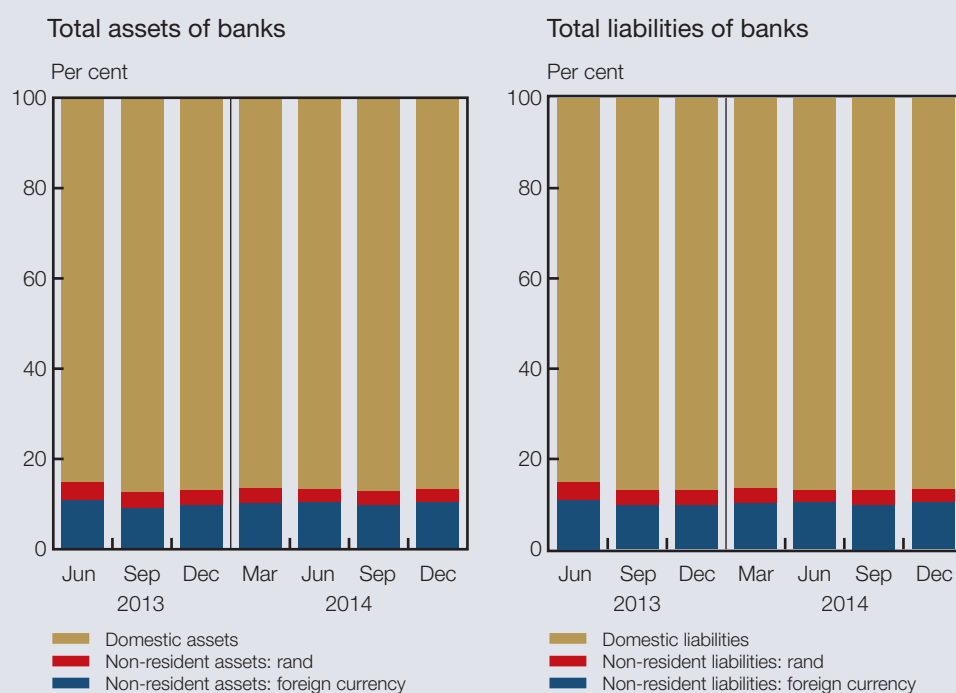


Box 4 Foreign currency exposure of banks

South African banks are part of the global financial system and their balance sheets include assets and liabilities with non-residents as well as assets and liabilities denominated in foreign currencies. In some respects, South African banks are less internationally active than their international counterparts as their foreign assets and liabilities accounted for merely 13 per cent of total assets and liabilities as at the end of December 2014. Nonetheless, data on cross-border exposure can greatly benefit the assessment and understanding of bank systemic risk by providing a benchmark vis-à-vis other countries in terms of both overall market share as well as categorisation provided in the data, such as lending and borrowing sectors and maturity and currency composition. In addition, it serves as a powerful tool for spotting economic trends that other banking statistics cannot capture.



The increased pace of global financialisation and the concomitant increase in liquidity of many emerging-market currencies has placed more focus on the currency composition of the financial assets and liabilities of these economies. The sensitivity of foreign positions to exchange rate movements is important due to the fact that the currency composition of foreign assets and liabilities can often be highly asymmetric.

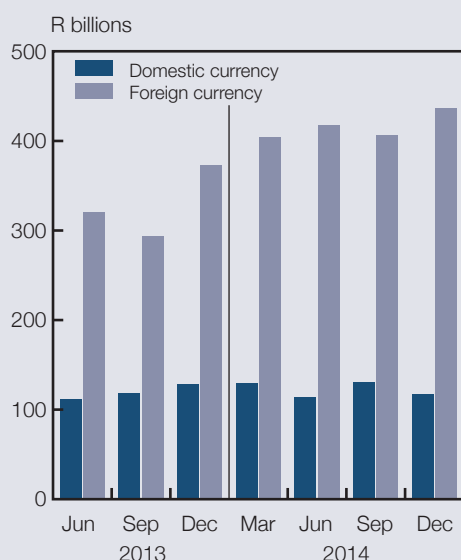
The rapid expansion of cross-border investment positions means that currency movements can potentially have large balance-sheet effects. The impact of this will vary across countries, depending on the scale of its international balance sheet, its net value position, as well as the currency composition of its assets and liabilities. Research done by Tille (2003), Gourinchas and Rey (2007), Lane and MilesiFerretti (2003,

2005, 2007) have highlighted that the foreign liabilities of the United States are mostly denominated in dollars while there is a substantial non-dollar component in its foreign assets. Accordingly, unanticipated dollar depreciation improves the net international investment position of the United States by increasing the dollar value of its foreign assets relative to its foreign liabilities. By contrast, many emerging markets have historically issued significant amounts of foreign currency debt — for these countries, currency depreciation has had an adverse impact on the net foreign asset position.

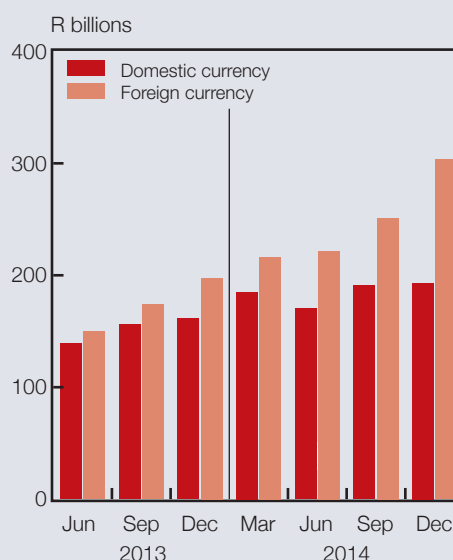
Of particular interest in this context is the composition of the foreign currency exposure of South African banks as their total holdings of foreign currency-denominated assets exceeds their foreign currency liabilities — although by a narrowing margin — thus resulting in a net foreign currency-denominated asset position. This implies that a depreciation of the rand reduces the size of South African banks' overall net foreign liability position by increasing the rand value of foreign currency assets relative to the foreign currency liabilities (the converse is true for an appreciation). However, this will also depend on the specific foreign currency basket composition of the assets and liabilities.

Although foreign currency mismatches — the extent to which an economy's liabilities and assets are divergently denominated in foreign currency — does not necessarily pose a significant problem at an aggregate level, it is possible that the aggregate net foreign currency asset position could be masking the existence of net foreign currency liability positions for individual counterpart sectors which could be important.

Non-resident assets of banks



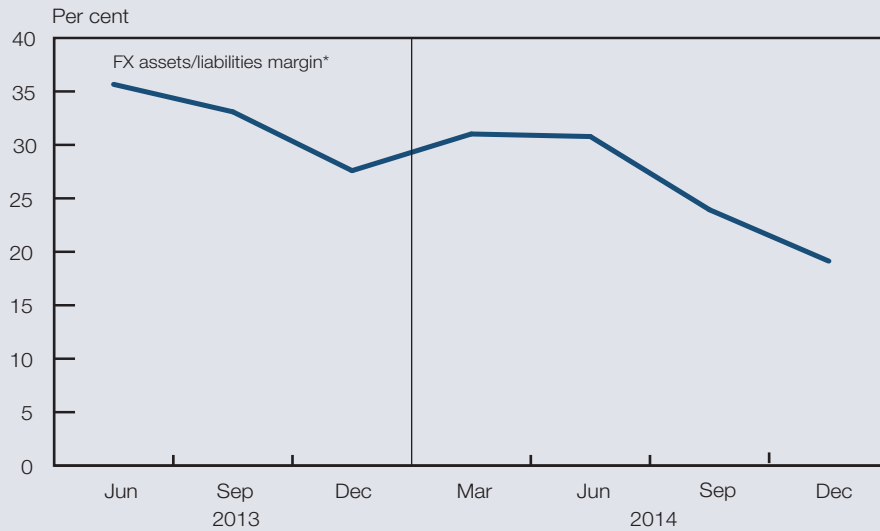
Non-resident liabilities of banks



The figure above illustrates that there has been a firm expansion in the non-resident assets of banks denominated in foreign currency from June 2013 to December 2014, with growth amounting to 36 per cent over this period compared to 5 per cent growth in non-resident assets denominated in rand. Foreign currency-denominated liabilities of non-residents recorded even more significant growth over this period, expanding by 103 per cent compared to 39 per cent growth in non-resident rand-denominated liabilities. Nonetheless, the foreign currency component of total liabilities of non-residents remains much lower than the foreign currency component of total assets of non-residents. Non-resident foreign currency-denominated liabilities constituted 61 per cent of total non-resident liabilities as at December 2014, whereas foreign currency-denominated assets of non-residents constituted 79 per cent of total non-resident assets. Between June 2013 and December 2014 the contribution of rand-denominated liabilities to total liabilities of non-residents declined from 48 per cent to 39 per cent, while the contribution of rand-denominated assets to total assets of non-residents declined from 26 per cent to 21 per cent. The aforementioned movements resulted in an 18 per cent positive foreign currency mismatch between assets and liabilities as at the end of December 2014. However, this ratio has steadily been declining from the June 2013 level of 36 per cent.

Because both the foreign currency-denominated assets and liabilities of banks are subject to similar valuation changes, it contributes to a natural foreign currency hedge position. However, this margin declined gradually from 36 per cent in June 2013 to 19 per cent in December 2014.

Foreign currency natural hedge



* Margin by which FX assets surpass FX liabilities: positive value = positive natural hedge value
negative value = negative natural hedge value

Bibliography

- Gourinchas, P and Rey, H. 2007. 'From world banker to world venture capitalist: US external adjustment and the exorbitant privilege'. *NBER Working Paper No. 11563*. Cambridge MA: National Bureau of Economic Research.
- Lane, P and Milesi-Ferretti, G. 2003 'International financial integration'. *IMF Working Papers 03/86*. Washington DC: International Monetary Fund.
- Lane, P and Milesi-Ferretti, G. 2005. 'Financial globalization and exchange rates'. *CEPR Discussion Paper No. 4745*. London: Centre for Economic Policy Research.
- Lane, P and Milesi-Ferretti, G. 2007. 'The external wealth of nations mark II: revised and extended estimates of foreign assets and liabilities, 1970–2004'. *Journal of International Economics* 73 (November): 223–250.
- Lane, R and Shambaugh, J. 2010. 'Financial exchange rates and international currency exposures'. *American Economic Review* 100(1): 518–40.
- Tille, C. 2003. 'The impact of exchange rate movements on US foreign debt'. *Current Issues in Economics and Finance* 9(1).