

## COMPILATION METHODS

1. This appendix explains how the data for the banks in each country were compiled. It notes where the data include operations in addition to the domestic bank. It also compares the Bank's measures of net interest income with those derived from OECD and Salomon Brothers data and explains relevant differences.

**Australia**

2. The data for Australia are for the four largest banks, ANZ Banking Group, Commonwealth Bank, National Australia Bank, and Westpac. These are full-service banks; they have large retail and wholesale customer bases; they have large non-intermediation business activities such as trading in securities and foreign exchange; and they are full participants in the payments system. In December 1993, the four banks comprised 68 per cent of total domestic assets of the Australian banking system.

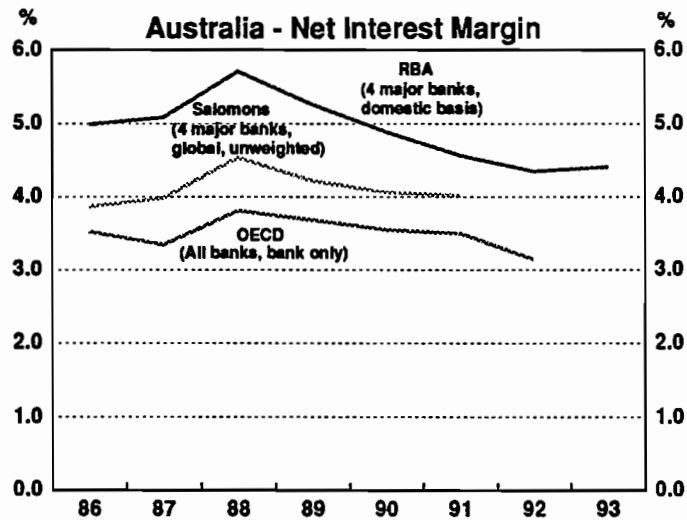
3. The four banks have extensive overseas operations and in some cases have large domestic non-bank subsidiaries. For this study, all overseas operations are excluded. The operations of domestic subsidiaries of the banks are included; in 1993 these comprised around 7 per cent of total domestic assets of the four banks.

4. The data are sourced mainly from annual reports and from the banks directly. Data for some items were not available on the required basis and these were estimated by reference to the relevant global and parent bank data.

5. Chart A6 compares the RBA data for net interest margins with those published by the OECD and Salomon Brothers. The OECD data are on a different conceptual basis from the data used in this study — they are for the parent bank and therefore cover the domestic and foreign branch operations — and are for all banks rather than just the four majors. Both the RBA and OECD series are weighted averages. The RBA series is consistently higher, reflecting the inclusion of domestic non-bank subsidiaries, which tend to have high margins, and the exclusion of overseas business where margins tend to be lower on average.

6. The Salomon data are for the four major banks but differ from the RBA data in a number of respects. They are for the global operations of the banks, including all offshore operations (subsidiaries and branches) and domestic non-bank subsidiaries. In addition, the data are an unweighted average of the four banks. The RBA data are higher than the Salomon series; again this reflects mainly the exclusion of low-margin overseas operations from the RBA data.

Chart A6



## Canada

7. The study covers the five largest commercial (chartered) banks, Bank of Montreal, Canadian Imperial Bank of Commerce, Royal Bank of Canada, Toronto Dominion Bank and Bank of Nova Scotia. These are what are known as Schedule 1 banks — banks which are majority Canadian owned and for which equity is widely held, with no one party allowed to own more than 10 per cent of the shares. These banks have no limits on branching and asset size, unlike Schedule 2 banks which are almost all foreign owned. The five banks selected comprise around 85 per cent of Canadian bank assets.

8. The selected banks have large retail and business customer bases, and are full participants in the payments system.

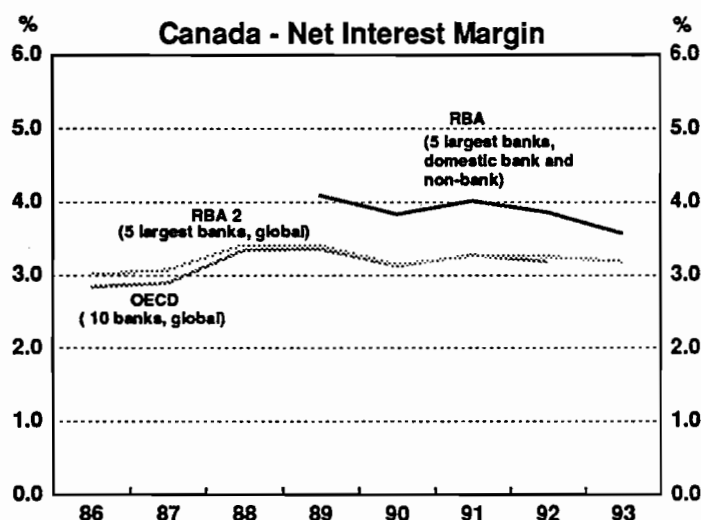
9. The RBA data relate to the domestic operations of these banks, including their non-bank subsidiaries. The non-bank subsidiaries include securities dealers, trusts and mortgage loan companies, and insurance companies. While precise information on the size of the non-bank subsidiaries is not available, mortgage loan companies, which have traditionally been the chartered banks' largest outside interests, make up about 20 per cent of chartered bank assets.

10. International branch and subsidiary operations, which together account for about 30 per cent of total assets, are excluded.

11. Data are sourced mainly from banks' annual reports. The Bank of Montreal and Canadian Imperial Bank of Commerce do not report some domestic profit and loss figures and balance sheet information on the required basis for recent years; these omissions are filled by using estimates prepared by Burns Fry Ltd, a Canadian stockbroker. None of the five banks publishes data on shareholders' funds apportioned between domestic and international operations; such data were estimated by apportioning shareholders' funds between domestic and international operations pro-rata with assets.

12. Chart A7 compares RBA and OECD data for net interest margins. Salomon do not list data for Canada. The OECD data cover a broader group of banks (10 rather than five) and are for global operations, including foreign bank branches and subsidiaries. Both series are weighted averages. The OECD data show considerably lower margins, reflecting the inclusion of foreign operations. The series denoted RBA 2 adjusts the RBA data for this effect by including the foreign operations of the five banks. This adjusted series lines up very closely with the OECD data. The foreign operations of the Canadian banks have much lower net interest margins than the domestic operations — about 2.0 percentage points for the foreign operations in 1992 and 1993 compared with between 3.5 and 4.0 percentage points for domestic operations.

Chart A7



### New Zealand

13. The study is based on the four largest banks, three of which are owned by the Australian major banks; Westpac NZ, ANZ Banking Group NZ, and Bank of New Zealand (now owned by National Australia Bank). The fourth bank, National Bank of New Zealand, is owned by Lloyds Bank(UK). All of these are full-service banks (called "multi-purpose" banks in New Zealand). They comprise about 75 per cent of total bank assets in New Zealand.

14. The New Zealand banking industry has experienced a number of mergers and acquisitions in recent years. Data on the four banks are affected in the following ways: ANZ Banking Group NZ figures include the operations of PostBank from 1993, and National Bank of New Zealand figures include the operations of Rural Bank from 1992.

15. The data relate to the total operations of the banks, including non-bank subsidiaries. Offshore operations are not excluded but, apart from those of Bank of New Zealand, these are very small because the banks are themselves offshoots of larger foreign banks. Data are sourced from banks' annual reports, except those for Westpac which are from the prospectuses issued by Westpac twice a year

covering its New Zealand banking operations and those of its guaranteeing subsidiaries — i.e. its subsidiaries in New Zealand which guarantee certain debt securities issued by the Bank.

16. The OECD and Salomon Brothers do not publish data for New Zealand.

### United Kingdom

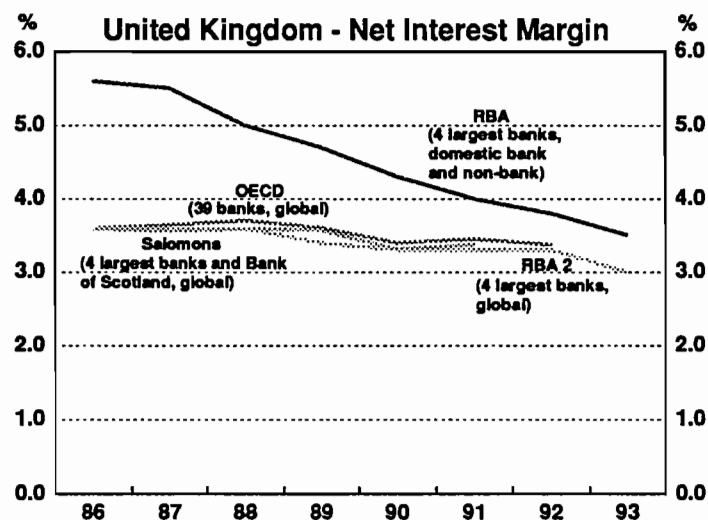
17. The data are for the four high street clearing banks - Barclays Bank, Lloyds Bank, National Westminster, and Midland. These are all full-service banks with large retail and wholesale customer bases and are full participants in the payments system. Their aggregate assets comprise around two thirds of British bank assets.

18. The RBA data are for the domestic operations of the banking group, including non-bank subsidiaries. Data on this domestic basis are only available for 1992 and 1993, except for net interest margins which are available for a longer time period.

19. Chart A8 compares the RBA series for net interest margins with those of the OECD and Salomon. Salomon data are for five banks, while the OECD is for 39 banks; both use global data. Despite differences in the number of banks covered, these two series are similar probably due to the predominance of the large four clearers.

20. The RBA series is higher than the other two series, but falls more quickly. The difference is due to differences in coverage — the RBA series excludes the foreign operations of the banks. When these operations are included (the RBA 2 line), the results are very close to the OECD and Salomon series.

Chart A8



## United States

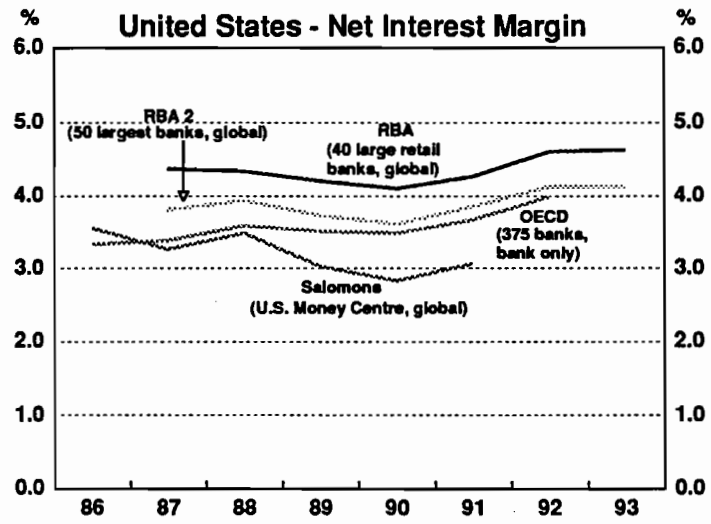
21. There are about 12,000 banks in the United States, with no self-selecting group which is comparable with the Australian major banks. The study is based on the 50 largest banks (bank holding companies) from which the 10 money centre banks are then excluded. The remaining 40 banks are listed in the database and include the well known regional or superregional banks such as Banc One, Nationsbank and Wells Fargo. The full list is given in Appendix 3. There is some difference of opinion among banking analysts as to which banks qualify as money centre banks. For this study, the 10 banks which are classified as money centre banks are Bankers Trust, Bank America, Chase Manhattan, Chemical, Citicorp, J.P Morgan, Bank of Boston, Bank of New York, State Street Boston, and Republic New York Corporation. These banks typically have a low proportion of their assets in consumer and commercial loans, and a high proportion offshore.

22. The data for the 40 banks are on a bank holding company basis. This includes both domestic non-bank subsidiaries and overseas operations. Any bias to the margin figures from these inclusions should be minor as the 40 regional banks have little or no overseas business, unlike the money centre banks which have significant overseas operations (averaging about 20 per cent of assets). Data are sourced from the Federal Reserve, and are based on published financial statements.

23. Chart A9 compares the RBA, OECD and Salomon data for net interest margins. The OECD figures are for a weighted average of 375 banks, on a domestic bank basis, excluding overseas branch operations. They show lower margins than the RBA; this reflects the inclusion of the money centre banks which have lower margins than the rest of the US banking industry. The RBA 2 line shows the RBA data including the money centre banks. From 1990 the OECD and RBA 2 lines are very close.

24. Salomon data are an unweighted average of the global operations of some of the money centre banks; these on average have margins about 1 percentage point lower than the regional banks chosen for this study.

Chart A9



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