

## Chapter 2 The financial services industry: depository institutions

### Chapter outline

#### Banks

- Size, structure and composition of the industry
- Balance sheet and trends
- Bank performance

#### Credit unions and building societies

- Size, structure and composition of the industry
- Balance sheet, performance and trends

#### The regulation of Australian depository institutions

- The key legislation
- The regulatory agencies
- Australian prudential supervision framework
- Overview of the regulation of depository institutions

### Learning objectives

- 2.1 Learn the different types of depository institutions in Australia and how they compete in the same market and face similar risks.
- 2.2 Gain an understanding of the major activities of banks and the industry structure.
- 2.3 Gain an insight into the balance sheet of banks and the trends in assets, liabilities and capital.
- 2.4 Appreciate the key performance ratios of banks and the trends in bank performance.
- 2.5 Learn the history of the industry comprising credit unions and building societies and the structure of their industry.
- 2.6 Gain an understanding of the changing shape of the market for credit unions and building societies and how they have performed.
- 2.7 Appreciate the regulatory framework governing the activities of Australian depository institutions and the key regulatory agencies.
- 2.8 Understand the key areas of regulation and the reasons why these areas are targeted for regulation.

Appendix 2A Financial statement analysis using a return on equity framework (online)

### Overview of chapter

This chapter provides an overview of the major activities of Australia's banks, building societies and credit unions. The size, structure and composition of banking and the mutual organisations is covered along with a discussion of recent trends in balance sheet structure and performance. It also describes the regulation of Australian depository institutions (DIs) and the various agencies that regulate them. DIs rely heavily on retail deposits to fund their activities, although wholesale borrowing and offshore funding are increasingly important sources of funds, particularly for the major banks. Historically, banks have offered a full range of services to both retail and corporate customers and Australia's major banks concentrate much of their effort in the provision of banking and investment banking services to businesses. Building societies and credit unions, on the other hand, focus on retail business, with loan portfolios dominated by residential mortgage lending. These differences are being eroded due to competitive forces, regulation and changing financial and business technology.

### Chapter 2 Teaching Suggestions (including some comments on Chapter 3)

For simplicity, some lecturers may wish to commence any course on bank/financial institutions' risk management with this chapter and Chapter 3—which are both descriptive in nature and provide the institutional arrangements and background for the discussion of

bank/FI risks and their management.

I would strongly recommend against this approach for many reasons, but principally for one. While relatively simple for students new to the study of institutional risks, essentially the discussion of the institutional arrangements is very dry—and not a good way to stimulate students in preparation for the intensive examination of the key issues discussed in the course.

Higher level courses may leave this chapter as reading matter only—and not directly covered, but drawn upon during the ensuing discussion of the various risks and their management.

If both Chapters 2 and 3 are covered in lectures, then I suggest that they form a part of the introductory lecture where balance sheets of the various FIs can be examined in light of a discussion of either ‘specialness’ or other aspects of the lecture built around the issues in Chapter 1.

The start of the lecture is to identify the various services offered by a bank (Tables 2.1A and 2.1B), and relate these to the evolution of banking over the past few decades, and the specialness aspects discussed in Chapter 1.

A good way to approach the discussion of the institutional arrangements is to either use the material in the book, or alternatively get copies of a major bank’s latest annual report (say Westpac), and focus on the items in the typical balance sheet and performance reports.

From this, you could then ask questions such as:

- What is the concentration of Australia’s major banks in terms of assets?
- How profitable are the Australian banks and how does their performance compare with the credit unions and building societies?
- What is the largest asset type in the Australian bank balance sheet? (Housing loans)
- Does the concentration of housing loans in the balance sheets of Australian DIs put them at more risk than their international competitors? (This question gives you a chance to commence discussion of the various credit related risks in the balance sheets—that is, credit risk, concentration risk, etc.) At this point, you may also wish to comment on the findings of the Financial System Inquiry 2014 that suggest that the smaller banks are at a disadvantage to the major banks in the housing loan market. (Also look at the Learning from the Financial System Inquiry box in Chapter 2, ‘The too big to fail subsidy’, page 52.)
- What are the main types of liabilities in the balance sheets? (You can refer this to the ensuing discussion of liquidity risk and interest rate risk.)

The issue of capital and its adequacy could be introduced by referring to the Financial System Inquiry Report 2014, which recommended that the major banks hold higher levels of capital than that currently required by APRA. While the discussion of capital and its role is left for Chapter 18, it is important to introduce students to all risks, including survival risk—solvency risk—at this stage, so that they realise the importance of capital and the maintenance of equity value for the DIs.

An examination of the performance reports allows a discussion of the ways DIs make their profit, and with this a discussion of interest rate spread and fees. The issue of which is more important for the Australian major banks, other Australian DIs, foreign banks, etc. can also be explored. The risk of interest rate spreads versus fees is also a good discussion point.

Again, with the examination of income-earning potential, the risks to earning capacity can be broached. Clearly, the risks are the same as those from the discussion of the balance sheet, but the question about how these risks affect profitability can now be addressed.

For example, you could ask:

- Which income type (interest rate spreads or fees) has the higher risk potential?
- What risks are inherent in each income type?

Finally, Chapter 2 covers the regulation of DIs, and the regulatory agencies. Note that the Australian Prudential Supervision Framework is also covered in Chapter 2 and that this framework is relevant to all APRA regulated institutions—that is, it includes the insurers and superannuation funds which are discussed in Chapter 3.

A key discussion point at this juncture is the role of regulation—that is, what is the regulator trying to achieve?

Depending on the course content, if it is a bank or DI related course, then the next relevant chapter is Chapter 4 which introduces all the major risks of FIs. If the course has broader coverage of all FIs, then a quick overview of the other FIs (see Chapter 3) is required. However, please remember that the Prudential Supervision Framework discussed in Chapter 2 is relevant to the key institutions covered in Chapter 3.

## Answers to end-of-chapter questions

### Questions and problems

- 1 How have the risks and products sold by the financial services industry changed since 1950? **LO 2.1**

The financial services industry today is very different from that in 1950. In 1950, the financial institutions (FIs) were more specialised, each offering a distinct set of products/services. Today, however, the activities and products of the various FI types are more blurred, with many overlapping functions and risks. The risks faced by modern FIs are becoming increasingly similar because of this.

- 2 Describe the structure of the banking industry and discuss the reasons for any changes. **LO 2.1, 2.2**

Since the 1980s the number of banks has increased from 13 in 1985 to 63 in 2012. Moreover, there are many foreign banks (either subsidiaries or branches), which make up 48 of the total number of banks. However, while the number of banks has grown, there has been considerable consolidation of the industry over the 30 years to 2012. Despite this, the industry is highly concentrated. Reasons for the changes are many and include the following. Many building societies gained banking licences and most of these—plus other smaller banks—have been taken over by the larger banks. The four major banks hold 77 per cent of all bank assets and 79 per cent of total bank loans (as at January 2012). While there was intense competition for banks during the 1990s and early 2000s from building societies, credit unions and other mortgage originators—particularly in the residential housing loan market—the competition diminished through the global financial crisis (GFC). The main reason for this was that as the GFC had been caused by the failure of appropriate risk assessment of many mortgage-backed securitisation (MBS) programs, access to securitisation markets essentially closed after 2008. As many of the smaller Australian depository institutions (DIs) including building societies used securitisation for funding their increasing asset base, they lost competitiveness as this source of funds dried up. Despite government support for the MBS market and the same regulations for all DIs, banks were perceived as safer institutions and they increased their market share of housing mortgages. Moreover, the banks were also able to capture a higher proportion of deposits as Australian households became more cautious and increased savings.

- 3 What are the major sources of funds for banks in Australia? What are the major uses of funds for banks in Australia? **LO 2.3**

Sources of funds:

- local deposits
- local wholesale funding (interbank funds)
- international wholesale funding
- equity (and other capital components).

Uses of funds:

- loans and advances:
  - home mortgages
  - commercial loans
  - bank accepted bills
  - commercial bills
  - promissory notes
  - corporate bonds and debentures

- interbank lending
- securities including:
  - government securities
  - other bank securities
  - corporate bonds
  - securitised assets
- foreign currency and foreign currency assets
- cash and deposits with the RBA.

4 Contrast the activities of the four major Australian banks with those of the regional banks. **LO 2.2, 2.3**

The four major banks cover most financial services including retail banking, commercial banking, investment banking, life and general insurance, and funds management. Regional banks tend to operate in the retail market only—consumer and small business market.

The four major banks have a national focus and offer banking at corporate and retail levels, not only throughout Australia but also through small operations overseas. Many of the regional banks were building societies that converted to banks and thus tended to conduct their activities within the confines of the region or state where they had traditionally operated. More recently the regional banks have started to expand across state borders, moving away from their traditional markets. Owing to their origins, the assets of the regional banks have been predominantly in residential housing loans.

The large banks have enhanced their margins by offering a full range of services to retail, small and large corporate customers, and through international diversification. Owing to their size, global presence and reputation, they can access funds more cheaply than the regional banks and can often offer funds to their customers at a slight premium because of the additional services provided. The large banks also have greater access to the international markets for funding because of their size and consequent reputation—which is often a key factor in the Euromarkets for example.

5 Why did bank net interest margin fall from 2000 to 2013? Why wasn't bank ROE affected? **LO 2.4**

Australian bank net interest margins have been falling since the 1980s due to deregulation of the financial markets and new technologies as well as regulatory change and the focus on improvements in quality capital. However, their return on equity has remained at a long-term average of 16 per cent. Total bank returns are made up of interest income and fee income, and fee income has represented one-quarter of bank operating income since 2004.

6 Why was the structure of Australian banks' liabilities in 2008 found to be a weakness? What have the banks done to change this? **LO 2.3**

A trend in the structure of bank liabilities was an increased reliance on offshore wholesale funding. In 2008 with the collapse of Lehman Brothers, credit markets essentially froze, as did access to global funding markets. As nearly 25 per cent of bank funding came from offshore lenders, Australian banks needed to attract more stable types of liabilities, such as domestic deposits. The government introduced a number of measures to assist the banking (DI) industry, including the Financial Claims Scheme and investment in local mortgage-backed securities. Prior to the GFC much of the funding for MBS had come from international investors.

7 What is driving the banks' changing capital base, and in particular the emphasis on common equity? **LO 2.3, 2.8**

Banks are improving the quality of their capital for two main reasons:

- bank regulations require it—and emphasise common equity and increased capital adequacy ratios for Tier 1 capital, as the lower quality forms of regulatory capital were not effective in absorbing the many bank losses during the GFC
- for global competitive reasons, banks have recognised that there is a need to strengthen their capital base, knowing that many large banks failed during the GFC.

8 Describe the factors influencing the decline in the number of building societies. **LO 2.5**

Building societies were originally set up to pool small deposits from individuals and households in order to finance mortgage lending. Residential home ownership was highly desired by Australians and as it was difficult to obtain home finance from banks in the regulated environment, building societies were able to fill the breach and thrived. With the deregulation of banks and the growth of the securitised mortgage market, the value of the intermediation function performed by building societies and credit unions (funneling small savings into home mortgage lending or shorter term lending) was eroded by competition. Deregulation of the financial industry freed the banks' capacity to extend home loans to individuals, which resulted in increased competition from the banking sector, making it more difficult for NBFIs to survive in their previous form. As a result many smaller societies and credit cooperatives have merged, while larger building societies converted to banks, allowing them to offer more services (although more recently building societies have been able to expand the range of services on offer) and giving them instant access to clearing house funds. This conversion from building society status to bank status resulted in an overall loss in market share for building societies.

9 What are the similarities and differences between the three major groups of authorised deposit-taking institutions in Australia? **LO 2.1, 2.2, 2.6**

The two types of non-bank DIs in Australia are building societies and credit unions. Generally, both began life as cooperative organisations, regulated under state or territory legislation (building societies increasingly now have issued share capital). However, with regulatory restructure in the late 1990s, both are now regulated in the same way as the banks—by APRA. Credit unions tend to provide retail finance and their members are usually linked by a common bond such as an employer or profession, which is not the case with building societies. While credit unions have moved into longer term lending and specifically into housing loans, building societies have always focused on longer term lending. The difference between the two groups in lending maturity is now far more blurred than when they were originally established.

Banks are the third type of DI in Australia and are far larger than building societies or credit unions. Banks also operate in a far broader range of financial services than either building societies or credit unions, as they can leverage their size and distribution networks effectively. They operate in retail, commercial and investment banking as well as insurance and funds management. All Australian depository institutions are regulated by APRA in the same way.

10 What is the Australian Prudential Regulation Framework and what does it aim to do? **LO 2.7**

The regulation and supervision of Australian FIs is guided by APRA's Australian Prudential Supervision Framework, developed in 2003–2004. The framework requires the identification of FI risks and then provides for supervisory action by APRA to keep the FI's risks at a level that APRA deems appropriate. Since its introduction, the framework has evolved to incorporate new risks, changing environments and changing international standards. The scope of APRA's supervisory framework is broad and covers all activities, supporting procedures, processes, systems and guidelines that are necessary to form risk assessments and supervision strategies. There are five parts of APRA's framework for prudential supervision: supervision outcomes and responses; entity risk assessment; supervisory activities; supporting material and infrastructure; and quality assurance within the framework.

11 How has the regulation of building societies and credit unions changed since 1999?

**LO 2.8**

Regulation of bank interest rates and exchange rates was dismantled in the 1980s, leaving banks free to determine product prices. At the same time the regulatory approach changed from control bank activities to prudential supervision. Responsibility for prudential management lies with the banks' management, while RBA's role was to ensure it is carried out effectively. At that time building societies and credit unions were regulated by the Australian Financial Institutions Commission (AFIC). In 1998, regulation of the financial services industry was restructured and the Australian Prudential Regulation Authority (APRA) was established to supervise the activities of all depository institutions previously covered by the RBA and AFIC. From 1999, the regulation of banks, credit unions and building societies was exactly the same and was the responsibility of APRA.

12 What is the key focus of DI regulation? **LO 2.8**

The regulation of DIs covers a number of areas, but principally the focus is on capital, liquidity and credit risk management. The objective of regulation is to ensure the stability of the banking system and the protection of depositors.

The following questions refer to Appendix 2A.

13 What is the likely relationship between the interest income ratio and the non-interest income ratio? **LO 2.4**

Interest income and non-interest income are not independent. For example, loans generate interest income and also non-interest income (fees and servicing fees etc.). Thus the relationship between the interest income ratio and the non-interest income ratio is likely to be positive—that is, they are most likely to move in the same direction. Thus the more loans sold, the higher the loan interest income and the higher the loan fees and servicing charges.

14 Given the following balance sheet and income statement for Mega Bank, calculate:

**LO 2.3, 2.4**

- (a) return on equity
- (b) return on assets
- (c) asset utilisation
- (d) equity multiplier
- (e) profit margin
- (f) interest expense ratio
- (g) provision for loan loss ratio
- (h) non-interest expense ratio
- (i) tax expense ratio.

**Mega bank balance sheet (\$ million)**

<b>Assets</b>		<b>Liabilities and equity</b>	
Cash and due from bank	9 000	Cheque accounts	19 000
Investment securities	23 000	Savings accounts	89 000
Repurchase agreements	42 000	Negotiable CDs	28 000
Loans	90 000	Debentures	19 000
Fixed Assets	15 000	<b>Total liabilities</b>	<b>155 000</b>
Other Assets	4000	Share capital	16 000
	<hr/>	Retained earnings	12 000
<b>Total assets</b>	<b>183 000</b>	<b>Total liabilities and equity</b>	<b>183 000</b>

**Mega bank income statement (\$ million)**

Interest on fees and loans	9 000	
Interest on investment securities	4 000	
Interest on repurchase agreements	6 000	
Interest earned on deposits	1 000	
<b>Total interest income</b>	<b>20 000</b>	
Interest on deposits	9 000	
Interest on debentures	2 000	
<b>Total interest expense</b>	<b>11 000</b>	
<b>Net interest income</b>	<b>9 000</b>	
Provision for loan losses	2 000	
Other income	4 000	
Other expenses	1 000	
<b>Income before taxes</b>	<b>10 000</b>	
Taxes	3 000	
<b>Net income</b>	<b>7 000</b>	

a	return on equity	25.00%
b	return on assets	3.83%
c	asset utilisation	4.92%
d	equity multiplier	6.54 times
e	profit margin	53.85%
f	interest expense ratio	84.62%
g	provision for loan loss ratio	15.38%
h	non-interest expense ratio	23.08%
i	tax expense ratio	23.08%

Note that total operating income = net interest income plus other income = \$13 000

15 Bold Bank has the following ratios:

- (a) profit margin 21 per cent
- (b) asset utilisation 11 per cent
- (c) equity multiplier 12 times

Calculate Bold Bank's ROE and ROA. **LO 2.3, 2.4**



$$\text{ROA} = \text{PM} \times \text{AU} = 2.31\%$$

$$\text{ROE} = \text{ROA} \times \text{EM} = 27.72\%$$

**Web questions**

- 16 Go to APRA's website and find the latest information on Australian bank, building society and credit union asset concentration. **LO 2.6**

Go to the APRA website ([www.apra.gov.au](http://www.apra.gov.au)) and click on 'Authorised Deposit Institutions', and then on 'Statistics'. You can then go to the various statistics for each of the ADIs—that is, ADI Quarterly Performance Statistics for banks, building societies and credit unions. The answer will depend on the date of the assignment.

- 17 Go to the APRA website and update the balance sheets shown in this chapter for banks, building societies and credit unions. **LO 2.3, 2.6**

Go to the APRA website and get the latest data for Tables 2.4 and 2.10. Go to the APRA website ([www.apra.gov.au](http://www.apra.gov.au)) and click on 'Authorised Deposit Institutions', and then on 'Statistics'. You can then go to the various statistics for each of the ADIs—that is, ADI Quarterly Performance Statistics for banks, building societies and credit unions. The answer will depend on the date of the assignment.