

Box A

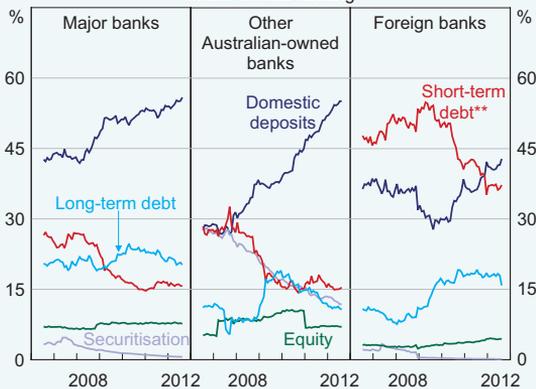
Funding Composition of Banks in Australia

Since the onset of the global financial crisis, there has been a pronounced shift in the funding composition of banks in Australia. In particular, there has been a move away from the use of wholesale debt securities, including securitisation, towards domestic deposits. The crisis spurred banks, investors and regulators globally to reassess funding risks, and the Australian banks have responded to the resulting pressures to secure more stable funding sources. An increase in the use of deposits has been evident across all types of banks in Australia, although it has been most pronounced for the regional and other smaller Australian-owned banks, which had previously used securitisation more heavily (Graph A1). These banks have increased their share of deposits broadly across most products, whereas most of the growth in the major and foreign-owned banks' deposits (and the banking sector's deposits as a whole over recent years) has been concentrated in term deposits. Reflecting greater competition, term deposits now attract higher interest rates than a number of other forms of deposits and wholesale debt securities of a similar maturity.¹

Australian banks in aggregate have also slightly increased stable funding in the form of long-term wholesale debt and this has been complemented by a sharp fall in the share of short-term wholesale debt. Most of this decline was in domestic debt; the share of domestic short-term debt in total bank funding has declined from a peak of over 20 per cent in early 2008 to around 10 per cent recently (Graph A2). The share of short-term debt issued overseas has fallen somewhat less, from a peak of 15 per cent of funding prior to the crisis to 12 per cent currently. There

¹ For more in-depth discussion of the role of deposits in bank funding costs, see Deans C and C Stewart (2012), 'Banks' Funding Costs and Lending Rates', *RBA Bulletin*, March, pp 37–43.

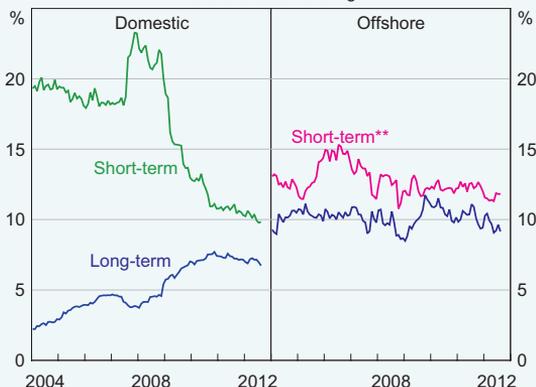
Graph A1
Funding Composition of Banks in Australia*
Share of total funding



* Adjusted for movements in foreign exchange rates; not adjusted for mergers and changes in capital structure

** Includes deposits and intragroup funding from non-residents
Sources: APRA; RBA

Graph A2
Wholesale Funding of Banks in Australia*
Share of total funding



* Adjusted for movements in foreign exchange rates; wholesale debt is on a residual maturity basis

** Includes deposits and intragroup funding from non-residents
Sources: APRA; RBA

are a number of possible reasons why the share of domestic short-term debt has declined more than that of offshore short-term debt. Domestic investors are likely to have had more opportunity to substitute away from short-term debt securities,

such as certificates of deposits, to term deposits offering higher interest rates. Banks are also holding less of each other's securities now than at the height of the global financial crisis. Additionally, as banks have tried to increase the average maturity of their funding, they have been relatively more inclined to reduce issuance of domestic short-term debt, which typically has shorter maturities than short-term debt issued offshore because the two investor bases have different preferences. Estimates suggest that the average residual maturity of banks' offshore short-term wholesale debt is around four months, while that of domestic debt is generally less than two months. Within banks' offshore short-term funding, around half is debt securities, mainly commercial paper, with the remainder being deposits whose maturity characteristics will often be similar to that of debt securities (Table A1).

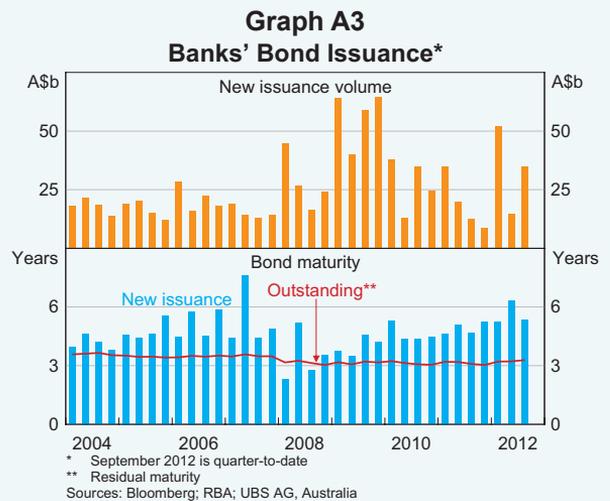
Long-term wholesale debt currently accounts for about 16 per cent of banks' funding, up from a low of about 13 per cent in late 2007. Most of the increase has been in domestic long-term debt; the share of offshore long-term debt has been broadly unchanged since 2007. After rising initially following the onset of the crisis, the share of long-term debt has declined a little in the past year or so, as strong deposit growth and modest credit growth has reduced the banks' wholesale funding requirements. Although the term to maturity of newly issued bonds has increased, because issuance levels have not been particularly high the average residual maturity of banks' long-term wholesale debt has hardly changed in recent years, remaining at just over three years (Graph A3).

Around 15 per cent of banks' liabilities are denominated in foreign currency, with non-resident liabilities comprising around 90 per cent of this share. The foreign currency share of banks' liabilities has fallen by about 3 percentage points over the past two years. The long-standing and prudent practice of hedging foreign-currency denominated exposures back into Australian dollars ensures that

Table A1: Offshore Short-term Debt Funding of Banks in Australia^(a)
August 2012, share of total

Debt securities	5.6
Intragroup deposits	3.7
Other deposits	2.5
Total	11.8

(a) Adjusted for movements in foreign exchange rates
Sources: APRA; RBA



fluctuations in exchange rates have little effect on domestic banks' profits or equity.²

The funding composition of Australian banks can be compared with banks in other advanced countries using a number of simple metrics, such as the wholesale funding ratio, the customer deposit funding ratio, the foreign funding ratio and the loan-to-deposit ratio. Cross-country comparisons are complicated by a lack of fully consistent data, but some general observations based on estimates of these metrics for different banking systems can still be made. The Australian banking system has a wholesale funding ratio of about 34 per cent, which is similar to Sweden, but higher than a number of other countries (Table A2). Euro area banks have

² For more information, see RBA (2010), 'Box B: Foreign Currency Exposure and Hedging Practices of Australian Banks', *Financial Stability Review*, March, pp 38–40.

Table A2: Bank Funding Structures in Selected Countries^(a)
June 2012, per cent

	Wholesale funding ratio ^(b)	Customer deposit funding ratio ^{(b),(c)}	Foreign funding ratio ^(d)	Loan-to-deposit ratio
Australia	34	49	24	135
Canada	23	67	10	103
Euro area	23	41	15	110
<i>France</i>	20	32	19	110
<i>Germany</i>	20	46	18	107
Japan	21	72	12	73
Sweden	33	40	34	129
Switzerland	21	55	27	97
United Kingdom	24	59	48	138
United States	13	73	24	77

(a) Funding ratios across banking systems are subject to definitional differences; certificates of deposits are classified as wholesale funding in all countries except Canada and the United States, where these instruments are eligible for deposit insurance

(b) Expressed as a share of funding liabilities (total liabilities including equity less derivatives and other non-debt liabilities)

(c) Customer deposits are total deposits minus deposits from banks and other monetary financial institutions

(d) Gross foreign liabilities of BIS reporting banks on a locational basis, expressed as a share of total liabilities and equity; data as at 31 March 2012

Sources: APRA; BIS; Bloomberg; FDIC; OSFI; RBA; central banks

lower wholesale funding ratios but they also make more use of interbank deposits than Australian banks; these deposits are not counted as part of wholesale funding, but arguably share similar characteristics. US and Canadian banks' certificates of deposit are not recorded as wholesale funding, even though at least some investors in these instruments may behave in a similar way. While wholesale funding is often assumed to be less stable than customer deposit funding, a higher wholesale funding ratio for the Australian banking system does not necessarily indicate higher funding risks – the maturity and diversity of wholesale funding are also important factors to consider; as noted earlier, some wholesale funding is at quite long terms. Also, because an investor's decision to lend to a bank is largely based on a credit assessment of the bank's assets, the Australian banks' fund-raising activities in global capital markets has created a strong incentive for them to maintain high credit ratings

and sound asset quality, factors which improve the stability of their funding base.³

Australian banks' use of foreign funding is also often singled out by some observers as a potential source of vulnerability. However, the foreign funding ratio for the Australian banking system is lower than for banking systems in Europe outside the euro area, mainly because Australian banks raise little non-resident deposit funding. Non-resident deposit funding can be less stable than domestic deposits, as the recent experience of some euro area banking systems demonstrates (see 'The Global Financial Environment' chapter). Also, as noted earlier, Australian banks hedge almost all of their foreign currency denominated exposure to manage the foreign exchange risk.

³ On the importance of maintaining high-quality assets, see Debelle G (2011), 'Collateral, Funding and Liquidity', Address to Conference on Systemic Risk, Basel III, Financial Stability and Regulation, Sydney, 28 June.

The loan-to-deposit ratio for the Australian banking system is higher than those for the other large advanced banking systems in Table A2, with the exception of the United Kingdom, though it is comparable to that in Sweden. The Australian banks' ratio has declined significantly since the onset of the global financial crisis, as deposit growth has outpaced credit growth. Loan-to-deposit ratios can be misleading indicators of the vulnerability of a bank's funding profile: very different ratios can apply to banks with the same funding mix but different shares of banking and trading book assets on their balance sheets. In the Australian banks' case, the relatively high loan-to-deposit ratio partly reflects their lower share of trading book assets. A low loan-to-deposit ratio is not necessarily an indicator of stability as there are numerous instances over recent years where banks have invested their 'excess' deposits in trading securities or other assets that proved to be riskier than domestic loans. ↘