
E Market share and income leakage methodology

As discussed in chapter 2, information on the market share of ‘Australian’ books that was available to the Commission at the start of this study was dated and characterised by variable definitions. Although previous studies and commentary have typically relied on the share of Australian-published or originated books, these include a significant proportion of foreign-authored works.

To ensure a better evidence-base, the Commission has undertaken its own analyses. In the first instance, this appendix outlines the Commission’s methodology to estimate the Australian-authored books’ share of the Australian market. Using this market share estimate, the Commission then estimates the likely degree of income leakage from the Australian economy that is a consequence of the operation of Australia’s Parallel Import Restrictions (PIRs). This leakage occurs because the PIRs raise the price of foreign-authored books as well as Australian-authored books in the local market. Some of this price increase for foreign-authored works will be ‘captured’ by the foreign author and/or publisher which created the work and then sold its rights to an Australian publisher or sold its book to the market directly.¹

In undertaking these analyses, the Commission initially examined all editions in the top 5000 trade books sold in Australia in 2007-08 (worth around \$670 million), as captured by The Nielsen Company’s BookScan database (see box D.3). Following the discussion draft, the Commission extended its analysis to incorporate the remaining ‘tail’ of trade books sold in 2007-08, which comprised around 455 000 editions (worth around \$530 million). The Commission analysed a sample of 2500 of these editions, using statistical techniques designed to enhance the precision of the resultant estimates.²

¹ As noted in chapter 7, technically speaking, there is a leakage of ‘economic rent’ — returns earned from resources in excess of those necessary to induce the use of those resources in a particular activity. This leakage should be distinguished from ordinary payments for imports.

² A random sample of 2500 titles was drawn, stratified on the basis of six equal value strata to account for possible changes in the share of Australian-authored and PIR protected books with changing sales value. Sample allocation among the strata followed a Neyman allocation method which allows optimal allocation when the sample size is fixed (Cochran 1977).

E.1 Estimating the share of Australian-authored books

To estimate the market share of Australian-authored books, the Commission checked the nationality of each author represented in Australia's 5000 top selling trade editions as well as each author in the 2500 sample of the tail.

The Commission adopted a broad definition of Australian authorship. Books were deemed to be Australian-authored if the author:

- was born in Australia and resides here
- was born in Australia, but resides principally overseas
- was born overseas, but resides principally in Australia
- is one of several joint authors and fitted any of the above definitions, even if some or all of the other joint authors did not do so.

Authors' nationalities were identified using a wide array of sources, including:

- author and publisher submissions to this study
- the AustLit data base of creative and critical Australian literature works — a joint collaboration between 12 Australian universities and the National Library of Australia
- a variety of online sources including author websites and publisher websites that listed their authors' biographical details.

The Commission directed considerable resources at these searches and established whether the author fitted the above definition, with reasonable certainty, for around ninety-five per cent of authors (by value of editions).

However, recognising that, as with all such exercises, there would remain some scope for classification error, the Commission has taken a conservative approach to minimise any risk that it might underestimate the share of Australian-authored works, including by adopting the broad definition of an Australian-authored book (see above).

On this basis, the Commission estimates that Australian-authored works accounted for around one-third, in both value and volume terms, of trade books sold in Australia in 2007-08.³

³ In value terms, Australian-authored works accounted for 38 per cent of the top 5000, and 24 per cent of the tail. The weighted average estimate is 32 per cent, with a 95 per cent confidence interval of 29–36 per cent calculated using the STATA statistical package. In volume terms, Australian authored books were estimated to account for around 31 per cent of total sales.

E.2 Estimating the income leakage

In developing a broad estimate of the income leakage, the Commission made a number of simplifying assumptions:

- the price-raising effect of PIR protection is uniform across all foreign- and Australian-authored books
- additional net returns to copyright holders from PIRs flow to the author's home country
- all Australian-authored books are technically PIR-protected because they are, in the main, first published in Australia.

Proceeding from these assumptions, the Commission sought to estimate the share of the foreign-authored books that were formally protected by Australia's PIRs under the 30 day rule. Using the data and methodology described in box E.1, foreign-authored trade books that qualified for PIR protection were estimated to have accounted for around 70 per cent of the retail value of all foreign-authored trade books sold in Australia during 2007-08.⁴

On this basis, the Commission estimates that for every dollar that accrued to the copyright holders of Australian-authored trade books sold in 2007-08, due to the PIRs, around 150 cents would have accrued to those foreign-authored works that were PIR-protected — calculated as the share of foreign-authored sales (68 per cent) multiplied by the proportion that were PIR-protected (70 per cent) and divided by the share of locally authored sales (32 per cent). In other words, around 60 per cent of the assistance that PIRs provide to authors and publishers is estimated to leak offshore.

The assumptions required to calculate the income leakage ratio, together with the need to determine the PIR protection status of individual editions, mean that the resultant estimate should be considered indicative rather than precise. In two key respects, however, the Commission has taken a conservative approach to estimating the extent of the leakage ratio.

First, some additional leakage is likely to occur in relation to the sale of foreign-authored titles that, while not technically PIR-protected, benefit from the upward pressure on prices in the market consequent upon the restrictions. Further, as discussed in chapter 5, the PIRs could exert a 'silent policeman' effect such that industry participants treat some books that are not formally PIR-protected as if they are, for example to avoid any risk of inadvertently breaching regulatory requirements or out of a desire to maintain existing commercial relationships.

⁴ By value, the estimated share of foreign-authored works with PIR protection was 90 per cent in the top 5000, and 46 per cent of the tail.

Box E.1 **Estimating the value share of foreign-authored books that are PIR-protected**

To estimate the extent of the income leakage due directly to the PIRs, those books that are technically protected by the PIRs were first identified. In the case of Australian-authored books, the Commission has assumed that all are PIR-protected. In the case of foreign-authored books, the Commission individually checked the PIR status of sampled editions:

- For the top 5000, the PIR status was checked for a stratified random sample of 500 editions. Sampling was stratified on the basis of six equal value strata to account for possible changes in the likelihood of PIR protection with changing sales value. (The survey later confirmed that better selling editions in the top 5000 were more likely to be PIR-protected.) Sample allocation among the strata followed a Neyman allocation method.
- The PIR status was checked for all foreign-authored editions in the ‘tail’ sample.

The PIR status (protected or not protected) was individually determined for each book in the sample by comparing its earliest release date in any print format for Australia (as listed in Nielsen BookScan) with those of other countries (as listed in The Nielsen Company’s BookData database — see box D.3).

Foreign-authored books that were released in Australia within 30 days of publication overseas (in any book format) were deemed to be PIR-protected. Although the Commission recognises that, at any one time, some of these may not be compliant with the 90 day rule, it is likely that, in practice, the majority would either be PIR-protected, or would be treated by industry as though they remained PIR-protected.

The sample included around four per cent of books (by value) for which the Commission could not establish their PIR protection status with reasonable certainty.

Second, many Australian-authored books do not appear amenable to significant, if any, parallel importation, and thus receive little or no direct benefit from their PIR-protected status. Analysis using the Nielsen BookData database suggests that, in value terms, around 72 per cent of Australian-authored trade books do not have export editions. If the value of these Australian titles was excluded from the calculation, the estimated share of assistance to copyright holders that leaks off-shore would be closer to 85 per cent.

That said, domestic titles that do not have foreign editions might also benefit from the upward pressure on prices in the market generally, consequent upon the PIRs. In addition, analysis using the BookData database also indicates that the majority of books without an export edition are likely to have an overseas distribution agreement (67 per cent, including 6 per cent with an Australia/New Zealand distributor only). While local publishers have greater contractual control over volumes supplied and prices charged under these circumstances, there could be scope for some of those books to be re-imported in the absence of PIRs.