 16 or more pages, (excluding covers and non-essential pages) intended for children, with or without pictures, where the minimum 'x-height' of the text, if any, is not less than 3 mm.

Ineligible Books

While your book may meet the general eligibility conditions above, it still may not receive bounty if it is one of the following:

- A **magazine or periodical** issued at regular intervals of not more than six months (but not including case bound magazines).
- **Annual reports, prospectuses or reports of a similar nature** issued by a body or authority for shareholders or directors.
- A **directory or a timetable** — in the nature of telephone directories; accommodation directories; or timetables relating to services — if the subject matter relates to Australia, or places in Australia. All other directories are eligible for bounty, except where their total printed page area comprises more than 30 per cent advertising

(Advertising is defined as including printed material in the form of logos, names of bodies corporate, trade marks and brand names, where a fee or commercial consideration is payable and where the advertising is intended to draw attention to goods or services or the provider of goods or services; events or the organiser of events; or any

commercial operation or activity.)

- A **book for making entries**, including **stationery** articles, exercise books, stamp and photo albums, notebooks, account books, invoice or receipt books, cheque books, diaries and calendars. However combined exercise/text books which mainly contain spaces for answering questions in the book may be eligible.
- A **book produced in whole or in part by photocopying** in which one or more pages of the book are produced by photocopying. This exclusion does not include books produced by electronic publishing systems.
- A **book intended to be unbound or taken to pieces**.
- An **in-house publication** that is, a book which has been produced (ie printed in-house) by an organisation and all or a substantial number of copies are intended to be used by the organisation. Such a book is also ineligible where it is intended to be used by a group associated with the organisation/s, employees, agents, customers or intended customers of the organisation/s.

- **A prohibited import** a book which, if imported, would be considered a prohibited import.
- **A Government publication** produced or published by, or on behalf of, an instrumentality or authority of the Commonwealth or of a State. The Minister may waive this exclusion if a particular instrumentality or authority of the Commonwealth or of a State produces and/or publishes bountiable books and is in substantial competition with the private sector. The Northern Territory is considered to be a State for the purposes of book bounty.
- **A book bound by means of padding** ie flexible adhesive affixed to one edge.
- **Tariff Classification** — books which would be subject to duty if imported are excluded from bounty; eg books such as catalogues which are produced by companies to further their commercial interests.
- A book which, at the time of production, is intended for export to **New Zealand**, either directly or indirectly through another country or countries.

Are you unsure whether your Book is Eligible?

If you are unsure whether your book is eligible for bounty please contact your nearest Customs House for help.

Customs will be happy to give you a written decision on whether your book is eligible if you provide us with a copy or a mock-up of the publication. Normally Customs will retain the copy or mock-up for comparison with the finished product.

Eligible Production Processes

Eligible production processes include typesetting, printing, binding and packaging. Packaging can be further broken down to include the manufacture of packaging sold with the book and the packaging of the book for transport.

Who can Claim Bounty?

Bounty can be claimed by either the printer or publisher of the book. The claimant must be registered with Customs under the Bounty (Books) Act 1986. Registration forms are available from any Customs House.

Registered printers can claim the bounty on behalf of ‘one-off’

publishers to avoid delays in processing claims.

If both the publisher and printer are registered under the Act, the party who will not be claiming **MUST** complete a 'Waiver of Right to Claim Bounty' form which is available from any Customs House.

How to Claim Bounty

Bounty claim forms are obtainable from Customs. When making a claim, they should be completed and forwarded to Customs within 12 months of the book being bound, together with a sample of the book and copies of production invoices.

Amount Payable

Bounty is payable to either the printer or the publisher as a percentage of what is known as the 'publisher's production cost'.

The publisher's production cost consists of the total eligible costs incurred in producing the book:

- (a) cost of the work done by the publisher; and
- (b) money paid by the publisher to outside firms (for example, printers, binders or platemakers) for work done less discounts (except for cash or prompt payment).

The publisher's production cost does not include:

- any pre-production processes, such as editing of manuscripts, design, original artwork, photography, illustrations, payment of copyright/royalty fees and the like
- brokers/consultants fees

Note: Costs incurred by brokers for eligible processes may be included in the bounty calculation.

- accommodation, travel or research costs incurred by authors
- journalistic costs
- advertising or other marketing costs
- sales tax
- discounts (except for cash or prompt payment)
- charges for delivery between the manufacturer and the publisher
- invoicing and freight costs where forwarding is undertaken on behalf of the publisher; and
- production costs in relation to copies of books exported either directly or indirectly to New Zealand.

Calculating Bounty

The rate of bounty payable is based on the publisher's production cost for the book, ie the actual cost of producing the book. The rates to be used when calculating bounty are set out [below] and apply to the time when all of those production processes, including binding, are finalised. For example, if some production processes are completed in December 1994, but the book is not completed, ie bound, until January 1995, then the rate to be used should be 9 per cent.

Bounty on all eligible costs of production processes performed within Australia that publishers arrange to have completed on their behalf, or that they perform themselves, is calculated at Part 2 of the claim form.

These costs include those incurred from the typesetting stage through to completion of production. Ineligible costs such as manuscript editing, design, original artwork, photography, sales tax, discounts, rebates, advertising or freight charges from the manufacturer to the publisher cannot be included.

Bounty is only paid on **actual** (not notional) costs and these must be substantiated by wage books, work records, accounts and the like. To ensure prompt processing of claims, it is necessary that all relevant details must be completed on the form, as incorrectly completed

forms may be returned for rectification or refused.

Bounty Rates (Section 11 of the Act)

- If the book is produced on or after 1 January 1994 and before 1 January 1995 — 10.8 per cent.
- If the book is produced on or after 1 January 1995 and before 1 January 1996 — 9 per cent.
- If the book is produced on or after 1 January 1996 and before 1 January 1997 — 7.2 per cent.
- If the book is produced on or after 1 January 1997 and before 1 January 1998 — 4.5 per cent.
- Books produced prior to 1 January 1994 will attract the bounty rates applicable under the Act at the time the book was produced.

F TECHNOLOGICAL DEVELOPMENTS IN BOOK PRINTING

Technology has been the driver of change in book printing in recent years. Since the 1992 inquiry, book printing equipment has become more computerised, and improvements in productivity have been achieved.

Developments in pre-press, press and post-press technology which have affected the industry significantly are discussed in this appendix.

Book printing equipment is now highly computerised, offering efficiency and productivity improvements and reducing the amount and cost of labour required to print a book. Printing machines are now fully automatic and use computer technology for control and quality management.

The 1996 PAKPRINT exhibition in Melbourne was the largest display of printing industry equipment ever assembled in Australia, breaking all previous records in the number of exhibitors and visitors — over 260 stands represented 1200 different companies and attendance and personnel totalled 39 550. Some of the latest technology available and in use in Australia which was on display included digital imaging equipment, electronic pre-press technology and on-demand colour printing systems.

These and other developments likely to affect the industry in Australia in the future are described below.

F1 Digital technology

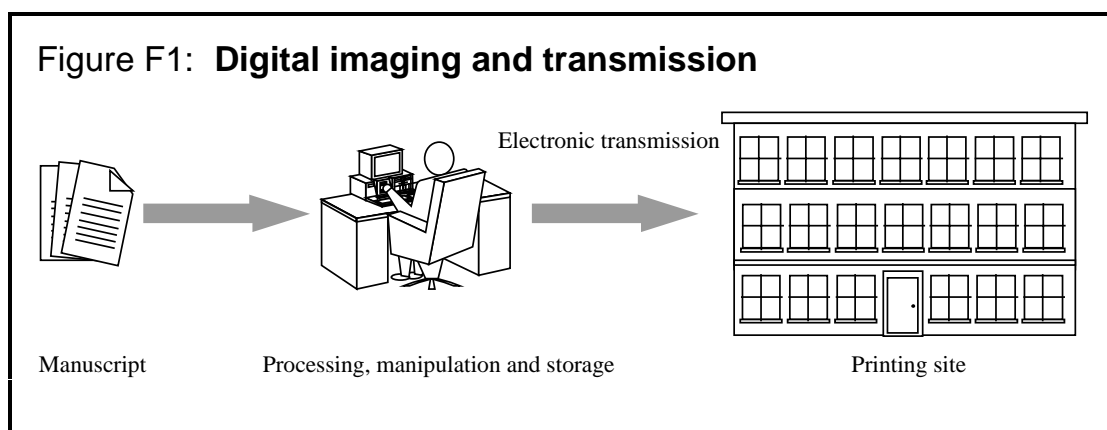
The technological developments that have affected most industrial processes have occurred due to the revolution in digital technology. Zwang (1996) describes the three phases of technological change in the printing industry as:

- taking existing processes and replicating them on the computer;
- using the computer to improve the steps in the process; and
- redefining the process using process automation.

According to one report, PAKPRINT 96 demonstrated the ‘triumph’ of digital processes:

electronic data is now as essential in the production of printing and packaging as oil, ink, or paper. Digital printing, digital process control, digital photography, digital proofing, digital storage and digital transmission; the list is endless. (Howard 1996, p. 30)

The developments in digital technology at the front end of the book production process begin with authors. Authors now have access to technology which enables them to electronically store and transmit files (manuscripts). These files can be delivered electronically from the author’s place of work to any printing site equipped with the technology to receive them. That is, the author can be sitting at a computer terminal in Brisbane and electronically send manuscripts to a publisher in Melbourne, or in the United Kingdom. When the manuscript is made ready for printing by the publisher, it can be sent electronically — in a matter of seconds/minutes — to a printer in Adelaide, or the other side of the world (see Figure F1).



Technology has enabled the entire publishing process to be undertaken on the one machine, from writing, designing and preparing text and images to the final stages of preparation before printing.

The following describes how digital technology has affected pre-press, press and post-press technology in the industry.

F2 Pre-press

Pre-press refers to the production operations in producing a book which must be completed before the job can be transferred to the printing press. The

technological advances in some of these processes: namely, typesetting, colour separation and platemaking, are described below.

According to Howard, the impact of digitalisation has been the most powerful in pre-press (1996, p. 30). Digital pre-press uses electronic input, and what were conventional steps in the pre-press process are now either eliminated or computerised. Text and images can be transferred, formatted and archived from information stored in digital format.

A recent report suggests that almost half of the work received by printers in Australia today arrives in a digital form (Australian Printer 1996).

F2.1 Typesetting

Traditional typesetting, the process of assembling printed words in the form in which they will appear in a publication, is a thing of the past. Typesetting has advanced from hand composition and hot-metal composition of lines of type on various composing machines, to photo composition (setting type photographically to make film) to digitised imagesetting of text and illustrations.

Imagesetting

According to AGPS (1994), the most dynamic changes in generating type have come through imagesetting equipment. Imagesetters produce computer images (compositions) at high resolution onto film. Imagesetting onto film is still the most common means of producing plates, despite advances in digitised imagesetting and computer-to-plate technology (see below).

While small imagesetters are only able to image pages one at a time¹, electronic imposition has allowed the production of fully imposed pages on a single sheet of film or on a plate (computer-to-plate technology). According to Zwang (1996), electronic imposition has 'offered perhaps the most significant reductions in time and cost'.

Scanning

Scanners are used to scan images and text, which are not in digital format, for input into a computer file. Character scanning saves time in not having to retype text which has not been word-processed, while illustrations can be scanned onto disk and then incorporated with the text.

¹ This produces the single page film negatives which are joined manually to produce a 'signature' of 8, 16, 32 pages which is then ready for platemaking.

As well as drum and flat-bed scanners for reproducing illustrations in a digital format, digital cameras are now available which can capture images digitally for direct incorporation into digital files.

F2.2 Colour separation

A printer can create coloured illustrations and text using four colours: cyan, magenta, yellow and black. To produce the colours of the image, the printer requires four plates from four separate pieces of film. Traditionally, these colour separations are produced photographically using a camera with glass filters. Now, colour separations are produced by colour-scanning machines. Laser scanners now produce in minutes what previously took hours to produce in the photographic method.

Colour scanning machines allow colour separation to be done automatically. The image is electronically scanned, or input in digital format (photo-CD), and a set of four-colour screened film separations is simultaneously produced.

Computerised colour-editing systems are also in use. The image is digitised and manipulated on the computer screen until the desired result is achieved. For example, a fashion model can be given a 'perfect' complexion or a bald man hair. The final image is then stored on disk or tape for future use, eliminating the need to store film and plates. These systems allow editing right up to the platemaking stage.

F2.3 Plate technology

Printing plates carry the images and text to be printed. The plates are physically placed on the printing press and used to adhere ink to paper. Offset lithographic printing is the most common book printing process used today. It uses plates produced photographically from images stored on film.² The image is printed from the flat surface of the plate onto a second, rubber-blanketed roller, which then offsets the image onto paper carried round a third (impression) roller (see Figure F2). Corrections can be costly using this technology if new plates are required.

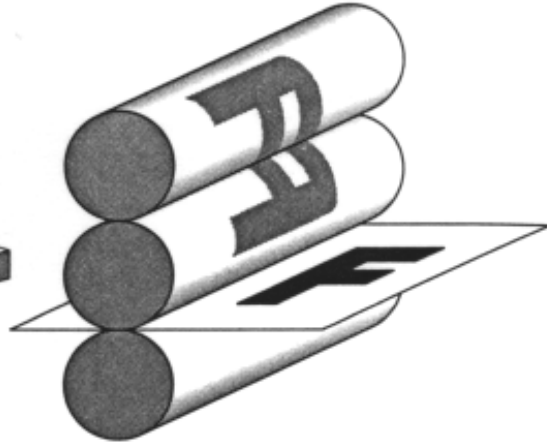
² A major advance of the conventional technology is drysetting (ie film imaging onto plate without using chemicals).

Figure F2: Technological developments in print technology

Letterpress
printing from a raised surface



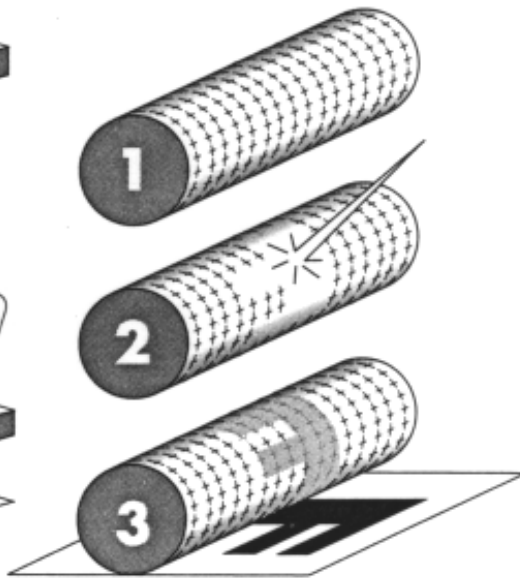
Offset
printing from a flat surface



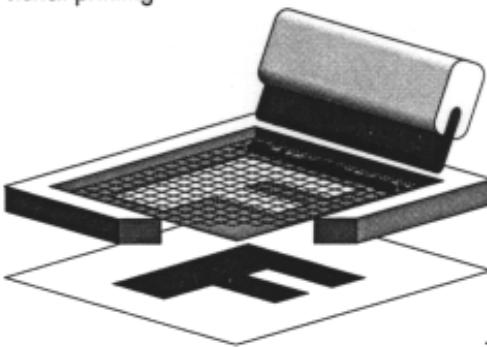
Gravure
printing from an etched surface



Laser
laser optics and electronic printing



Screen process
stencil printing



Source: AGPS (1994).

Technology has responded to the costly and time consuming nature of film-to-plate production. Digital technology enables plates to be produced directly from the computer, reducing plate make-ready time. Computer-to-plate technology enables the images and text stored in digital format to be transferred direct to plates, eliminating the film stage from the process. The plate may be produced in conventional form or as a sleeve on a printing cylinder that forms part of the actual printing press.

A computer-to-plate system can be large in size, including its plateloaders and processors, but it replaces the space typically taken by stripping tables, exposure frames and imagesetters. In addition, jobs can be stored on disk for future use and storage space is minimised.

Digital plates can either be polyester (one third more than the price of conventional plates, but the same price as film) or thermally sensitive (twice as expensive as the conventional plate). While cost is a factor in the short term, these plates can be superior in terms of the quality of the resolution produced and the run length. According to a recent estimate, digital plates can save \$US1 per page compared to traditional sheet-fed and web-fed presses (Hutchison 1996).

Polyester plates are targeted at the 40 x 56 centimetre press size, produce good quality colour work and can run up to 20 000 impressions (Anderson 1996). The Heidelberg QuickMaster has a built-in polyester platemaking component which provides a direct-to-press solution.

Both plates and film can be eliminated from the pre-press process entirely for some print jobs with the advent of the digital press (see below).

F3 Press

Printing is the process of putting ink onto paper. The press technology to accommodate the process is available in a variety of sizes for a variety of uses. Traditional offset printing is undertaken on sheet-fed or web-fed offset presses. Both presses are used for mono- and multi-colour work and are manufactured to a variety of sizes and configurations. The choice of machine will depend on the type of work, the size of the job and the paper to be used.

Sheet-fed machines, which print on individual sheets of paper, cater for both small jobs and large-volume multi-colour book work. The larger, web-fed offset machines print on continuous rolls of paper and are usually equipped with folding units to produce books, directories and magazines for long-run jobs.

F3.1 Automation

Increased automation and quality control systems have increased the speed and output of conventional offset printing presses and reduced staffing levels. The Printing Industries Association of Australia (PIAA) said computer technology has:

- enabled the printing press to continuously monitor quality and self-correct to a pre-determined standard;
- enabled the maintenance of systems which monitor and maintain the high mechanical and electrical standards with minimum tolerances;
- improved scanning of printing plates prior to placement on the printing press; and
- aided control of registration, ink density, ink/water balance and other print functions. (Sub. 8, p. 11)

Changes other than those associated with computer technology which have been introduced to increase productivity include:

- redesign of feeder and delivery mechanisms;
- introduction of automatic plate changers;
- automatic wash up devices for printing blankets, ink rollers and impression cylinders; and
- greater use of robotics. (PIAA, Sub. 8, p. 12)

F3.2 Digital technology

Digital printing, which has only emerged recently, is one of the most exciting developments in the industry. While the term is being used in relation to a number of different technologies, each relies on an entirely digital operation.

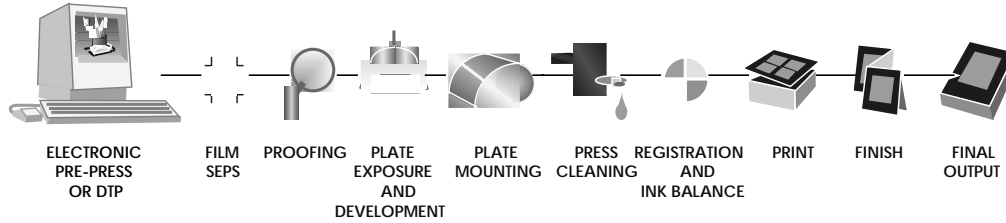
Presses are now being manufactured which enable digitised information to be transferred direct from computer-to-plate and computer to the printed page.³ The digital press is used for time-sensitive short runs where updates are able to be made until the last possible moment before printing. The technology enables copies of a title to be printed as needed ('on demand') from files stored digitally. Digital storage of information enables material to be customised, personalised and individualised.

Digital print technology has a dramatic impact on the book production process (see Figure F3).

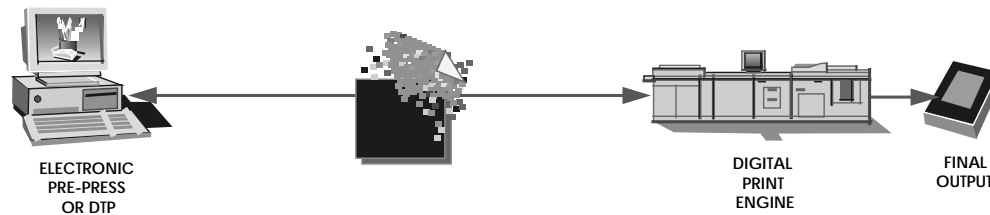
³ Both technologies are described as digital printing.

Figure F3: Traditional versus digital print technology

TRADITIONAL



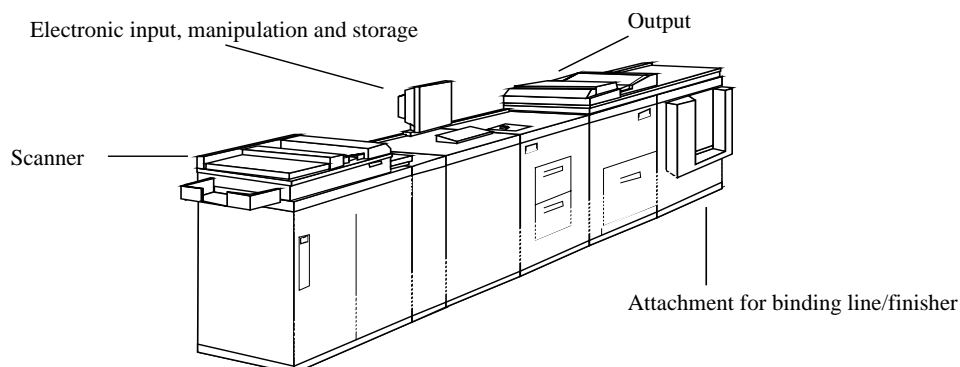
DIGITAL



Source: Fuji Xerox.

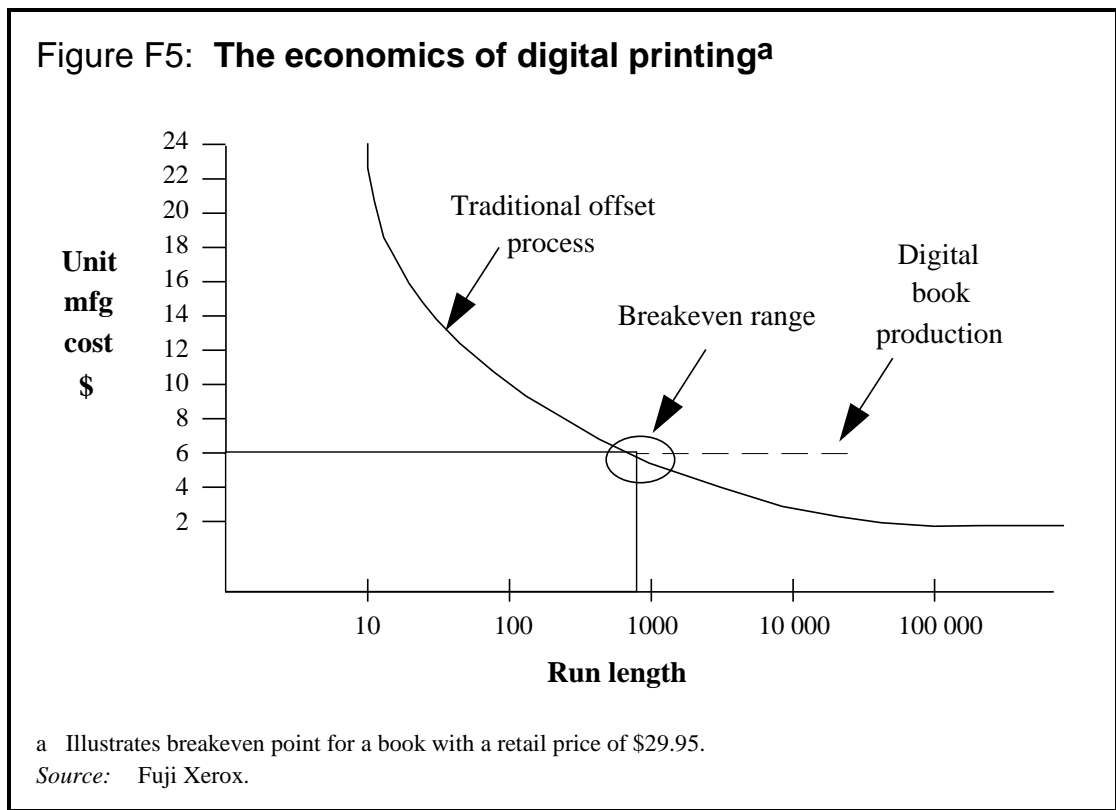
Digital print technology ranges from machines such as the high-speed Xerox DocuTech laser printer for black and white files (see Figure F4) and Xerox DocuColor for colour files, to the fully integrated ink-based Indigo digital colour offset cut-sheet press (see below) and the toner-based digital web-fed Agfa ChromaPress for colour files. Digital presses are available with in-line binding for booklets and similar smaller publications, or finishers and binding lines can be attached to the press to produce fully bound books.

Figure F4: DocuTech technology



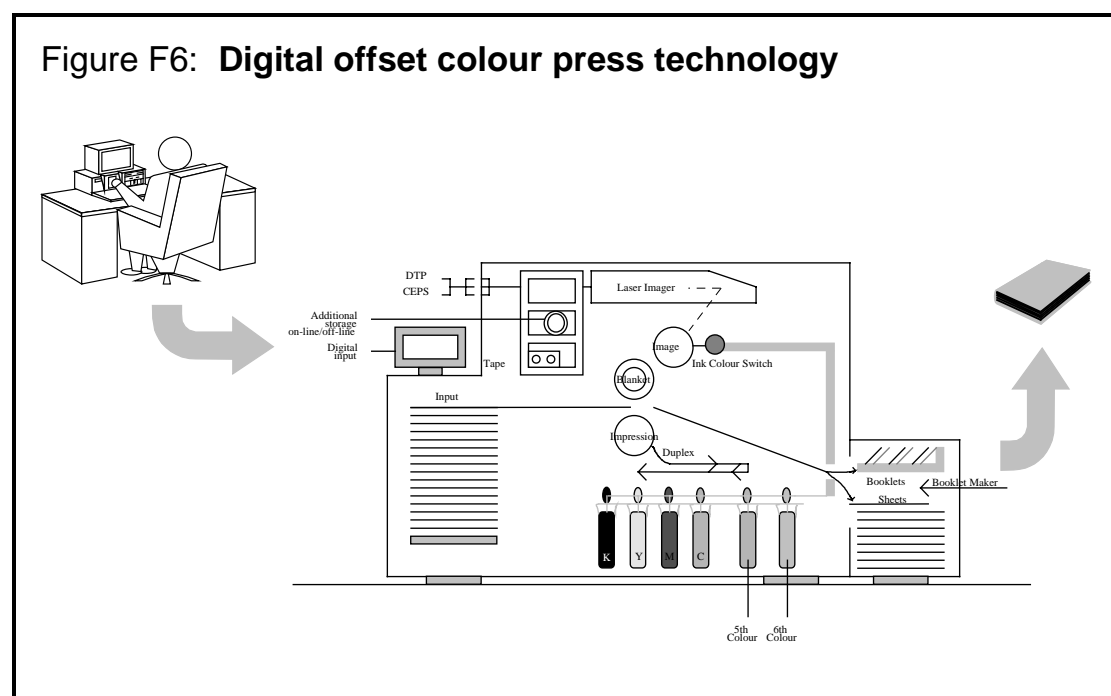
Source: Fuji Xerox.

Estimates suggest that this technology is cost effective for print runs up to a run length of around 750 copies (see Figure F5). As the technology improves and the cost per page falls, the breakeven point is likely to increase.



The features of Indigo's digital offset colour press, E-Print 1000, include: electronic collation, automatic duplex printing (printing on both sides of the page), automatic finishing and automatic booklet making. The technology requires no colour separations, no film-making, no plates, no expensive colour proofing, no press make-ready and no expert operators. The digital file can be sent from the author's computer terminal to the printer for output (see Figure F6).

The quality of output of digital colour printing is steadily improving. The cost per printed page continues to fall, and operating speeds (currently 2 000 A4 full colour pages per hour) are likely to increase. And while the average print job is currently around 250, run lengths up to 1 000 are not uncommon if an urgent job is required (Enticknap 1996). According to one report, the very short run market for on-demand colour printing is increasing by 15 per cent each month (Australian Printer 1996).



While the application of digital colour print technology to book production may currently be limited to printing covers for specialised paperback books or printing colour inserts for mono-colour books, as the cost per printed page falls the number of applications is likely to increase.

F4 Post-press

The post-press process, usually undertaken in a bindery, is where operations are undertaken which are not handled 'in-line' on the press. This is where the job is folded (though some presses have folding units), guillotined, collated, bound (glued, sewn, stitched etc in paperback or hardback), trimmed and packaged for distribution. According to Howard, this is the last area of the industry to be influenced by digital technology (1996, p. 32).

Computer controllers and other developments in microelectronics have improved the productivity of folding, cutting and binding equipment by reducing labour operations and thereby increasing operating speeds in excess of those monitorable by human operators and reducing the scope for human error.

Binding is a process which involves a series of operations by which printed sheets are converted into a continuous sequence of pages fastened together at one edge. The type of binding will depend on the use for which the book is

intended and its expected shelf-life. Computer technology has improved the binding process by:

- enabling feed hoppers on binding lines to read the digitised image of a signature as it is fed on the collating line to reduce human error in loading sections;
- enabling miscollated books to be rejected by the binding line;
- monitoring machine performance; and
- reducing make-ready times by presetting machine settings. (PIAA, Sub. 8, pp. 12–13)

Traditional ways of finishing a book, such as hand-binding, still exist in the industry. Hand-binding can be used for new books and the renovation of old and other valuable books. Embossing and gold-lettering are also still produced by hand.

G COPYRIGHT¹

G1 Copyright

Copyright is the exclusive right, granted by law for a certain term of years, to make and dispose of copies of, and otherwise to control, a literary, musical, dramatic, or artistic work. Copyright protection relates to the expression of an idea, rather than to an idea itself.

Governments provide copyright protection in order to encourage and reward the creation of intellectual property. However, in order to ensure that society also benefits from the creation of intellectual property, governments impose limits on the extent and duration of the right to exploit any intellectual property created.

Australia's copyright laws are embodied in the *Copyright Act 1968*, and are modelled on the Berne and Universal Copyright Conventions (see Appendix D for details).

G2 How does copyright apply to books?

Books are protected by copyright in two ways. The author's intellectual contribution — the expression of an idea — is protected as a literary work. The publisher's intellectual contribution — the typographical layout of the work — is protected as a published edition. Publisher's additions to a printed work (eg an explanatory introduction) are protected as literary works. Illustrations and cover designs are generally protected as artistic works in their own right.

G2.1 Exclusive rights granted to copyright holders

Copyright protection for a book protected as a literary work commences when the work is first published, and lasts until 50 years after the author's death. In the case of works unpublished when their author dies, copyright protection endures until 50 years after the work is first published. Copyright protection for a book protected as a published edition lasts for 25 years from the date the edition is first published.

¹ Valuable comments have been received from Mr Peter Drahos of the ANU Law School.

In Australia, holders of the Australian copyright in a literary work have the sole right to make, sell and distribute legitimate copies of that work. There is some debate as to whether copyright protection should expire when a copyright protected work is first sold, in which case copyright holders lose the ability to control distribution of their works, or whether copyright protection should extend beyond first sale.

In the case of books, Australia's *Copyright Act 1968* currently extends protection beyond the point of first sale, and allows holders of the Australia copyright in a literary work to preclude others from importing legitimate copies of that work (that is copies of the work placed on sale in other countries by the holders of copyright in those countries). Such legitimate copies are called 'parallel imports'.

By extending copyright protection beyond the point of first sale, the *Copyright Act 1968* creates a unique Australian market for copyright protected goods, and allows the holder of the Australian copyright to determine the conditions under which they will supply legitimate copies of their works to retailers and consumers in Australia.

The Copyright Law Review Committee (CLRC) examined the impact of the parallel import provisions of Australia's Copyright Act in 1988. In its report, the CLRC considered whether Australia's Copyright Act should be modified to allow parallel imports of goods protected by copyright.

The CLRC recognised that 'Australia is a net importer of copyright material and the more competition in the market the better it will be for its balance of payments and those members of the public who buy overseas books' (CLRC 1988, p. 109). It also felt that Australian authors would not be disadvantaged by moves to allow parallel imports of printed books.

However, the CLRC said:

it has insufficient evidence that books are being sold at unreasonably high prices and has not the powers or resources to make an adequate investigation into the matter. Nor is there a great deal of evidence that there is any marked unavailability of books in Australia. (1988, p. 107)

The CLRC also recognised the long-standing concept that ownership of copyright was determined on a territorial basis, and that most English-speaking countries, including Australia, based their copyright law on this principle. To modify Australia's copyright law when comparable legislation was unlikely to be passed in these other countries, would 'put Australia out of step internationally' (pp. 108–109). Some committee members were also concerned by the possibility of an unfavourable reaction from other countries if Australia

were to allow parallel imports, which may have included some form of retaliation against Australia.

After weighing up these competing considerations, the CLRC recommended that, apart from some minor exceptions (eg where the material in question was unavailable in Australia), Australia should continue to preclude parallel imports of printed books and other material protected by copyright.

The Prices Surveillance Authority (PSA) conducted an inquiry into book prices in Australia in 1989, and found that copyright holders were using the protection against parallel imports provided by the Copyright Act to raise the price of books in Australia above those prevailing overseas, after taking into account differences in the cost of supplying books in Australia and overseas (eg differences in freight costs, handling costs etc). The PSA also found that the provisions were being used to delay the release of new titles in Australia relative to their release dates in other countries.

The PSA recommended that the Copyright Act be amended to allow parallel imports of books (that is, to restrict copyright protection to the point of first sale).

In response to these two reports, the Government introduced legislation (the '1991 amendments') modifying the exclusive rights accorded to a copyright holder in relation to control over parallel imports.

G3 The 1991 amendments

Two rules, the 30 day rule and the 7/90 day rule, were introduced under the 1991 amendments to the Copyright Act. The 30 day rule applies to new (previously unpublished) titles and the 7/90 day rule applies to previously published titles. In the case of new titles, the holder of the Australian copyright must supply copies of the title within 30 days of receiving a written order for the title. In the case of previously published titles, the copyright holder has seven days in which to respond to a written request to supply a title, indicating whether they can supply it within 90 days or not. The copyright holder then has 90 days in which to meet the written order.

If the holder of the Australian copyright indicates that they cannot supply copies of the title within the appropriate time frame, or indicate that they can, but fail to do so, then booksellers in Australia can import and distribute legitimate copies of the title without the permission of the holder of the Australian copyright.

Put simply, the amendments now require the holder of the Australian copyright in a title to supply sufficient copies of that title to adequately satisfy demand in Australia faster than the copyright holder may have chosen to do so, in order to retain control over imports.

G4 Recent reports and concurrent inquiries

G4.1 Prices Surveillance Authority inquiry into book prices and parallel imports (1995)

The Prices Surveillance Authority conducted a subsequent inquiry into book prices and parallel imports in 1995 (see PSA 1995). The Authority reviewed the impact of the 1991 amendments to the Copyright Act on the availability and the price of books in Australia relative to their price and availability overseas. The Authority found that the 30 day rule had made a significant impact on the availability of new titles released in Australia, while the 7/90 day rule applying to previously published titles had not. Neither rule, however, had made much of an impact on the differential between the price of a book sold overseas, and its price in Australia.

The PSA again recommended that the import provisions of the *Copyright Act 1968* be repealed with respect to legitimate copies of books.

The PSA also recommended that if the Government chose not to implement its preferred recommendation, then the 7/90 day rule applying to previously published titles should be replaced with a 30 day rule similar to that applying to new titles, and price surveillance of books in Australia should continue.

There has been no specific Commonwealth Government response to the PSA's recommendations.

G4.2 Copyright Law Review Committee Simplification of the Copyright Act

In February 1995, the then Minister for Justice announced that the CLRC would inquire into and advise on the simplification of the *Copyright Act 1968*. The CLRC released a discussion paper 'to stimulate debate on the arguments made in support of the modern copyright regime' in February 1996 (CLRC 1996, p. 5).

It is to make its final report by 30 November 1997. The Office of Regulation Review (ORR), part of the Industry Commission, the Australia Council, and the

Commonwealth Treasury are among those parties which have made formal submissions to the CLRC's review.

The ORR did not address the issue of parallel importing specifically (ORR 1995a). But in relation to extending exclusive rights, the ORR said it:

supports the aim of simplifying the Copyright Act. But justification for its extension rests upon a proper economic analysis of the incentives facing authors, producers and consumers.

A general extension of copyright protection would have few (if any) tangible benefits and holds the risk of substantial costs to consumers.

The ORR contends that the onus is on those advocating any expansion of copyright protection to show on a case-by-case basis that such extension would benefit producers and consumers. If it can be demonstrated that there is a need to increase copyright protection for some specific forms of intellectual property, then increased copyright protection should be specifically targeted. (1995b)

The Commonwealth Treasury raised the issue of parallel imports of copyright material in its submission:

There is no justification for the ban on parallel imports. The parallel import restrictions in the *Act* prevent competition in domestic markets from overseas sources and make international price discrimination possible. This restriction on competition results in an unjustifiable enhancement of private interests at the expense of Australian consumers. (Treasury 1996, p. 2)

The CLRC is yet to state its position on parallel import controls.

G4.3 The negotiation of a possible Protocol to the Berne Convention

Australia's Copyright Act is modelled on the *Berne Convention* for the protection of literary and artistic works. The Convention is administered by the World Intellectual Property Organisation (WIPO).

The Berne Convention sets out a number of exclusive rights which signatory countries must provide to copyright holders. One area the Berne Convention does not discuss, however, is the extension of copyright protection beyond the point of first sale. The World Intellectual Property Organisation which administers the Berne Convention has established a Working Group to discuss the creation of a protocol to the Convention. One matter the Working Group is considering is the scope for creating exclusive transmission and distribution rights for copyright holders.

Some countries are advocating the creation of a distribution right based on the principle of 'national exhaustion' through the Working Group (see Box G1).

This principle would allow copyright holders to treat each country as a separate market for copyright-protected goods, and preclude others from importing legitimate copies of copyright protected goods without the permission of the holder of copyright in the country concerned.

Others support the view that exclusive rights in relation to distribution should cease at the point of first sale, wherever that first sale may occur. This is known as the principle of ‘international exhaustion’.

Box G1: National and international exhaustion

Under the principle of *national exhaustion*, the government of a particular country gives the holder of copyright in their country an automatic right, guaranteed in law, to preclude parallel imports of legitimate copies of copyright-protected material. By precluding parallel imports, the holder of a national copyright can charge different prices for the same material in different countries, or can delay the release of material protected by copyright in one country relative to another.

Under the principle of *international exhaustion*, a copyright holder has no automatic right to control the distribution of copyright protected material once they have placed that material on sale in any one country. They retain the contractual right, however, to influence the distribution of the material in which they hold copyright.

Several countries which are signatories to the Berne Convention provide copyright holders with such a right under their existing copyright laws. Australia, for example, currently provides such a right for holders of most forms of material protected by copyright, although it has, through the 1991 amendments, sought to restrict this right as it applies to printed books.

These amendments could be inconsistent with an exclusive right based on national exhaustion.

But the possible Protocol to the Berne Convention deals with every form of copyright-protected material, not just with printed books. And as a net importer of copyright protected material, Australia as a whole would benefit from the introduction of a distribution right based on international exhaustion.

H POSSIBLE CHANGES TO BOUNTY CRITERIA

In its Draft Report, the Commission considered what changes should be made to bounty criteria if the Government were to decide that book bounty should continue beyond 1997. That material has less relevance following the Government's decision to terminate bounty from 20 August 1996. However, for completeness, and to comply with the terms of reference, this appendix reproduces the Draft Report's discussion on bounty criteria.

Participants generally considered that the bounty's administrative arrangements were working well. Nevertheless, participants proposed some changes to existing bounty criteria.

The main change requested dealt with the bounty eligibility requirement for a minimum of 1000 copies to be printed in a production run. The Australian Publishers Association (APA), for instance, proposed that:

while preserving the 1000 copy minimum eligibility criterion, the threshold may be satisfied by more than just a single production run during a particular bounty year. In this way periodic batch production — even at geographic distant sites — will not be discriminated against for bounty purposes. (Sub. 9, p. 20)

The Printing Industries Association of Australia (PIAA) supported this approach, while Brown Prior Anderson (BPA) considered the threshold should be reduced to 500 copies. In justification for its proposal, the APA said that the 1000 level was arbitrary and had been arguably unnecessary since the introduction of the \$3700 minimum net production cost threshold. Its main reason however relates to 'the emerging technological capability of efficient book production in relatively smaller production runs' (Sub. 9, p. 20). The move away from the sale-or-return system by publishers is encouraging printing-on-demand.

Harlequin Enterprises (Australia) considered that 'there is no doubt the applicability of bounty to individual titles, with minimum levels, is extremely cumbersome' (Sub. 3, p. 4). It proposed an alternative whereby none of the present bounty criteria would apply and bounty would be applied to the total monthly invoice production cost. Pacific Magazines & Printing (PMP) considered that 'it is appropriate to consider bulk billing for large publishers ...

where some individual titles in a large production run do not reach the '\$3700 minimum' (Sub. 2, p. 12).

Other changes to bounty criteria suggested by participants included:

- lowering the \$3700 minimum production cost threshold (Mr Lindsay Somerville, Sub. 6);
- removing 'arbitrary' criteria such as the 49 page limit (Telstra Corporation, Sub. 10);
- extending bounty to professional journals (BPA, Sub. 1);
- extending bounty to 'part works' which when the series is complete are bound in book form (The Hannan Group, Sub. 4);
- possibly excluding typesetting from bounty eligibility, as 'with the development of multimedia publications ... the typesetting costs can be applicable to both electronic and printed products' (BPA, Sub. 1);
- facilitating the process whereby government printers can be eligible for bounty (PIAA, Sub. 8); and
- extending bounty to production for the New Zealand market (Mr Lindsay Somerville, Sub. 6). (This is not possible because of the Closer Economic Relations Trade Agreement between Australia and New Zealand.)

PMP considered that it was 'safer' for bounty to be paid directly to the printer, rather than to a publisher, as the printer is 'more easily able to collect the full costs on any production run' (Sub. 2, p. 12). BPA commented that restricting eligibility to printers would reduce administrative and compliance costs (Sub. 1, p. 5). However, the Australian Customs Service considered that there is 'no valid reason' to disturb the current arrangement (Sub. 13, p. 5).

Mr Lindsay Somerville considered that a 'moderate' fee charged for registration (for eligibility to claim bounty) of say \$500 would 'discourage bounty claims from printers who only do one or two titles per annum' (Sub. 6, p. 5). The PIAA said that it:

has no disagreement with the introduction of some form of user pays principle provided it is a reasonable cost and does not lead to increased costs in the ACS which negate its purpose. (Sub. 8, p. 18)

Assessment

In considering what changes should be made to bounty criteria if the Government decides bounty should be continued, there are two important considerations. First, as discussed above, the Commission has not been able to conclude whether or not, leaving aside administrative and compliance costs, there are net uniformity benefits from bounty. Further, it is possible that

piecemeal changes to the scope of bounty, either to extend it or restrict it, could lessen economic efficiency, rather than improve it. Second, the Commission is mindful of its conclusion that the economic efficiency benefits of bounty are largely offset by administrative and compliance costs. Taking these two considerations into account, the Commission suggests that if bounty is to continue, the prime focus should be on reducing administrative and compliance costs.

The intent of the \$3700 minimum cost provision is to reduce administrative and compliance costs by screening out small claims. Lowering this threshold, as requested by one participant, could significantly add to administrative and compliance costs, whereas increasing it could reduce those costs. As noted above [Section 4.1.4], however, too great a change could significantly reduce bounty payments, and consequently any possible efficiency benefits which might otherwise arise from bounty could be lost. In its previous report, the Commission recommended that this amount should be indexed annually by reference to changes in the Consumer Price Index. That recommendation was not taken up at the time. However, the Commission considers that if bounty is to continue after 1997, the minimum production cost provision should be raised to \$5000, and then indexed annually. An alternative would be to implement fees for bounty claims. This could prevent low claims and thus lower total administrative and compliance costs.

Several requests were made to liberalise the 1000 copies criterion in various ways, thus extending the scope of bounty. Depending on how such a change was implemented, administrative and compliance costs could increase or decrease. This criterion was originally implemented because it was considered that if less than 1000 copies were to be printed in the one print run, assistance to compete against imports was not required. No evidence was presented to suggest that this is no longer the case. Indeed, the evidence is that shorter production runs are becoming more economic, and that Australian book printing is relatively more competitive when shorter runs are required. Thus, liberalising the 1000 copies criterion would not only extend the scope of assistance, but extend it to an area of printing where the evidence suggests it is least cost effective.

Similarly, changes to the current 49 page lower limit, or to the treatment of journals and part works, could extend bounty assistance to already competitive areas of local book printing.

Conditional recommendation

If the Government decides to extend the book bounty beyond its current expiry date it should:

- introduce adequate administrative penalties to facilitate greater use of claimant self-assessment;
- abolish registration procedures;
- consider combining all existing bounties into one piece of legislation; and
- raise the minimum eligible production cost to \$5000, and index it annually according to the CPI.

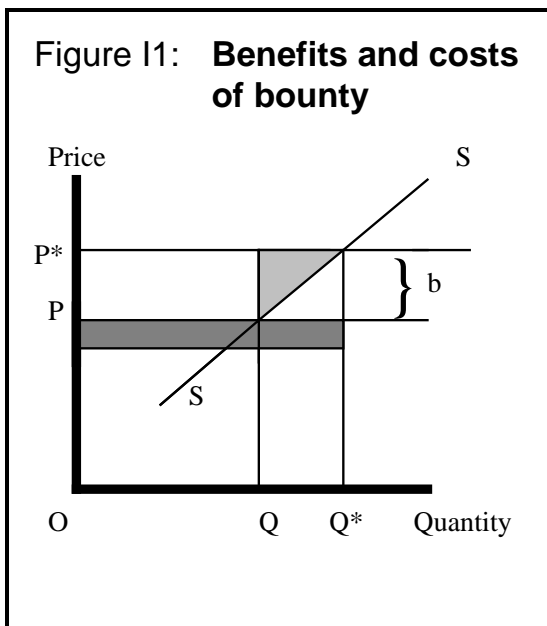
I ECONOMIC EFFICIENCY EFFECTS OF BOUNTY

In Chapter 4, Section 4.1.4 and Box 4.2 explain how, as the rate of bounty reduces towards zero, any economic efficiency gain from providing book bounty will be eroded by administrative and compliance costs.

This appendix seeks to provide an indication of the magnitude of the economic efficiency gain from bounty, compared with administrative and compliance costs.

I1 Economic efficiency gain

As explained in Box 4.2, the economic efficiency gain from bounty can be represented by the area of the triangle in Figure I1.



Area of triangle = $\frac{1}{2} (Q^* - Q) (P^* - P)$.

Now $P^* = P (1 + b)$, where b is the rate of bounty.

Thus area = $\frac{1}{2} (Q^* - Q) P b$.

It is convenient to express this area in terms of the elasticity of supply, as this is generally amenable to estimation from available data.

By definition the elasticity of supply ϵ equals $((Q^* - Q)/Q)/((P^* - P)/P)$, which simplifies to $((Q^* - Q)/Q)/b$.

Thus, finally, the area of efficiency gain = $\frac{1}{2} \epsilon Q P b^2$.

As noted in Box 4.2, this area reduces to zero as the rate of bounty, b , reduces to zero. In the diagram, this can be visualised as a downward movement of the horizontal line from P^* , until it meets the horizontal line from P .

I2 Administrative and compliance costs

These costs consist of a fixed component — that is, the costs of registration — and a variable component — that is, the costs of claiming and processing claims. Neither of these components need necessarily be strongly related to the bounty rate. The variable component is likely to be related to the number of claims; in turn, this is likely to be related to the value of bountiable production (on the realistic basis that the average value of each claim is unlikely to change much as the total value of Australian bountiable production increases or decreases).

Assuming that administrative and compliance costs in total are proportional to the value of bountiable production, then they can be represented by the rectangular area imposed on the above diagram.

This area = $j P Q^*$, where j is a fraction (assumed to be constant) between 0 and 1, and $P Q^*$ is the value of bountiable production.

As the rate of bounty, b , reduces towards zero, the volume of production tends towards Q , the volume of production without bounty. Thus, administrative and compliance costs tend towards $j P Q$ as bounty declines.

This illustrates that as the rate of bounty continues to decline, administrative and compliance costs will sooner or later exceed any efficiency gains from bounty.

I3 Measurement

In quantifying these two areas, consistent estimates are needed of ϵ , $P Q$, $P Q^*$ and j .

Attachment I1 sets out some attempts to estimate the supply elasticity, ϵ . The results are inconclusive, and in measuring the efficiency gain supply elasticities of between 0.5 and 5.5 have been used.

Information about $P Q$, $P Q^*$ and j is set out in Attachment I2. This is based on 1994–95 data. As noted in Chapter 4, information about compliance costs is not precise. In Attachment I2, lower and upper estimates for these costs are set out.

The measurement results are set out below. Firstly, results are presented in Table I1 for the average 1994–95 bounty rate of 9.9 per cent:

Table I1: Comparison for bounty rate of 9.9 per cent

<i>Elasticity</i>	<i>Efficiency gain</i>	<i>Administrative and compliance costs</i>	
		<i>Lower estimate</i>	<i>Upper estimate</i>
	<i>\$ million</i>	<i>\$ million</i>	<i>\$ million</i>
0.5	0.55	0.56	0.83
1	1.05	0.56	0.83
2	1.92	0.56	0.83
3	2.66	0.56	0.83
4	3.30	0.56	0.83
5	3.85	0.56	0.83
5.5	4.10	0.56	0.83

Source: Commission estimates.

Thus, based on 1994–95 data at the average bounty rate of 9.9 per cent, the efficiency gain from providing bounty exceeds administrative and compliance costs, except for the estimates with a supply elasticity of 0.5.

Estimates can also be made for the bounty rate of 4.5 per cent which was to have applied during 1997. In this case, it is necessary to work backwards from the estimates of the value of production without bounty. There is a separate estimate of this value for each separate estimate of the supply elasticity. This means that in this case, there will also be a separate estimate of administrative and compliance costs for each supply elasticity. The results are presented in Table I2.

Table I2: Comparison for bounty rate of 4.5 per cent

<i>Elasticity</i>	<i>Efficiency gain</i>	<i>Administrative and compliance costs</i>	
		<i>Lower estimate</i>	<i>Upper estimate</i>
	<i>\$ million</i>	<i>\$ million</i>	<i>\$ million</i>
0.5	0.11	0.55	0.81
1	0.22	0.53	0.79
2	0.40	0.51	0.76
3	0.55	0.49	0.73
4	0.68	0.47	0.70
5	0.80	0.46	0.68
5.5	0.85	0.45	0.67

Source: Commission estimates.

At a bounty rate of 4.5 per cent, it is thus estimated that with the lower estimate of administrative and compliance costs and for elasticities of below 3, the efficiency gain from bounty is outweighed by administrative and compliance costs. With the upper estimate of costs, any efficiency gain is outweighed for elasticities of below 5. Even at the higher elasticity estimates, a sizeable proportion of any possible efficiency gain is offset by administrative and compliance costs.

Attachment I1

Estimates of supply elasticity

Some evidence from participants can be used to derive estimates of the elasticity of supply. The Commission also estimated the elasticity of supply using econometric analysis.

Derived from participants' evidence

Participants offered a range of views about the effects of removal of bounty, each of which implies a different elasticity of supply.

For example, according to the Australian Publishers Association:

1994–95 book bounty payments implied on-shore book production of approximately \$240 million ... one-third of on-shore printing is time-insensitive enough to be taken off-shore. So, should bounty be abolished, on-shore production could be expected to diminish by \$80 million ... (Sub. 9, p. 16)

The bounty rate in 1994 was at 10.8 per cent, and in 1995 was at 9 per cent. It is assumed the average for 1994–95 was 9.9 per cent. With this information, an estimate of ϵ of about 3.5 can be derived.

The Printing Industries Association of Australia considered that removal of bounty could result in the loss of \$120 million of printing offshore. When related to 1995–96 total production of some \$270 million with an average bounty rate for that year of 8.1 per cent, an elasticity of supply of about 5.5 is implied.

Econometric study

The estimated supply elasticities in the econometric analysis ranged from 0.5 to 4.3. Outlined below are the estimation methods. In estimating the elasticities, a number of factors were tested and controlled for, such as stationarity, simultaneity bias and autocorrelation. However, the estimates remain unreliable because of the quality and the scope of the underlying data.

Estimation methods

For this exercise, the primary interest was to estimate the supply elasticity for book printing. Nevertheless, a supply and demand *system* was estimated to take account of the interaction between supply and demand and to ensure consistent estimates of the elasticity of supply.

The following system of equations was estimated:

$$\begin{array}{ll} \textit{Supply} & \ln Q = \alpha_s + \varepsilon_s \ln P + \gamma r \\ \textit{Demand} & \ln Q = \alpha_d + \varepsilon_d \ln P + \phi \ln y \end{array}$$

where:

Q	is quantity
P	is price
r	is interest rate
y	is income

The supply of book printing is primarily determined by the price received and by the cost of printing books. Over the last decade, the printing and associated industries, have been moving away from being a labour intensive process to capital intensive process. The long-term interest rate was included in the supply curve as measure of the cost of capital, which plays an increasingly important role in the industry's cost of supply.

The demand for book printing is a function of the price paid by consumers and the general level of economic activity. As the level economic activity in the economy increases, so does the level of demand because consumers have more income to spend.

The system was estimated in log linear (natural logarithm) form. This allows the coefficients to be directly interpreted as elasticities; the price coefficient in the supply equation is the price elasticity of supply. However, the interest rate was in level form, so its coefficient represents a semi-elasticity.

For the current exercise, the 'ideal' data on price and quantity would cover the printing activities of those books that attract assistance from the book bounty. However, this level of disaggregation was unavailable. The most disaggregated data available were collected by the Australian Bureau of Statistics (ABS), for the following Australia Standard Industry Classification (ASIC) combined categories:

- printing and publishing (2642);
- printing and bookbinding (2644); and
- printing trade services (2645).

However, the above industries include printing activities that do not attract the book bounty as well as other non-printing activities. Presumably including printing activities that do not attract a bounty will not greatly affect the elasticity of supply because similar technology is used to print various forms of books and publications.

The effect on the estimated elasticities of including non-printing activities such as publishing is unclear. Firms engaging in both printing and publishing may face a different elasticity of supply to those firms which undertake *either* printing or publishing. The net effect of including non-printing activities on the supply elasticity is unclear.

All data were collected for the period 1977–78 to 1992–93.

The measure of output used was sales and transfers. Sales and transfers were collected for all three ASIC industries and summed together to obtain an aggregate measure of output. For some years, sales and transfers data were unavailable. To acquire a complete series the missing years were interpolated.

The price paid and received for printing services is approximated by using a price index of articles produced for the above manufacturing industries. The Commission purchased unpublished data from the ABS for printing and publishing and printing and bookbinding. Price data for printing trade services are not collected. The ABS's general method of aggregation is to weight each index class by the estimated net value of production for a given year. An aggregate price index was obtained using the same weighting process as used by the ABS (ABSb).

The two additional variables, interest rates and incomes, are economy-wide aggregates. The ten year Treasury bond rate was used as a measure of long-term interest rates. To measure the general level of income in the economy, the ABS measure of national income in current prices was used.

It is standard practice when working with time-series data to test the stationarity properties of the data. Using the Phillips-Perron test, the stationarity test results gave mixed and unstable conclusions. The volatility in results may be because of poor quality data or because the sample size was too small to give reliable results. The instability of these tests casts doubt on the reliability of the estimated results.

As the stationarity tests gave mixed results, the supply equation was estimated using conventional three stage least squares methods that require stationary data, as well as using the Johansen method that allows for nonstationary data.

Using the Johansen method of estimating cointegrating relationships, three cointegrating relationships were found between sales, price, interest rates, and income¹. The estimated elasticity of supply was 4.2. The supply results are

¹ A priori expectations were that only two cointegrating relationships would be found: one demand and one supply relationship. Instead three relationships were found: two that looked like demand and one that looked like a supply relationship.

displayed in Table I1.1, Equation 1. The system was re-estimated dropping the income variable. The estimated elasticity of supply fell to 0.75 (see Table I1.1, Equation 2).

Table I1.1: Supply equations using Johansen method^{a,b,c}

<i>Explanatory variables</i>	<i>Equation 1</i>	<i>Equation 2</i>
Price	4.23	0.75
Interest	-0.02	0.01
Income	-2.58	...
Constant	29.51	13.83

... Not estimated.

a Estimation method : Johansen maximum likelihood procedure (non-trended case).

b All variables are in natural logarithms except interest rates.

c Critical value used to establish cointegrating relationships: 90 per cent .

Source: Commission estimates.

The system was also estimated in levels, first difference and second differences using conventional three stage least squares methods of estimating systems of equations (see Table I1.2, Equations 1–3). The estimates of the elasticity of supply varied from 0.5 to 4.3. All price elasticity estimates were significant. However, autocorrelation was a problem for models estimated in the levels and first differences. The equations were re-estimated correcting for autocorrelation, but with only slight changes in the point estimates (Table I1.2, Equations 1a–2a).

The residuals from each specification were also tested for stationarity to test whether the estimated equation was cointegrating. Nonstationary residuals indicate evidence of spurious and unreliable estimates. All supply equations except Equation 3 failed cointegrating tests adding further evidence that the estimates of supply elasticities were unreliable.

Table I1.2: Supply equations using conventional estimation methods a,b

<i>Variables</i>	<i>Equation 1</i>	<i>Equation 1a</i>	<i>Equation 2</i>	<i>Equation 2a</i>	<i>Equation 3</i>
Price	0.50 (8.09)	0.45 (4.64)	4.09 (23.90)	4.16 (53.70)	4.30 (29.31)
Interest rates	0.01 (0.52)	0.01 (0.67)	0.01 (0.16)	0.01 (0.35)	-0.06 (-1.13)
Constant	12.92 (42.42)	13.08 (29.48)
R ²	82.77	88.12	99.22	99.80	99.85
Durbin-Watson	0.87	1.56	0.30	2.13	2.75
Cointegrating relationship ^c	No	No	No	No	Yes

... Not estimated.

Equation 1: estimation in levels.

Equation 1a: estimation in levels, correcting for autocorrelation.

Equation 2: estimation in first differences.

Equation 1a: estimation in first differences, correcting for autocorrelation.

Equation 3: estimation in second differences.

a Estimation method: Equations 1–3: 3 stage least squares, equations 1a–2a : Cochrane-Orcutt.

b All variables are in natural logarithms except interest rates.

c Critical value used to establish cointegrating relationships: 90 per cent.

Source: Commission estimates.

Attachment I2

Other data estimates

Table I2.1 lists bounty data relating to 1994–95.

	<i>1994–95</i>
Average bounty rate (b)	9.9%
Value of bountiable production	\$235 000 000
Administrative cost	\$410 000
Compliance cost:	
Lower estimate	\$150 000
Upper estimate	\$420 000
Total administrative and compliance costs:	
Lower estimate	\$560 000
Upper estimate	\$830 000
Administrative/compliance costs as a proportion of bountiable production (j):	
Lower estimate	0.002383
Upper estimate	0.003532

Sources: ACS and Commission estimates.

Estimates are also needed of P Q, the value of production without bounty, implied by bountiable production of \$235 million. The estimate depends on the elasticity of supply, ϵ . Estimates for a range of elasticities are shown in Table I2.2.

Elasticity	0.5	1	2	3	4	5	5.5
Value of production ^a (\$ million)	224	214	196	181	168	157	152

a Excluding bounty.

In making estimates for a bounty rate of 4.5 per cent, it is necessary to work backwards from these estimates of the value of production without bounty to obtain estimates of the value of production with bounty. There will be a separate

estimate of this value for each different elasticity of supply. Further, because it has been assumed that administrative and compliance costs make up a constant proportion of the value of bountiable production, there will also be a separate estimate of total administrative and compliance costs for each elasticity.

The following estimates in Table I2.3 relate to a bounty rate of 4.5 per cent.

Table I2.3: Estimates of bountiable production, and administrative and compliance costs, for a bounty rate of 4.5 per cent

Elasticity	0.5	1	2	3	4	5	5.5
Value of production ^a (\$ million)	224	214	196	181	168	157	152
Estimates of value of bountiable production ^a (\$ million)	229	223	214	206	199	193	190
Administrative and compliance costs (\$ million):							
Lower estimate	0.55	0.53	0.51	0.49	0.47	0.46	0.45
Upper estimate	0.81	0.79	0.76	0.73	0.70	0.68	0.67

a Excluding bounty.

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