

## Chapter 6 Summary . . .

# Cost and Efficiency

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## Overview

- In its Terms of Reference, the Inquiry is directed to make recommendations on the regulatory arrangements that will best promote efficiency while retaining stability and fairness. To this end, the Inquiry assesses in this chapter the current cost and efficiency of the Australian financial system and the scope for improvement.

## Key Findings

- The Australian financial system creates costs to users in excess of \$40 billion annually. This is more than the residential construction sector or the costs of the entire retail sector.
- Significant efficiency improvements should be achievable through the removal of inefficient regulation and the enhancement of competition.
- In the banking system, most of these efficiency gains can be achieved by changing the mix of transaction channels in favour of electronic transactions, by reducing the density of the branch network and by using more differentiated branch formats.
- While there is also scope to improve the cost structures of individual insurance companies, this is best achieved through competition rather than through regulation.

- Regulation and taxation rules have contributed to high cost levels in funds management in Australia by creating barriers to foreign entry and by failing to encourage the consolidation of the fragmented superannuation industry. Further unnecessary cost is added by the lack of low-cost distribution channels.
- Payments system costs are driven directly by the frequency of use of different instruments and by the proportion of electronic transactions. Despite the rapid uptake of some forms of electronic payments instruments such as EFTPOS, Australia still depends heavily on cheques. As a result, total payments systems costs in Australia are relatively high, constituting between \$5 billion and \$7.5 billion annually.

## Cost and Efficiency

### Introduction

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Australia's financial system has become increasingly competitive in many segments. This is a desirable development as experience demonstrates that contestable markets or those with strong competition are characterised by falling prices, better product quality, greater choice, superior services and faster innovation.

Despite the positive developments of recent years, further improvements are possible. If a 10 per cent overall improvement were achieved through more competition and the removal of unnecessary regulations, over \$4 billion of cost could be released from the financial system, in addition to creating non-price benefits to consumers. If implemented successfully, these enhancements to efficiency would not decrease the safety or stability of the system.

The key to these improvements lies in two areas: creating a competitive environment in which markets can allocate resources most appropriately through efficient pricing, and making the market for corporate control more contestable. This chapter assesses the scope for such improvements by comparing Australia's financial system with international best practice. Chapters 9 and 11 discuss specific recommendations to enhance competition. Chapter 10 addresses the effects of ownership and acquisition restrictions on competition.

## 6.1 Financial System Cost Comparison

Comparing the efficiency of different financial systems is difficult in light of the great operational differences between countries and definitional variations.<sup>1</sup> Nonetheless, it is possible to obtain indications of the overall efficiency of the financial system by aggregating a number of independent data sets.

From the information available to the Inquiry, it appears that the overall cost of Australia's financial system is at the higher end of the middle range of a set of comparable countries.

On balance, the Inquiry believes that significant improvement is possible if competition is allowed to run its course and international best practice is brought to the fore throughout the financial system.

### 6.1.1 Overall Cost of Australia's Financial System

The Inquiry estimates that the total cost to users of Australia's financial system in 1995 was approximately \$41 billion (see Figure 6.1). The cost to the customer, measured by total revenue generated, provides a useful indicator because it assesses what is relevant to end users and is not sensitive to annual fluctuations of provisions or profit.<sup>2</sup>

About 50 per cent of the assets in Australia's financial system are controlled by banks.<sup>3</sup> It is therefore not surprising that in 1995 banks, at around \$22 billion, accounted for the largest proportion of the total cost. Life companies and general insurance accounted for a further \$7.3 billion; money

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1 Similar caveats are documented for the RBA 1994, *International Comparisonsof Bank Margins* and OECD 1996 reports used later in this section.

2 For banks, this is equivalent to total net interest income plus non-interest income; for insurance companies, it is equivalent to total revenue net of benefit payments.

3 RBA 1996, *Reserve Bank of Australia Bulletin*, December edition, Table D.5. Similar percentages are found in financial systems around the world, the US being a notable exception.

market corporations and finance companies, \$3.4 billion; and building societies and credit unions, about \$1.4 billion.<sup>4</sup>

The management cost for non-exempt superannuation outside of life companies, as well as fund entry and exit charges, is estimated to add \$2.5 billion.<sup>5</sup> All 'Other' participants in the financial sector (which include securitisation vehicles, general and intra-group financiers, pastoral finance companies, cooperative housing societies and exempt superannuation funds) are estimated to add a further \$4.5 billion.<sup>6</sup> The total system cost to end users is equivalent to an annual charge of 4.5 per cent of financial assets which stood at \$917 billion in 1995.<sup>7</sup>

At over \$40 billion, the costs to users of the financial system are larger than those of the residential building construction sector or the entire retail sector.<sup>8</sup>

In 1995, approximately 70 per cent (\$30 billion) of this cost to the customer was in the form of operating expenses, while the rest was used to absorb taxes and write-downs and to reward investors through profits.

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4 Life company costs include only operating costs as the two largest life insurers were both mutual companies which would redistribute surpluses to their policy holders.

5 Total explicit superannuation fund costs are estimated by the industry to amount to \$5 billion to \$6 billion. The \$2.5 billion is net of costs already counted under life insurance companies (which manage 39 per cent of all superannuation assets) and other financial institutions.

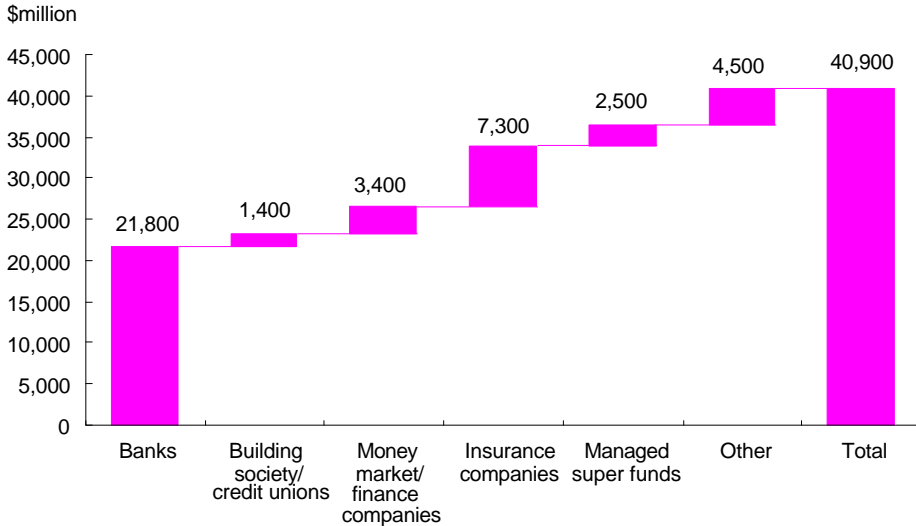
6 Estimated at the aggregate average system cost of 4.5 per cent of assets.

7 Excluding Reserve Bank of Australia funds.

8 Based on 1992-93 Input-Output tables. See ABS 1996, Cat. no. 5215.0.

## Total System Costs are Over \$40 Billion . . .

Figure 6.1: Cost of Australia's Financial System to Users  
(indicative, 1995)



Source: ISC 1995, *Half Yearly Bulletin on Life Insurance*; ISC 1996, *Insurance and Superannuation Bulletin*; KPMG 1996, *Financial Institutions Performance Survey*; KPMG 1996, *Insurance Industry Survey*; Deloitte Touche Tohmatsu 1996; estimates.

### 6.1.2 Comparison of Bank Costs

As noted above, banks make up more than half of the total cost of the financial system. In aggregate, the cost of the Australian banking system appears to be at the high end of the middle range when compared with other developed countries. Over the period 1986 to 1994, Australian banks charged their customers on average 4.3 per cent of assets (see Figure 6.2).

Of this figure, 2.8 per cent was spent on operating costs, with the remaining 1.5 per cent used to cover bad debts, taxes and profits. The aggregate cost ratio compares favourably with the US and UK figures of 5.3 per cent and 4.5 per cent respectively. However, it appears to be high compared with banking systems in equally bankcentric European countries such as

Switzerland, Germany and the Netherlands, which charge around 2.9 per cent to 2.6 per cent.<sup>9</sup> The lowest cost country in the sample, Japan, provides a less appropriate comparison due to structural and operational differences.

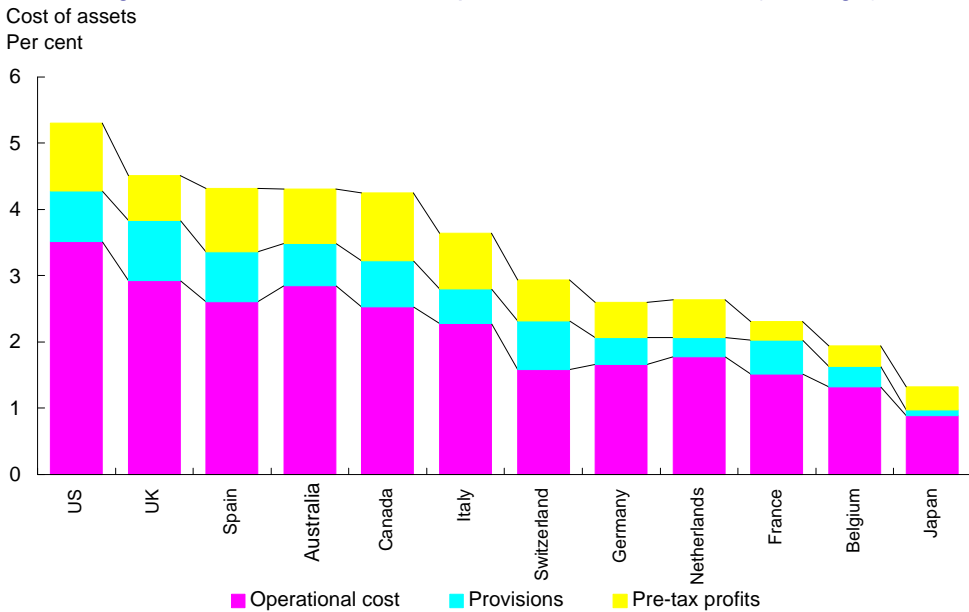
It should be noted however, that the operating cost levels of banks are almost as variable within countries as the aggregate cost performance of banking systems is across countries—this is indicative of the differing ability and willingness of some competitors within national markets to reduce costs.

### ***Australian Banking System Costs are Above Average . . .***

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9 This finding is broadly agreed in the market although there are dissenting views. For example, the RBA finds that ‘overall income, cost or profitability (of Australian banks) tend to be broadly similar to those for comparable full-service banks in other countries’; in contrast, IBCA puts Australian bank costs as second highest in a comparison of 14 countries. See RBA 1994, *International Comparisons of Bank Margins*, p. 13, (the study has been updated and findings confirmed for the extended observation period until 1995) and BIS 1996, *66<sup>th</sup> Annual Report*, p. 81.

Figure 6.2: Bank Cost Comparison, 1986 to 1994 (average)



Source: OECD 1996, *Bank Profitability*.

Noteworthy also is that banks in countries with generally low operating costs do not appear to enjoy a higher profit margin (as a percentage of assets) than banks in high-cost countries. By implication, competition ensures that cost savings are passed through to customers.

Payments systems and related branch networks are responsible for the largest portion of most retail banks' cost structures. In fact, a large part of the overall cost differences identified between countries can be explained by different distribution and payments systems. The following sections analyse these issues in more detail by reviewing:

- the importance of the mix of payment instruments for the overall cost structure of banks;
- the scope for reducing the number of branches; and
- the unit cost per branch.



## **Impact of Payment Instruments Mix**

Several institutions commented in their submissions and representations to the Inquiry about the significant cost reductions that could be obtained if consumers transacted more through electronic media rather than branches or cheques.<sup>10</sup> The same argument appears to apply to the aggregate operating costs of banking systems (see Figure 6.3): the higher the usage of cheques, the higher seem to be the operating costs of a banking system.<sup>11</sup>

European countries with well-developed giro-systems and a higher share of electronic transactions (electronic transfers, direct debits and card payments) tend to have significantly lower overall banking costs than countries such as Australia, Canada or the US, which use cheques more extensively.<sup>12</sup>

This analysis emphasises the significance of the payments system for the overall efficiency of a banking system and the importance of further developing electronic channels. The payments system is discussed in detail in Section 6.3, with corresponding recommendations in Chapter 9.

## ***Payments Functions seem to Drive Overall Banking System Costs . . .***

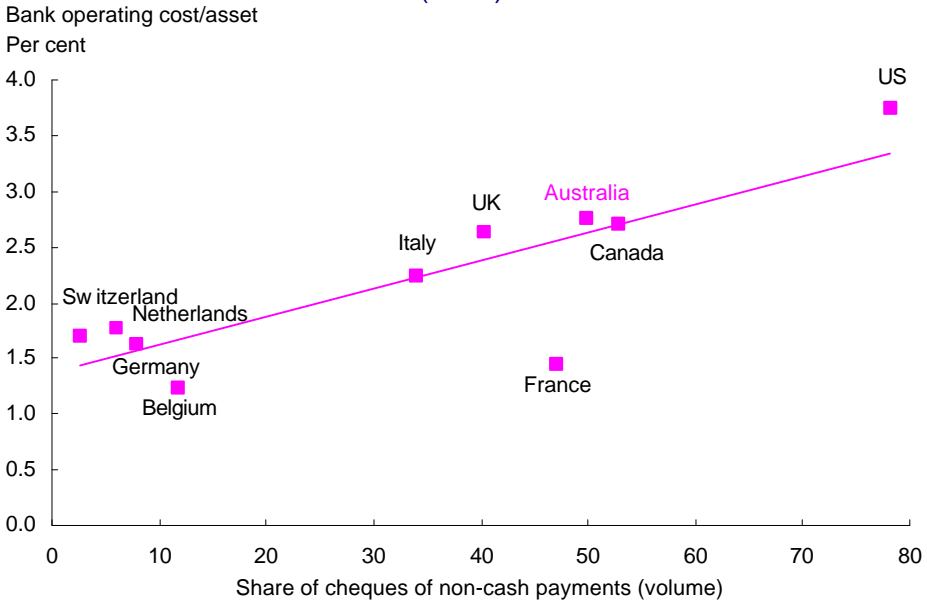
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10 Table 6.4 illustrates the tenfold cost difference between manual, branch based transactions and direct entry electronic transactions.

11 The trendline has a fit ( $R^2$ ) of 67 per cent.

12 Giro-systems are electronic or paper based payments systems developed outside of banking systems, typically operated through post offices. The specific transaction mix for each country is shown in Figure 6.13.

Figure 6.3: Importance of Cheques and Total Banking System Costs (1994)



Source: OECD 1996, *Bank Profitability*; BIS 1996, *Statistics on the Payments Systems in the Group of Ten Countries*; RBA and APCA (unpublished data).

### Branch Density

Closely related to the mix of payment instruments is the density of a financial system's branch network. Figure 6.4 suggests that Australia's branch density of 3.8 branches per 10,000 inhabitants is well below that of some European

countries, but higher than the density in the US or the UK.<sup>13</sup> However, a comparison must also allow for the impact of possible branch substitutes. For example, in addition to proprietary bank and building society branches, Australian consumers can transact through approximately 12,000 agencies and about 2,000 outlets of credit unions.<sup>14</sup> These options are not always available in some countries with more bankcentric industry structures.

Two additional factors must also be considered: the impact of geography and the accessibility of branch substitutes such as automated teller machines (ATMs) and electronic funds transfer at point of sale (EFTPOS) terminals.

- Australia is the most sparsely populated country in the Organisation for Economic Cooperation and Development (OECD) — at two people per square kilometre, its population density is less than 10 per cent that of the US, and less than 1 per cent that of the UK. Only Canada compares closely to Australia in terms of population density and degree of urbanisation.<sup>15</sup>
- ATM and EFTPOS penetration and usage in Australia are average by worldwide standards, which reduces the need for a particularly dense branch network for standard transactions.<sup>16</sup>

On balance, it appears that Canada provides the best comparison of branch density for Australia. If Australia had Canada's density of bank branches, there would be approximately 1,000 fewer branches in Australia. This would not necessarily mean a reduction of rural service levels, as the majority of bank branches (60 per cent) are in metropolitan areas.<sup>17</sup>

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13 The US is dominated by a large number of very small banks with few or no branches (unit banks). In 1994, there were 10,489 commercial banks in the US (OECD 1996, *Bank Profitability*, p. 188). At the US rate of banks per capita, Australia would have over 750 banks. This structure leads to a massive replication of (fixed) overhead and head office functions and costs, thus providing one explanation for the apparent paradox of low branch density but high overall system costs.

14 'Agencies' include facilities at post offices and other banks' branches.

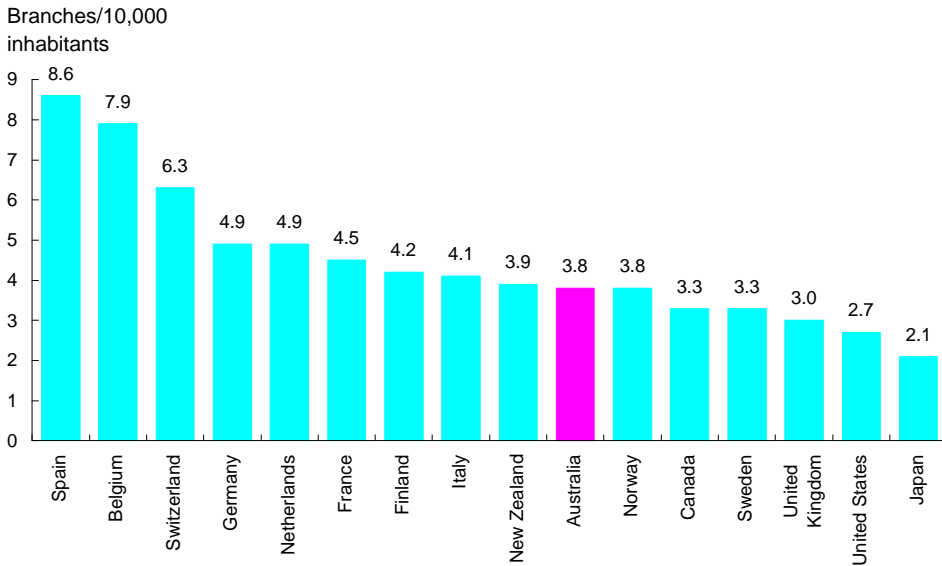
15 At 85 per cent, urbanisation in Australia is actually higher than in Canada (76 per cent). See World Bank 1995; and OECD 1996, *Economic Country Surveys*.

16 See Chapter 9 for a detailed discussion of electronic transaction channels. If all points of contact for basic banking services, both electronic and branch or agency-based, are added up, Australians had approximately 80,000 points of access to the financial system (in 1996).

17 RBA 1996, *Reserve Bank of Australia Bulletin*, December edition, Table B.21.

## **Australian Bank Branch Density is Average . . .**

Figure 6.4: Bank Branch Density



Note: The range of included institutions may vary slightly due to national differences in classification. Figures for Australia include banks and building societies.

Source: BIS 1996, 66<sup>th</sup> Annual Report; KPMG 1996, New Zealand Financial Institutions Performance Survey.

## **Branch Cost**

Apart from the different distribution mix and branch density differentials, average branch costs are the third area which can explain overall system costs. In Australia, annual operating costs per branch are estimated to amount to \$1.6 million, half of which are staff expenses.<sup>18</sup> There is increasing evidence which suggests that this cost could be reduced by pursuing more differentiated distribution strategies. Supermarket branches (a number of which have recently been introduced by Australian institutions) and other forms of in-store banking allow a reduction in the cost per distribution outlet.

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<sup>18</sup> McKinsey & Company with the McKinsey Global Institute 1995, *Australia's Economic Performance*, p. 57.

Figure 6.5 illustrates the US experience with such a model. A successful in-store branch can generate 92 per cent of the new business levels of a traditional branch, at two-thirds of the operating and one-fifth of the initial fit-out costs. The operating cost reductions are created through both higher staff productivity, higher degrees of automation and lower space requirements.<sup>19</sup> Given the high penetration rates achieved in some cities in the US, it appears that this is a significant factor which may in part explain the productivity gap which some studies have identified in Australian retail banking.<sup>20</sup>

While overseas experience is not always immediately applicable to Australia, it appears that:

- Australia may gain from further changing the mix of transaction channels in favour of electronic transactions;
- Australian financial intermediaries may have too many branches; and
- significant scope exists for reducing branch cost through the use of more targeted distribution strategies.

Such strategies would focus on reducing the share of traditional branch formats in favour of more cost-effective branch types and electronic distribution mechanisms such as video branches, sophisticated ATMs and EFTPOS machines, or personal computer (PC) banking.

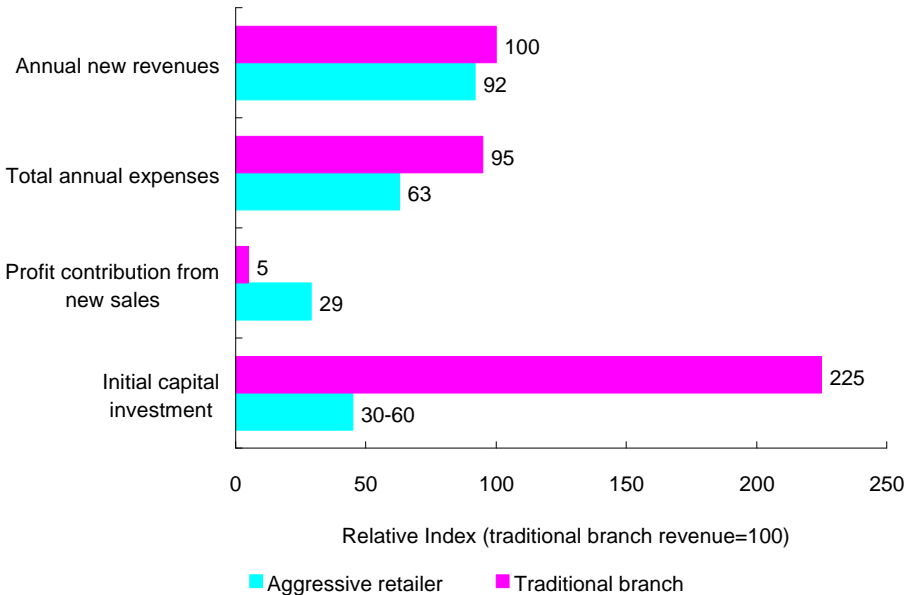
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19 Australian pilot sites operate with a staff of no more than two, with only 25 square metres branch space. See Murill 1997, p. 1.

20 For example, McKinsey & Company with the McKinsey Global Institute 1995, *Australia's Economic Performance*, p. 57 puts the gap at 40 per cent below US productivity levels, equivalent to additional costs of \$1.8 billion to \$3.6 billion. The lower boundary denotes staff savings only; the upper boundary, staff and real estate savings. Much of the difference is driven by lower labour productivity in Australia. In the US, transaction volumes per capita are significantly higher than in Australia (for example, cheque usage; see Figure 6.3). The structure of the US banking industry and the payment instruments mix provide an explanation for high overall banking system costs (see Figure 6.2) despite a productivity advantage.

## Different Branch Formats can Save Costs . . .

Figure 6.5: Comparison of the Economics of Branch Options in the US



Note: Revenue figures include consumer cheque, consumer credit, credit card and investment accounts only. Small business and high-end consumer services (eg. trusts) are excluded. Annual expenses include depreciation and processing expenditures/allocations.

Source: Flur, Ledet & McCoy 1996.

Some of the potential improvements identified, particularly the rationalisation of branch networks, could be achieved quickly through in-market mergers.<sup>21</sup> However, the Inquiry believes that the key to getting the full range of improvements lies in more intense competition in all parts of the market. This makes it all the more important to examine the possible anti-competitive effects in banking caused by unwarranted access and ownership restrictions, implicit community service obligations (CSOs) and overly strict privacy regulations.

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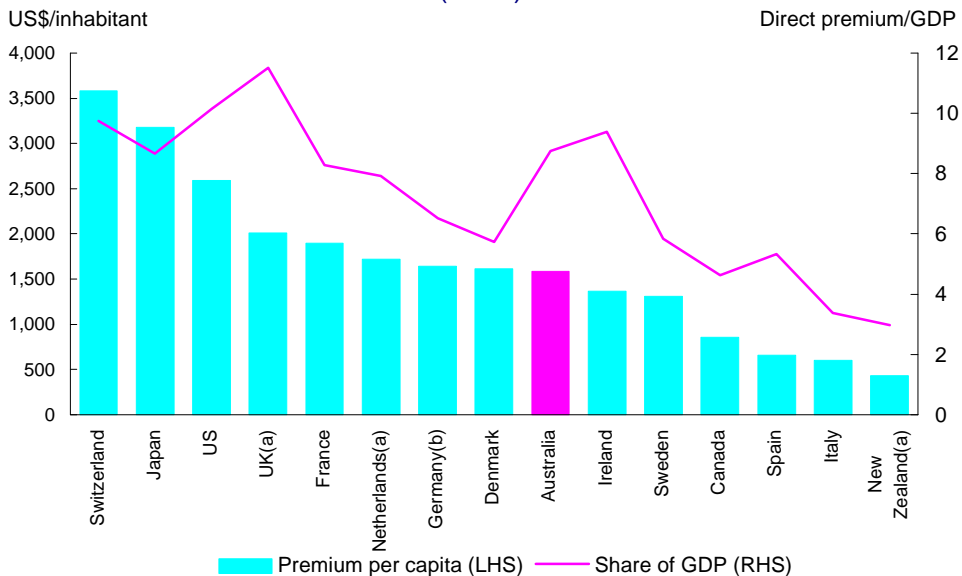
21 However, rationalisation cost savings are only one relevant factor for consideration in examining possible mergers of existing banks; see detailed discussion in Chapter 10.

### 6.1.3 Comparison of Life and General Insurance Costs

Taking premiums paid per capita as a measure, Australians are medium-intensity users of insurance. In 1994, they spent 8.8 per cent of gross domestic product (GDP), or an average of US\$1,584 per capita, on all types of insurance (including premiums for superannuation), relative to over US\$3,500 (9.8 per cent of GDP) in Switzerland, which has the highest level of premiums per capita (see Figure 6.6).

#### ***Australians are Average Users of Insurance . . .***

Figure 6.6: Total Insurance Premiums Per Inhabitant (1994)



- (a) Net written premium only.  
 (b) Net written premiums for life.

Source: OECD 1996, *Financial Market Trends*.

Of the total premiums written in Australia, 63 per cent were attributable to life insurance and 37 per cent to general insurance. Total underwriting or operating costs amounted to \$3,067 million for life insurance and \$3,284 million for general insurance.<sup>22</sup>

The relative efficiencies of the life and general insurance sectors are reviewed in the remainder of this section.

## Life Insurance

Efficiency comparisons for life insurance companies are difficult to draw, due to inconsistent accounting standards across countries, dissimilar economics of different product lines, and the distorting effect of growth on cost structures.

A review of total life company costs in Australia since 1989 indicates that total costs in absolute terms have been stable, while the ratio of expenses to premium income has fallen from over 20 per cent in the 1980s to 15 per cent (see Figure 6.7). This may in part reflect the beneficial impact that the Government's compulsory superannuation requirement has had on revenue — 85 per cent of life company premiums in 1995 were generated by superannuation business, up from 67 per cent in 1988.<sup>23</sup> The aggregate cost ratio may therefore disguise the compositional shift in life companies' business towards funds management (which is a lower cost activity than traditional life insurance).

Notwithstanding this shift, productivity has improved through ongoing industry rationalisation<sup>24</sup> and the reduction in distribution capacity.<sup>25</sup>

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22 ISC 1995, p. 4 and ISC 1996, *Insurance and Superannuation Bulletin*, September edition, p. 39.

23 ISC 1996, *Insurance and Superannuation Bulletin*, September edition, p. 35.

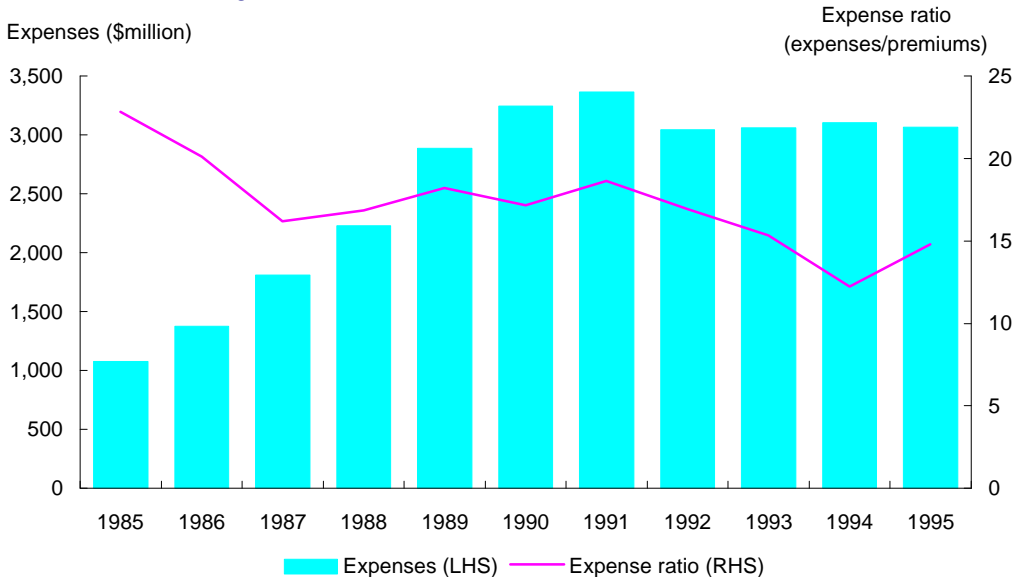
24 In September 1990, 62 life companies were operating in Australia. Five years later, this number had dropped to 51, due to 17 exits and six new entries. See KPMG 1996, *1996 Insurance Industry Survey*, p. 24.

25 Estimates of the life agent numbers vary. According to the joint Australian Lifewriters Association and the National Council of Life Agents Association Submission (No. 109), agent numbers have fallen from 20,000 to just over 5,000 over the last four years, p. 1.



## ***Life Insurance Companies' Expenses have Stabilised . . .***

Figure 6.7: Life Insurance Costs in Australia



Source: ISC 1995, *Half Yearly Financial Bulletin on Life Insurance*, pp. 3-4.

The Inquiry received no suggestions that the market for life insurance products was uncompetitive. However, evidence was presented which suggested that regulatory overlap and overly prescriptive regulation added unnecessary cost to operations.<sup>26</sup> These issues, and the cost of regulation in general, are discussed in more detail in Chapter 16.

While there is scope for improving the cost structures of individual insurers, this matter is best left to the market to resolve. Competition is likely to intensify with continued pressure on life companies' costs from independent direct distributors, with greater choice of superannuation products, and with banks becoming more active in the distribution of traditional life products.

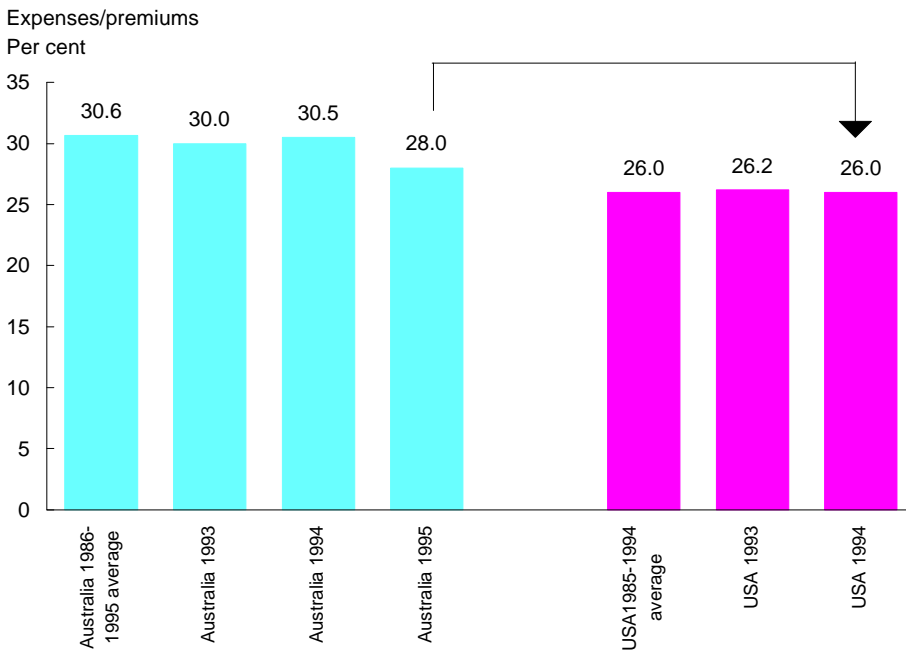
<sup>26</sup> For example, National Mutual Holdings, Submission No. 32, pp. 78-87.

## General Insurance

As Figure 6.8 illustrates, expense ratios of Australian private general insurance companies had fallen to 28 per cent in 1995, from over 30 per cent in previous years. However, a comparison with the 26 per cent average of the US sector shows that this may not yet be international best practice. Based on the 1995 net premium volume in Australia, the 2 per cent differential is equivalent to around \$200 million in excess costs in the industry. However, there are no signs of excess profits in the industry and barriers to entry are low. In addition, as submissions did not identify the regulation of general insurance as an issue, there appears to be neither market nor regulatory failure warranting intervention.

### ***Expenses in General Insurance may be too High . . .***

Figure 6.8: Expense Ratios in General Insurance



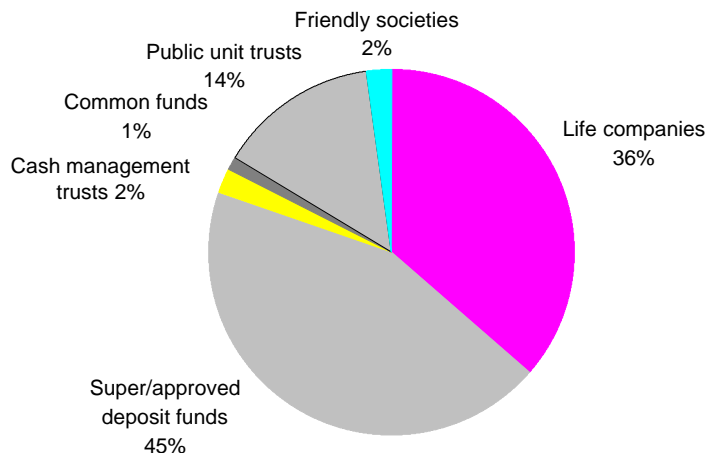
Source: ISC 1992, *Annual Report*, 1989-92 editions; ISC 1996, *Insurance and Superannuation Bulletin*; McKinsey & Company 1995.

### 6.1.4 Comparison of Funds Management Costs

In Australia, a total of \$317 billion (consolidated) was held in managed funds in June 1996. As shown in Figure 6.9, the largest share (45 per cent) was held in superannuation funds and approved deposit funds, followed by life companies (36 per cent). Of the total, managed funds placed with external investment managers amounted to approximately \$256 billion.<sup>27</sup> Public unit trusts are similar to mutual funds, which are an important investment vehicle in many countries, particularly the US. In Australia, they are only relatively small, with 14 per cent of the total managed funds market.<sup>28</sup>

#### ***Superannuation and Life Companies Control most Managed Funds . . .***

Figure 6.9: Break-up of Managed Funds



Source: RBA 1996, *Reserve Bank of Australia Bulletin*, December edition, Table C.15.

<sup>27</sup> ISC 1996, *Insurance and Superannuation Bulletin*, September edition, p. 12.

<sup>28</sup> The US makes up over 50 per cent of the global mutual funds volume which stood at US\$ 5,341 billion. Australia had 0.8 per cent of the total. See Investment Company Institute 1996, p. 76.

Due to the wide range of possible investment vehicles and overlaps with the banking and life insurance industries, it is difficult to assess the aggregate cost of the funds management industry.

From the fragmented and partly contradictory evidence presented to the Inquiry, it appears that operating costs in Australia’s funds management sector are relatively high. Table 6.1 provides details for unit trusts only. While the range of one-off sales charges is wide in most countries, the mix in Australia is weighted towards funds with high charges. Annual management fees in Australia, measured by the management expense ratio (MER) as a percentage of assets, appear to be high.

**Sales Charges and Funds Management Fees are High in Australia . . .**

Table 6.1: Comparison of Retail Unit Trust Charges for Selected Countries

	Typical sales charges (per cent)	Typical MER (per cent)
Australia	0-5	1.75-2
Canada	0-5	1.75-2
Germany	2-5	<1
Japan	2-3.5	1-1.5
United Kingdom	3-5	1.25-1.5
United States	0-5	0.5-2 (1.05 per cent asset-weighted avg)

Source: Vanguard Investments Australia, Supplementary Submission No. 120.

Submissions noted a range of reasons for the high cost of funds management in Australia which are discussed below in more detail:

- lack of competition due to taxation disincentives;
- lack of low-cost distribution channels for unit trusts; and
- industry structure, namely the large number of small funds, which creates scale diseconomies and the large share of funds held in retail rather than wholesale funds.

## Taxation Disadvantages and Disincentives

The Australian tax regime does not create an environment which is competitively neutral. The growth of cost-effective funds management vehicles is slowed by tax considerations in three ways:

- barriers to entry are raised;
- foreign unit trusts are made unattractive to Australian investors; and
- the ability of Australian funds to export is restricted.

The Inquiry recognises that some aspects of tax policy are impediments to an efficient financial system and considers them further in Chapter 11.

## Lack of Low-Cost Distribution Channels

Compared with countries such as the US, Australia does not benefit sufficiently from the direct sale of managed funds which have lower fees attached (some of these channels and fee arrangements are discussed in detail in Chapter 11). In Australia, most managed fund products are sold individually through financial planners, resulting in associated higher fees. In contrast, 37 per cent of all new mutual fund sales in 1995 in the US were sales generated by direct marketing, which typically carry much lower charges.<sup>29</sup>

In addition, the US benefits from other low-cost distribution channels such as discount brokers, which are becoming increasingly active in mutual funds. Such channels are only just emerging in Australia.

There are, however, no apparent regulatory impediments to the development and growth of such distribution channels in Australia.

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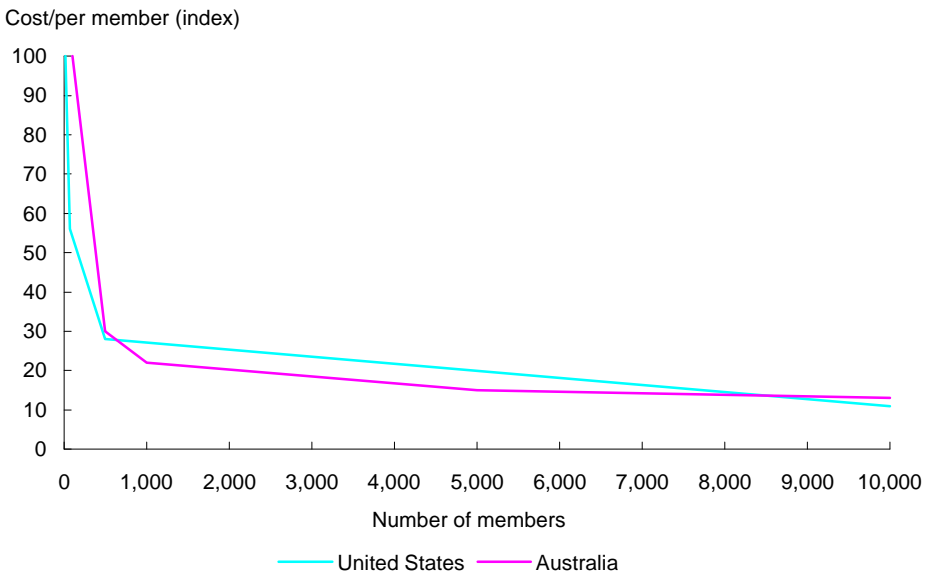
<sup>29</sup> With direct marketing, investors react to advertising or other solicitations and make mutual fund investments by mail or phone—typically without receiving specific investment advice. See Investment Company Institute 1996, pp. 52-56.

## Fragmentation of Superannuation Funds

The Australian superannuation funds market is highly fragmented. Of almost 140,000 active funds, only about 4 per cent have assets in excess of \$1 million.<sup>30</sup> Over 90 per cent of all funds have fewer than five members.<sup>31</sup>

### ***There are Scale Economies in Funds Administration . . .***

Figure 6.10: Annual Administration Cost by Size of Defined Benefit Funds (US) and Corporate Funds (Australia)



Note: Cost index 100 relates to first point in each data series.

Source: Husted 1996; Jacques Martin (unpublished data).

The impact of this fragmentation on cost is apparent. Figure 6.10 shows that the administrative cost per member in defined benefit and corporate funds drops by a factor of 10 as the number of members increases from 15 to 10,000. Most of the scale economies can be obtained by a moderate increase

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30 ISC 1996, *Insurance and Superannuation Bulletin*, September edition, p. 75.

31 These are classified as 'excluded funds'.

in member numbers. Similar proportions can be found for defined contribution funds.<sup>32</sup>

The Inquiry realises that this structure creates additional cost for the financial system as a whole in return for offering great flexibility to many individuals. The Inquiry's recommendations on superannuation choice and fund merger rules (see Chapter 11) and the regulation of Retirement Savings Accounts (RSAs, see Chapter 8) will contribute to increased competition in this market. This is important to every Australian saving for retirement as a reduction in funds management costs translates directly into higher net returns, the benefits of which compound.

For example, keeping all other variables constant, a net improvement in return<sup>33</sup> of one percentage point is equivalent to additional available superannuation assets of \$11 billion by the year 2000, \$75 billion by 2010 and \$205 billion by 2020.<sup>34</sup>

### 6.1.5 Markets

In the financial system, markets provide an alternative to intermediaries for a range of functions, including the provision of capital and liquidity and the management of risk. The potential growth of markets, and the competition between markets and intermediaries were discussed in more detail in Chapter 4.

Relative to the size of Australia's economy, markets are well-developed in Australia: with the fourteenth largest GDP in the world in 1995,<sup>35</sup> the Australian Stock Exchange (ASX) ranked eleventh in terms of size (market capitalisation) and twelfth in terms of turnover (in 1994), while the Sydney

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32 Husted 1996, p. 10.

33 This is equivalent to reducing all superannuation funds management and administration expenses by about one-third.

34 Based on the standard set of assumptions in the RIMGROUP model developed by the Retirement Income Modelling (RIM) Task Force.

35 World Economic Forum 1996, p. 145.

Futures Exchange (SFE) was the eleventh largest futures and options exchange in the world in 1994.<sup>36</sup>

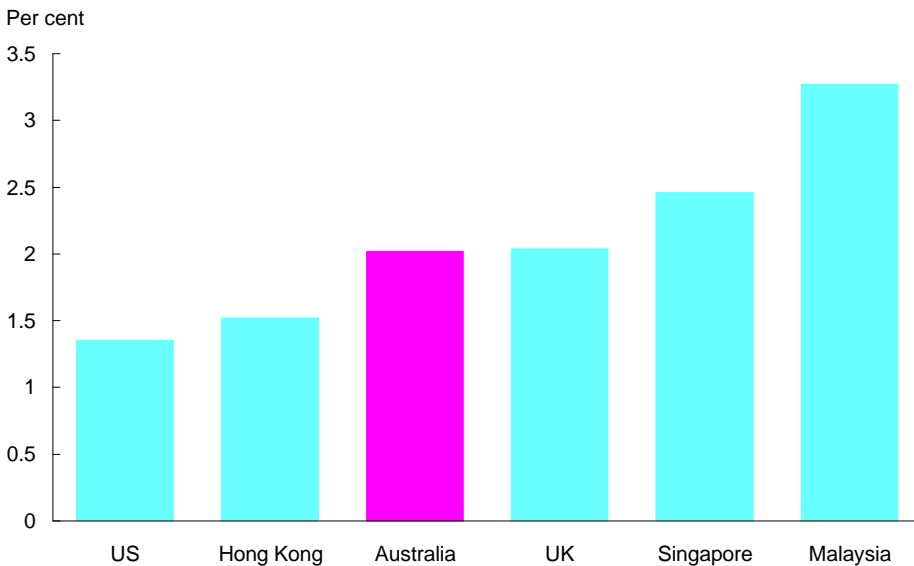
The importance of markets in absolute terms and relative to intermediaries is determined by their costs and user preferences. Aspects of both issues are briefly discussed below.

### Transaction Cost Comparison

Trade in equities constitutes a substantial part of exchange-related activities. As Figure 6.11 illustrates, total direct transaction costs (excluding market impact and opportunity costs) for equities in Australia are average by international standards.

### ***Australian Equity Transaction Costs are Comparable with other Countries . . .***

Figure 6.11: Transaction Cost Comparison for Trades above \$1million



Source: Aitken & Swan 1995, pp. 43-45.

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36 See Allen Consulting Group 1996, pp. 13-24.



Of the total transaction costs in Australia, 30 per cent are government stamp duties. This is a much higher share than in other countries — New Zealand and the US, for example, do not levy such taxes.<sup>37</sup> The Inquiry considers the implications of taxation issues for the financial system in Chapter 11.

The Inquiry welcomes the intensifying competition between exchanges as a further impetus to improving the competitiveness of Australia's financial system and delivering enhanced customer benefits (such as extended trading hours) and lower transaction fees.

### **Financing Preferences**

Only about 10 per cent of the total capital needed by Australian corporations is financed by direct issue of debt securities in the market, which is significantly less than in other English-speaking countries, particularly the US and the UK.<sup>38</sup>

The opportunity costs associated with low levels of debt capital raising are significant as the ongoing cost of funding through bank loans can be substantially more than the cost associated with issuing bonds.

A possible explanation for this behaviour is the smaller size of the Australian economy and the relatively small number of Australian companies large enough on an international scale to meet the breakeven size required to justify the fixed costs associated with a capital raising via a direct issue of securities.

The Inquiry believes that there are no substantive regulatory impediments to the development of alternatives to bank lending or the entry of new competitors.<sup>39</sup> However, some finetuning of the regulatory framework may be warranted. These recommendations are discussed in Chapter 11.

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37 Allen Consulting Group 1996, p. 127.

38 Edey & Gray 1996, p. 8. Total debt securities stood at \$65.4 billion out of total liabilities of \$550.4 billion in 1994/95; see Foster 1996, Table 3.27.

39 The significant upturn in the corporate bond market during the period of the Inquiry provides evidence for this.

## 6.2 Payments System

The payments system deserves special regulatory attention because of its close link to systemic risk (discussed in Chapter 9) and its importance as a driver of overall system cost.

### 6.2.1 Cost of the Payments System

Unlike in some other countries,<sup>40</sup> comprehensive data on the costs and efficiency of the payments system are not publicly available in Australia. This reflects both the structure of the Australian payments system and the absence of a transparent framework against which to benchmark costs and efficiency.

The payments system comprises both cash and non-cash payment instruments. While cash transactions dominate the volume of payments in Australia with 18 billion to 20 billion transactions per annum,<sup>41</sup> cash is not as important as in some other countries (see Table 6.2).

The relative importance of cash reflects a variety of factors, including cultural preferences, the impact of tax and social security policies, the extent of the black economy and the technical efficiency of the system itself. Excluding the costs associated with delivery, the resource cost of cash is less than that of other payment mediums, which explains its continued dominance for small value payments.<sup>42</sup> However, for larger value payments, the bulk and weight of currency add handling costs to users as well as increasing the risk of theft.

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40 For example, the Federal Reserve publishes a wide variety of data on the cost and efficiency of the US payments system, while in smaller countries, such as Norway, academic studies compare the cost and efficiency of various payment delivery channels and the cost of payment instruments. Data in New Zealand also appear to be more comprehensive than those available in Australia.

41 Mair 1995, updated to reflect population growth. In 1996, the value of currency on issue was \$20.5 billion, around one-quarter of the daily value of non-cash payments exchanged; RBA data reproduced in APSC 1996, *Annual Report 1995/96*, p. 51.

42 Resource costs measure all costs associated with the payment instrument, including the production of each instrument and the processing cost associated with tendering and collecting each instrument, including handling costs incurred by retailers etc. See Humphrey & Berger 1990.

## **Notes and Coins Continue to be Important . . .**

Table 6.2: Relative Reliance on Currency, 1995

	GDP per capita (US\$)	Currency per capita (US\$)	Currency to GDP (per cent)
Netherlands	25,701	1,546	6.02
Belgium	26,681	1,452	5.44
United States	28,161	1,466	5.21
Australia	19,487	794	4.07
Canada	19,471	615	3.16
United Kingdom	19,065	572	3.00
New Zealand	16,457	280	1.70

Source: RBA data reproduced in APSC 1996, *Annual Report 1995/96*.

While cash transactions are important by volume, most payments by value are exchanged through non-cash instruments (including cheques). Figure 6.12 shows that high-value payments through the Bank Interchange and Transfer System (BITS), the Reserve Bank Information and Transfer System (RITS) and the Austraclear system accounted for over 60 per cent of the daily value of payments exchanged in 1995. The Australian Payments Clearing Association (APCA) estimates that the dollar value of all non-cash payment transactions in 1996 was over \$90 billion per day, equivalent to around 20 per cent of annual GDP.<sup>43</sup>

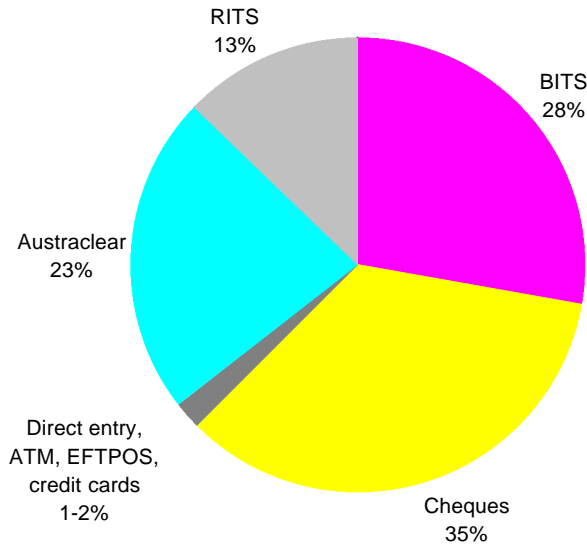
In 1995, the average value of a cheque was around \$7,000, down from around \$18,000 in 1990. However, anecdotal evidence suggests that small value cheques make up 80 to 90 per cent of total cheque payments so that the median cheque value would be much smaller.<sup>44</sup>

43 APCA 1996, p. 11.

44 Estimates of the average value of small cheques are unavailable, but in 1990, APSC estimated an average value of \$200-\$250. If comparable figures were applicable in 1995, the average value of the remaining 10-20 per cent of large value cheques would be around \$50,000. See APSC 1991.

**... but most Value is Exchanged through High-Value System ...**

Figure 6.12: Payments Exchanged by Value, November 1995



Source: APCA 1996.

Aggregate figures disguise variations in the use of payment instruments in different sectors of the economy. Table 6.3 draws on confidential information provided to the Inquiry on the composition of sales/receivables from a retailer, a utility company and an insurance company.

**Cheques and Cash are Primary Means of Interchange ...**

Table 6.3: Sales by Type of Payment (percentage of total sales by value)

	Firm A	Firm B	Firm C
Cash	60	37	1
Cheques	2.5	50	79
Credit/charge cards	19	12	1
Debit cards	18	—	—
Direct entry	n/a	—	19

Source: Data provided to the Inquiry by confidential sources.

This business mix is relevant as the costs associated with processing paper and in-branch transactions are high relative to electronic delivery mechanisms. This is illustrated for several financial institutions in Table 6.4.

### ***Electronic Payments are Significantly Cheaper . . .***

Table 6.4: Delivery Channel Cost Comparisons (indexed)(a)

	In-Branch Cash Deposit/ Withdrawal	Cheque Deposit	Own ATM Withdrawal	EFTPOS	Direct Credit
Institution A	100	—	31	18	—
Institution B(b)	100	80	33	18	3
Institution C	100	109	25	24	10
Institution D	100	121	59	29	—
Institution E	100	116	57	29	7

(a) Figures not strictly comparable between institutions due to different accounting and cost allocation.

(b) Midpoints.

Source: Westpac Banking Corporation, Submission No. 90; confidential sources.

Many banks and other deposit taking institutions (DTIs) have introduced pricing policies which encourage retail clients to utilise electronic channels. A number of institutions advised the Inquiry that such strategies reduced the number of in-branch transactions substantially. For example, one regional bank indicated that it had already achieved a ratio of electronic to in-branch transactions of 70:30 and had halved in-branch transactions since altering fee arrangements and launching a customer education program.<sup>45</sup> However, the increased usage of electronic delivery channels has been accompanied by an increase in transactions which partially offsets the savings.<sup>46</sup>

Estimates by the Inquiry suggest that the cost of the payments system to suppliers of cross-institutional payments is at least \$5 billion to \$7.5 billion,

<sup>45</sup> Advice provided to the Inquiry by Adelaide Bank.

<sup>46</sup> In 1995, there were 10.2 million non-cash transactions per day, compared to 8.4 million in 1991; APSC 1996, *Annual Report 1995/96*, p. 53.

of which around 80 per cent is attributable to paper clearing and over-the-counter cash (see Table 6.5).<sup>47</sup>

***Cheques and Over-the-Counter Cash  
Explain most of the Costs . . .***

Table 6.5: Costs incurred by Deposit Taking Institutions in Providing Payments Services

Payment Instrument	Estimated Total Annual Cost to Deposit Taking Institutions (\$million)
Over-the-counter cash	\$2,700-\$3,000(a)
Cheques	\$1,500-\$3,000(b)
Direct debit/credit	\$50-\$60
ATM network	\$320-\$400
EFTPOS network	\$220-\$260
Credit card transactions	\$270-\$300
High-value payments	\$10-\$20
Other costs	\$30-\$40
Total cost	\$5,140 to \$7,520

(a) Estimates based on Bain 1996; includes handling costs for institutions and retailers.

(b) Depending on whether branch-related costs are included or not.

Source: Interviews; industry estimates.

The conclusion from this analysis is that a migration from cheques to other payment mechanisms, such as direct entry or high-value systems, would yield significant cost savings. On the assumption that cheque usage could be reduced by 50 per cent and that costs are fully variable, the Inquiry estimates that savings in the order of \$700 million to \$1.4 billion are achievable.<sup>48</sup> This finding is consistent with the correlation between cheque usage and overall banking system cost identified in Figure 6.3 earlier in the chapter.

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47 Depending on whether cheque-related costs in branches are included or not.

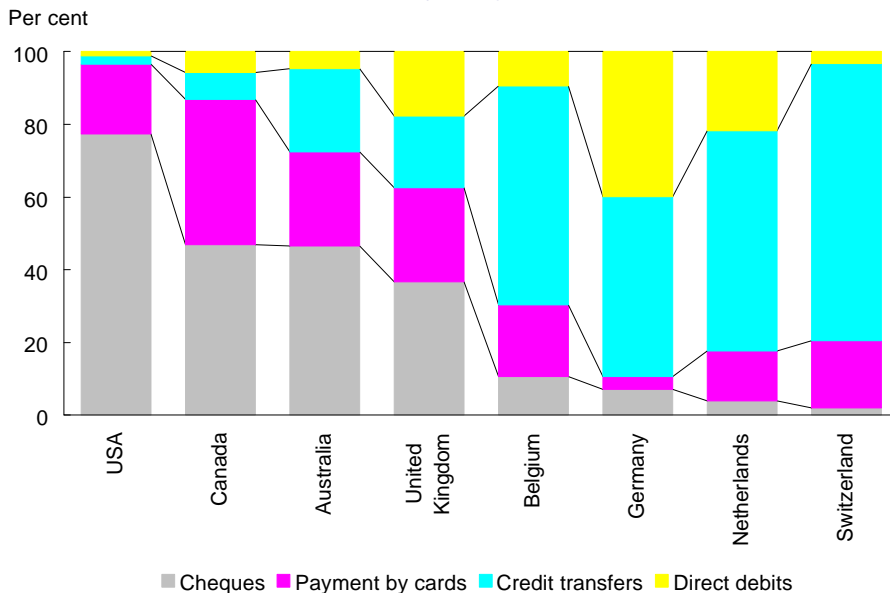
48 Assumes that cheque transactions would be replaced by direct entries and that relative costs (as per Table 6.4) stay unchanged. Variation reflects differences in estimated cost of cheque processing. Range is \$1.50 to \$3.00 per cheque.

## 6.2.2 Efficiency of the Payments System

International comparisons of the efficiency of individual countries' payments systems are unavailable. One proxy measure is to compare the relative importance of various payment instruments as shown in Figure 6.13.

### *Some Countries Use more Electronic Payments . . .*

Figure 6.13: Relative Importance of Non-Cash Instruments by Volume (1995)



Note: Data excludes transactions using ATMs. Credit transfers include both high-value payments and direct entry credits.

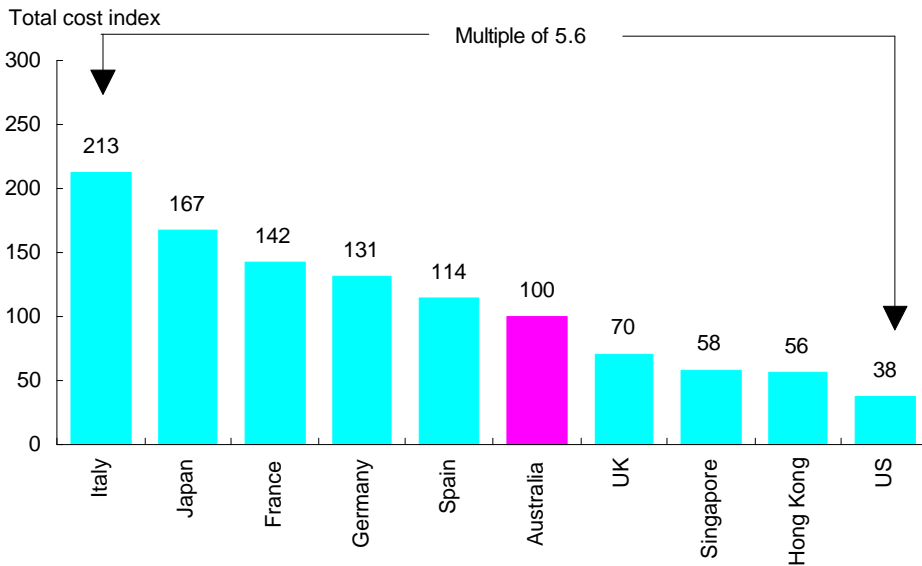
Source: BIS 1996, *Statistics on the Payments Systems in the Group of Ten Countries*; RBA and APCA (unpublished data).

Canada, the United States and Australia have a higher reliance on cheques than either Belgium or the Netherlands, where credit transfers predominate (reflecting the extensive giro systems operated by their respective postal authorities). While measures of the relative importance of payment instruments are interesting for comparative purposes, they disguise wide variations in the security and operational efficiency of the same payment instrument across countries.

An alternative perspective can be obtained by comparing data provided by an internationally active participant in consumer electronic payments systems. Figure 6.14 shows that costs (including labour, information technology and fees paid to third parties for acquired transactions) for identical functions vary by a multiple of over five between the highest cost and the lowest cost markets. Much of the difference can be explained by different agency agreements, scale of operations, and productivity variations. Australia is in the middle of the field.

**Australia is a Medium Cost Environment for Consumer Electronic Payments . . .**

Figure 6.14: Comparative Cost per Payment Transaction (1992)



Source: Data provided to the Inquiry by confidential source.

The technical and dynamic efficiency of the overall system is determined not only by the mix of payment instruments (cheques, direct entry credit and



debit, consumer electronic and high-value payments), but also by the operational efficiency of individual clearing streams.<sup>49</sup>

The remainder of this chapter discusses some aspects driving the efficiency of individual payments streams.

## Cheque Clearing

Australian cheque usage is high by international standards. As noted above, this has implications for the overall cost of the payments system because paper instruments are more expensive than electronic alternatives (see Table 6.4). While the relative importance of cheques is declining, no significant decline in the absolute number of cheques is evident. This can in part be explained by inefficient pricing which does not recover the full costs of providing cheque services. Inefficient pricing does not constrain demand for this expensive instrument.

Until recently, regulation contributed to inefficient processing procedures as physical presentment of cheques was required by legislation. The operating costs incurred by physical presentment could be largely reduced by truncation, which permits the storing of cheques at the location where they are presented and the electronic transmission of cheque details. Truncation is now permitted by law, but the industry has been slow to respond to this development due to the set-up costs involved.

Centralised processing provides a further means of reducing cheque processing costs and cheque clearing times.<sup>50</sup> However, banks have been reluctant to date to adopt centralised processing on a widespread scale, despite the availability of third-party processing capacity.

A final area of concern is cheque clearing times. Under current arrangements, retail and small business customers have to wait for up to eight days before being able to access their funds.<sup>51</sup> The concern here is one

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49 The individual payment streams are discussed in more detail in Chapter 9.

50 Clearing time increases in proportion to the number of direct clearing institutions in the chain and the distances between the point of collection and the processing centre.

51 Many large corporate customers have negotiated significantly quicker cheque clearing cycles with their banks.

of both reduced liquidity and of interest foregone as customers are prevented from transferring funds to higher-risk, higher-return investments.

### **Bulk Electronic Clearing Stream**

The direct entry credit system in Australia (Bulk Electronic Clearing System) has shown very strong growth since its inception. Government has led the way in moving regular, low-value payments such as salary and social security payments into electronic form. The private sector has followed because of the substantial cost savings available over other payment mediums.

Although growth in the use of direct debit has been much slower, the number of users increased by more than 40 per cent in the 12 months to January 1997.

Evidence provided to the Inquiry indicates that transaction costs per item are low and there is considerable potential for more payments to migrate to this system, particularly retail bill payments. Discussions with internationally active processors indicated that the security and efficiency of the bulk electronic payments system is high with the Australian system operating near international best practice in this area.

### **Consumer Electronic Clearing System**

The consumer electronic payment and clearing system covers debit transactions conducted through the ATM and EFTPOS networks.<sup>52</sup> While both credit and debit cards can be used to access deposit accounts or credit facilities over the networks, credit transactions are not cleared and settled in the consumer electronic clearing system but under separate arrangements. The emerging smart card technology with stored value functionality will also utilise existing ATM and EFTPOS networks.

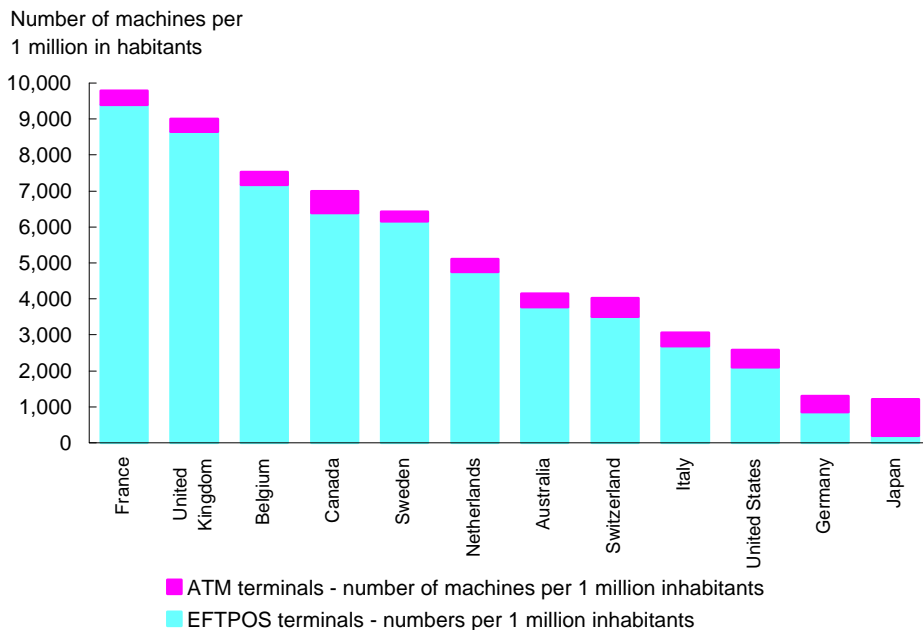
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<sup>52</sup> While the EFTPOS network has full interoperability, ATMs will only reach this stage later in 1997.

Figure 6.15 illustrates that, compared with other countries, the number of ATM and EFTPOS terminals in Australia (relative to the number of inhabitants) is average.

### ***Australian Penetration of ATMs and EFTPOS is Average . . .***

Figure 6.15: ATM and EFTPOS Penetration (1995)



Note: Not all systems have the same functionality (eg on-line capabilities) as those in Australia.  
 Source: BIS 1996, *Statistics on the Payments Systems in the Group of Ten Countries*, RBA and APCA (unpublished data).

Market participants indicated to the Inquiry that the security of the Australian electronic consumer system was world class, but that current industry arrangements imposed unnecessary costs. These impediments are discussed in Chapter 9.

## High-Value Systems

Currently, the high-value payments system comprises a number of separate systems. Some systems have the capacity for same day funds while others operate on a deferred settlement basis. High-value systems are owned and operated by the private sector (Austraclear), the major banks (BITS) and the Reserve Bank of Australia (RITS). The RBA has been developing a real-time gross settlement system (RTGS) to improve the efficiency and security of high-value payments and reduce systemic risk. With RTGS individual payments will be settled across exchange settlement accounts at the RBA as they are made. Some submissions queried whether the RTGS system being developed has been subject to an appropriate cost-benefit analysis but there was widespread support for the introduction of the system to reduce systemic risk.

## 6.3 Conclusion

The above discussion of relative cost efficiency shows that there are many areas in the financial system which would benefit from a redesign of regulation, to remove impediments and stimulate competition. Table 6.6 summarises these issues and lists the sections under which they are discussed in more detail, or where the Inquiry has made recommendations.

These recommendations will not automatically lead to the removal of all excess cost from the system, but they will facilitate the workings of competitive forces. The Inquiry believes that, based on the estimates made throughout this chapter, the regulatory reforms outlined could contribute significantly to reducing the total annual costs of over \$40 billion.

A lean, effective financial system brings many advantages to users which are illustrated by the benefits released through deregulation (see Chapters 15 and 17). The most direct and transparent benefit, the reduction of cost, accrues to consumers.

A more efficient financial system also has benefits for the wider economy as it releases resources for more efficient uses, and enhances Australia's global competitiveness.

***Regulatory Reform can Assist in  
Improving the Performance  
of Australia's Financial System . . .***

Table 6.6: Areas of Possible Improvement

Area	Improvement Potential	Areas of Regulatory Focus	Discussed in Section
Banks and other deposit taking institutions	Large	<ul style="list-style-type: none"> <li>◆ Ownership restrictions</li> <li>◆ CSOs</li> <li>◆ SME and other business lending</li> <li>◆ Active credit reporting and privacy issues</li> <li>◆ Technology platform</li> </ul>	Chapter 10, 8.6 11.5 11.6 11.6 11.4
Insurance companies	Medium	<ul style="list-style-type: none"> <li>◆ Superannuation choice</li> </ul>	11.2
Funds management	Large	<ul style="list-style-type: none"> <li>◆ Taxation</li> <li>◆ Widening competition</li> </ul>	11.3 11.2
Payments systems	Large	<ul style="list-style-type: none"> <li>◆ Access to clearing</li> <li>◆ Technology platforms</li> </ul>	Chapter 9
Other	Small	Various	Chapters 7, 8, 9, 10 and 11



