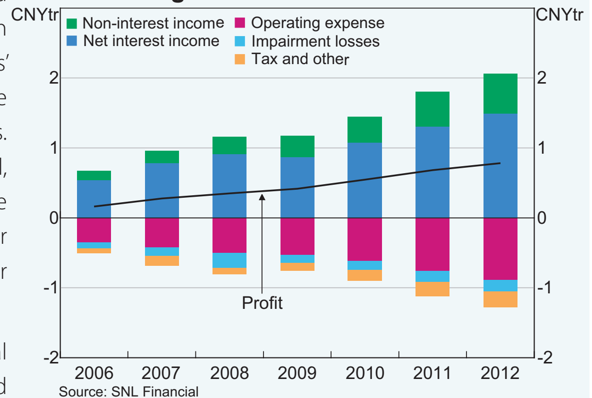
Box A

Recent Developments in Net Interest Income in the Chinese Banking System

Strong growth in profits in recent years, together with declining dividend payout ratios, has enabled Chinese banks to accumulate capital through retained earnings. The associated increase in banks' reported regulatory capital ratios has increased the Chinese banking system's buffer to adverse shocks. Given the importance of profits in generating capital, this box examines recent developments in Chinese banks' net interest income, a key recent driver of their profits, focusing on the five largest banks (hereafter referred to as large banks).[1]

Chinese banks are mainly engaged in financial intermediation between domestic savers and borrowers, and the bulk of their income is earned from such activities.[2] In 2012, over two-thirds of the large banks' income was in the form of net interest income – a high share relative to large banks in many major banking systems (Graph A1). Non-interest income accounts for a smaller share, though it has risen more rapidly in recent years, partly because banks' off-balance sheet activities have expanded significantly (see 'The Global Financial Environment' chapter). In recent years, both net interest income and non-interest income revenue streams have risen faster than costs, such as operating expenses and impairment losses, driving an increase in profits.

A bank's net interest income is determined by the average interest rates on its interest-earning



assets and interest-bearing liabilities, as well as the relative size of these assets and liabilities. In most advanced economies, central banks set a target for very short-term interest rates which influences other interest rates across the maturity structure. Banks operating in such an environment will typically set their deposit and lending rates with reference to market-determined interest rates, subject to a range of considerations such as credit risk (in the case of loans), business strategy, competitive pressures and a need to provide a return for shareholders. In contrast, the People's Bank of China (PBC) does not set an explicit target for short-term interest rates; instead, the PBC targets growth in the money supply and operates a range of monetary policy instruments to meet its target.[3] Among these instruments, the PBC sets benchmark deposit and lending rates at various maturities which directly influence the interest rates charged and paid by banks. For many years, these benchmark

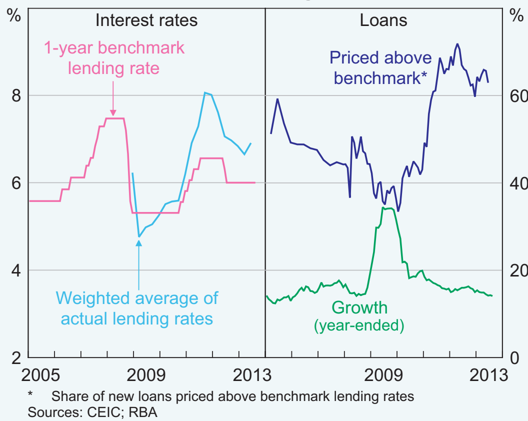
1 The five largest banks in China are Agricultural Bank of China, Bank of China, Bank of Communications, China Construction Bank, and Industrial and Commercial Bank of China. Together, these banks account for roughly one-half of Chinese banking system assets. Despite being majority state-owned, all five banks are listed on the Hong Kong stock exchange and their financial statements provide greater detail about the banks' activities than aggregate data from the Chinese authorities.

2 For a more detailed discussion of banking activity in China, see Turner G, N Tan and D Sadeghian (2012), 'The Chinese Banking System', RBA *Bulletin*, September, pp 53–63.

3 For more details on the PBC's monetary policy instruments, see Sadeghian D, G White and P D'Arcy (2013), 'Macroeconomic Management in China', RBA *Bulletin*, June, pp 11–20.

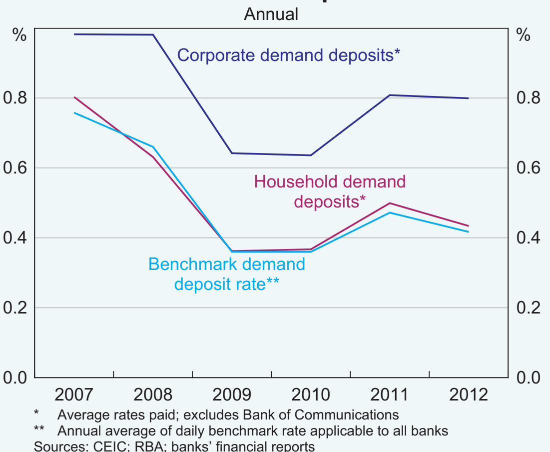
rates set a ceiling on deposit rates and a floor on loan rates for a range of products. Reforms announced in June 2012 and July 2013 removed interest rate restrictions on non-mortgage loans and permitted rates on bank deposits to slightly exceed the relevant benchmark rate.[4]

Even before these reforms, actual rates paid by borrowers across the Chinese banking system often varied substantially from benchmark lending rates. Against the backdrop of strong demand for credit, and the PBC's actions to rein in credit growth from the extremely rapid rates over 2009, an increased share of new loans was priced above benchmark rates over 2010 and 2011, and the average lending rate increased by much more than benchmark lending rates (Graph A2). From late 2011, however, a smaller share of loans has been priced above benchmark and average lending rates have fallen by more than benchmark rates, suggesting that banks have had considerable scope to adjust lending rates beyond changes to benchmark *lending* rates.



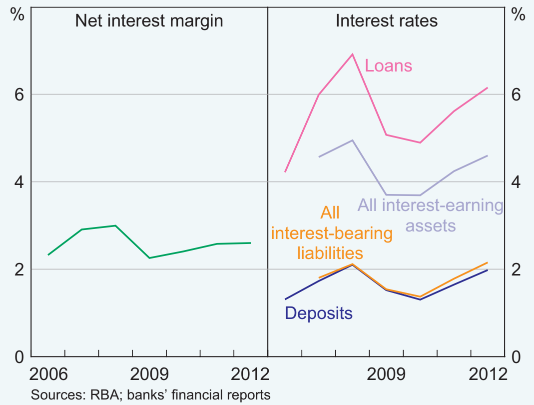
4 In June 2012, the PBC announced that banks were allowed to pay up to 1.1 times the relevant benchmark rate on deposits, and charge lending rates as low as 0.7 times the benchmark, before completely removing restrictions on lending rates for non-mortgage loans in July 2013.

In contrast, the large banks' financial statements suggest that benchmark *deposit* rates are a good indicator of interest rates actually received by depositors, especially by households on their demand deposits (Graph A3). Corporate customers on average earn more than the benchmark rate on their demand deposits, reflecting the banks' ability to pay above benchmark rates on high-value deposits, though the spread between actual corporate demand deposit rates paid and the benchmark rate has remained relatively constant over the past six years. This implies that the PBC has strongly influenced the cost of funding from demand deposits, which account for around 40 per cent of the large banks' total liabilities. Though less definitive, the evidence suggests that pricing of term deposits, which account for another 40 per cent of liabilities, also closely follows benchmark rates; the average returns on both households' and corporations' term deposits in recent years have tended to be clustered around the benchmark rates for shorter-tenor term deposits. Many analysts expect further gradual reform of deposit rate restrictions over the next few years, which would naturally reduce the PBC's influence over actual interest rates received by depositors.



The net interest margin (NIM) provides an indication of the effects of interest rates on banks' profitability. At around 2½ per cent in 2012, the large Chinese banks' NIM is considerably below the spread between average deposit and loan rates (around 4 percentage points in this period) because their margins are compressed by lower returns earned on other interest-earning assets, such as debt securities and reserves held at the PBC (Graph A4). Consistent with the Chinese banks' ability to adjust their lending rates beyond changes in benchmark rates, much of the variation in the large banks' NIMs in recent years has come from changes in lending rates. The average NIM fell noticeably in 2009, resulting in a decline in net interest income, but it has subsequently increased gradually (in addition to the modest widening in the NIM in recent years, growth in net interest income has been supported by ongoing expansion in banks' loans and other interest-earning assets). The current arrangements for setting interest rates in China have therefore helped underpin Chinese banks' profitability and thus their ability to accumulate capital. These relationships may change as interest rates are liberalised further. ✠

Graph A4
Large Chinese Banks' Net Interest Margin
Annual



Sources: RBA; banks' financial reports