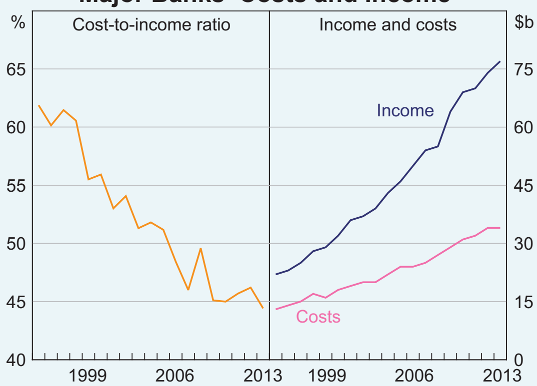
Box B

# Australian Major Banks' Cost-to-income Ratios

Improvement in operational efficiency is one factor underlying the strong profitability of the four major Australian banks over the past couple of decades. Operational efficiency in banking is commonly proxied by the cost-to-income (CI) ratio – that is, the ratio of total operating costs (excluding bad and doubtful debt charges) to total income (the sum of net interest and non-interest income). The major banks' aggregate CI ratio has fallen by just under 20 percentage points since the mid 1990s, to be 44 per cent in the 2013 financial year (Graph B1).[1]

**Graph B1**
**Major Banks' Costs and Income***




* Measured on an underlying basis; data from 2006 are on an IFRS basis, while prior years are on an AGAAP basis; includes St. George and, from 2009, Bankwest

Sources: Banks' Annual and Interim Reports; RBA

The Australian major banks' CI ratios have been at the bottom end of the range of their peers internationally in recent years, contributing to their relatively higher profitability (see Graph 1.8 in the 'The Global Financial Environment' chapter).[2] Reported CI ratios vary widely across a sample of 52 large international banks (Graph B2). Hong Kong banks recorded the lowest CI ratios in 2013 at 32 per cent, followed by New Zealand, Australian and Swedish banks, which had CI ratios below 50 per cent. Given the New Zealand banks are subsidiaries of the Australian major banks, it is not surprising that their CI ratios were similar to those of their Australian parents.[3] In contrast, CI ratios for large banks in Switzerland, Germany and the United Kingdom were relatively high in 2013, at above 70 per cent. The most notable change compared with 2007, just prior to the financial crisis, is that some German and United Kingdom banks' CI ratios were significantly higher in 2013, reflecting large declines in income. CI ratios were broadly unchanged over this time in those banking systems with the lowest CI ratios, including Australia.

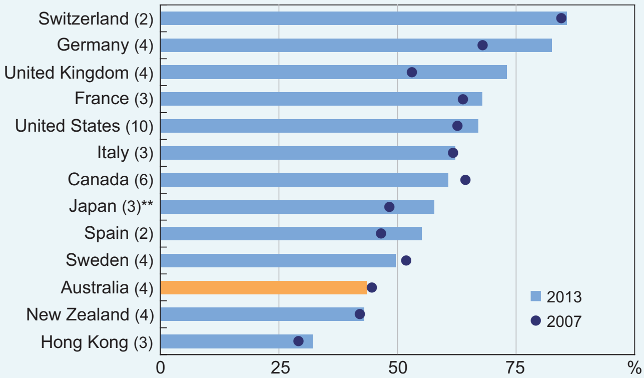
Banks' CI ratios can be decomposed into various categories of operating costs: personnel, occupancy, information technology (IT) and 'other' costs (which include expenses such as fees and commissions, marketing and litigation) (Graph B3). Personnel and 'other' costs are the largest components of banks' total costs and, as such, are important drivers of CI ratios. Those banks which reported the lowest CI ratios in the sample also had the lowest personnel and 'other' costs-to-income. Most European banks, in particular Swiss banks, reported relatively high personnel and 'other' costs-to-income. There is less variation in occupancy and IT costs-to-income across banks, although it is notable that the Australian major banks recorded among the lowest occupancy costs-to-income in 2013.

1 This has been an offset to the decline in the major banks' net interest margin over this period.

2 For example, the Australian major banks were ranked as the most profitable among their advanced economy peers in the 2012/13 and 2013/14 Annual Reports of the Bank for International Settlements.

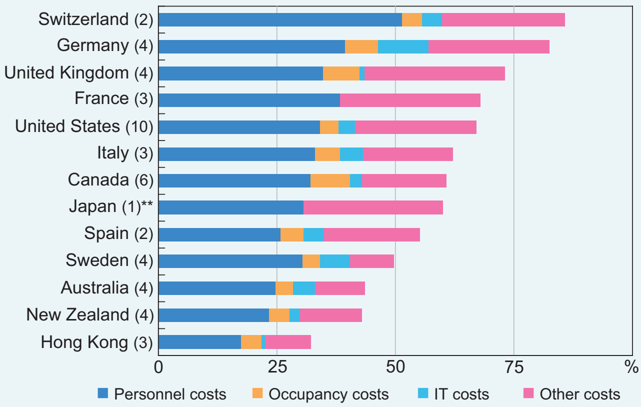
3 The New Zealand subsidiaries have similar business models to their Australian parents and are likely to have benefited from similar efficiency improvements. Nonetheless, the New Zealand subsidiaries have been included separately because the cost structure in the New Zealand economy could differ from that in Australia.

## Graph B2
## Large Banks' Cost-to-income Ratios*
Consolidated, selected banking systems




* Numbers in parentheses refer to the number of banks in sample
** Includes one Japanese bank in 2007 due to data availability
Sources: RBA; SNL Financial

## Graph B3
## Decomposition of Cost-to-income Ratios*
Consolidated, selected banking systems, 2013




* Numbers in parentheses refer to the number of banks in sample; full breakdown of costs not available for France and Japan
** Includes one Japanese bank due to data availability
Sources: RBA; SNL Financial

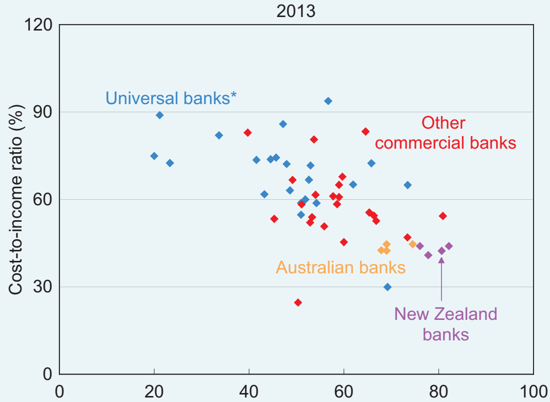
The decline in the Australian major banks' aggregate CI ratio over the past two decades reflects a number of factors. By adopting new technologies, banks have been able to provide more streamlined banking services to customers and improve back-office processes such as loan approvals, and information processing and management. Additionally, a focus on reducing high-cost, low-value operations resulted in the closure of a large number of branches during the 1990s.[4] The major Australian banks have renewed their focus on costs in the past few years to help counteract the effect of more moderate balance sheet growth on their profitability. Specifically, they have undertaken a range of initiatives including restructuring operations, upgrading their core

4 See Stewart C, B Robertson and A Heath (2013), 'Trends in the Funding and Lending Behaviour of Australian Banks', RBA Research Discussion Paper No 2013-15.

banking systems, and outsourcing back-office processing and support operations to lower cost locations offshore. In addition, the major banks have moved towards branch operating models that focus on product sales and cross-selling, as opposed to traditional transactional banking activities that are being done increasingly through internet and mobile facilities.

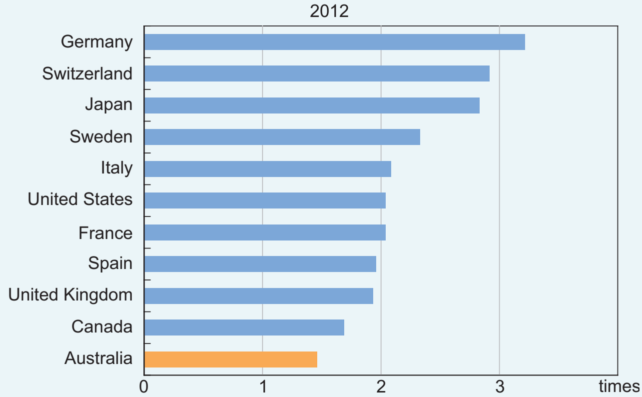
The Australian major banks' focus on commercial banking – that is, lending to households and businesses – appears to be a contributor to their relatively low CI ratio. In 2013, those large banks that earned a greater share of their income from net interest income (a proxy for a bank's focus on lending activities) tended to have lower CI ratios than 'universal' banks, which earned a larger share of their income through non-interest sources such as investment banking or wealth management (Graph B4).[5] One possible reason for this relationship is that universal banks tend to pay higher levels of staff remuneration, on average. This is consistent with the pattern in Graph B3 which shows that many of the large European banks – which typically earn a higher share of income from investment banking and wealth management activities – have higher personnel costs-to-income and pay a higher premium to the average wage in their respective home economies (Graph B5). A further potential explanation for the

## Graph B4
### Cost and Net Interest Income Ratios
2013




* Banks with a loan-to-asset ratio less than 50 per cent
** Net interest income as a share of total income
Sources: RBA; SNL Financial

## Graph B5
### Large Banks' Personnel Cost Premium*
2012




* Large banks' average personnel cost per employee in their consolidated global operations relative to average wage in home economy; data for Hong Kong and New Zealand not available; reduced sample for France and Japan due to data availability
Sources: OECD; RBA; SNL Financial

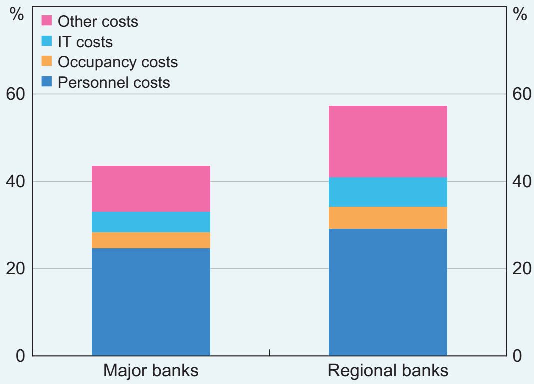
5 While some universal banks' CI ratios have been higher in recent years due to large declines in trading income following the global financial crisis, the relationship between banks' business models and CI ratios still broadly held in 2007.

Australian major banks' relatively low CI ratio, even compared with some other commercial banks, is that residential mortgage lending represents a high share of their total lending; as housing mortgages are more homogenous than business loans, the cost of distributing them is likely to have benefited more from technological advances than business lending or relationship-based financial services.

The above analysis suggests that there may be diseconomies of scope for some large banks – that is, average costs increase as they diversify outside of commercial banking services. This is consistent with some literature which points to negative returns to scope when banks move into market-based activities.[6] While market-based activities can provide a more diversified revenue stream for banks, they are typically a more volatile source of income and can expose banks to additional risks and complexity. Interestingly, the Bank for International Settlements noted in its 2013/14 Annual Report that in the post-crisis period, a number of large international banks with significant trading businesses have adjusted their business models away from those activities somewhat, consistent with the better performance and efficiency of banks with a more commercial banking model.

The Australian major banks' CI ratios are also well below those for smaller banks in Australia; for example, in 2013 the regional banks' aggregate CI ratio was 57 per cent, compared with 44 per cent for the major banks (Graph B6). Given that the major banks and regional banks have similar (commercial banking) business models and are likely to face a similar operating cost base, economies of scale could be one factor explaining the difference between their CI ratios. For example, the major banks may have been able to achieve efficiencies through spreading the fixed component of their operating costs over a larger revenue or asset base.[7] ✠

**Graph B6**
**Australian Banks' Cost-to-income Ratios***
2013




* Includes four major banks and three regional banks
Sources: RBA; SNL Financial

6 See Laeven L, L Ratnovski and H Tong (2014), 'Bank Size and Systemic Risk', IMF Staff Discussion Note 14/04 (and references within). As summarised in this paper, the source of negative returns to scope in the literature is the agency costs associated with monitoring complex financial conglomerates, which can result in lower market valuations, higher systemic risk and lower risk-adjusted returns.

7 While early literature found economies of scale in banking to be limited to relatively small banks, more recent academic studies have found evidence of scale economies in large banks. See Kovner A, J Vickery and L Zhou (2014), 'Do Big Banks Have Lower Operating Costs?', Federal Reserve Bank of New York *Economic Policy Review*, 20(2), pp 1–27 (and references within).