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**Australia's Survey of Foreign Currency Exposure**

**Prepared by the  
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## Australia's Survey of Foreign Currency Exposure

### Background

Australia's flexible exchange rate has played an important role in cushioning the economy from external shocks and smoothing fluctuations in the business cycle. However, exchange rate flexibility also exposes entities to foreign currency risk, unless these exposures are hedged.

For individual entities with unhedged foreign currency assets, liabilities or trade exposures, fluctuations in the exchange rate can lead to changes in the local currency value of their balance sheet positions and/or cash flows. More specifically, entities with net foreign currency liability exposures or net foreign currency trade payment obligations can be vulnerable to a sudden depreciation in the local currency. Depending on the size and distribution of any such exposures, this could, in turn, have adverse consequences for financial stability and flow-on effects for the real economy. In particular, work at the IMF has shown that currency (and maturity) mismatches on balance sheets have been a common theme in systemic crises.

Australian entities, as a whole, have traditionally had an overall net liability position with the rest of the world. As a result, it is particularly important to be able to gauge whether this is also associated with a net unhedged foreign currency liability position, as this could potentially be a source of vulnerability in the event of exchange rate depreciation. It is also important to be able to gauge the sectoral composition of Australia's net foreign currency position with the rest of the world, as the distribution of foreign currency exposure could also inform an assessment about the nature of any financial stability risks. If, for example, an individual sector of the economy had a large unhedged foreign currency liability position, this could have adverse flow-on effects for broader financial stability (even if it is offset by a large net unhedged foreign currency asset position within another sector).

While high-level information on the economy's *overall* net foreign currency position can be derived from the International Investment Position (IIP) dataset, which is compiled using data collected by the Survey of International Investment, there is no information on how this position is distributed among different sectors of the economy and only limited information on the types of assets and liabilities that comprise it. Moreover, the IIP is unable to shed any light on the extent to which these positions are hedged (and maturity matched) using derivatives, or on the types of derivatives used to conduct such hedging. To this end, the Reserve Bank of Australia (RBA) has commissioned the Australian Bureau of Statistics (ABS) to conduct the Survey of Foreign Currency Exposure once every four years, since 2001. A detailed description of the survey is in Appendix 1.

At a high level, the Survey is designed to provide information on trade-related foreign currency exposures (this information is not available from any alternative sources) and to build on the information which is available from the IIP about Australia's foreign currency balance sheet exposures. On the latter, the aim is to establish – at a *sectoral level* – the extent to which Australia's net foreign liability position is either: (a) denominated in Australian dollars; or (b) denominated in foreign currency but hedged (and maturity matched) back in to Australian dollars using derivatives.<sup>1</sup> A key – and consistent – finding is that, notwithstanding the overall net foreign liability position,

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<sup>1</sup> It should be noted that the Survey does not directly account for 'natural hedges', which are created by payment obligations and/or receipts that have at least partially offsetting foreign currency risk. While the survey indirectly accounts for natural hedges that are created by netting foreign currency asset and liability position against each other, no account is taken of other forms of natural hedging, such as those that are based on historical relationship between exchange rate movements and the foreign currency price of the underlying exposures.

Australia has substantially more foreign currency assets than foreign currency liabilities. In other words, Australia has a net foreign currency asset position. This net foreign currency asset position means that a depreciation of the Australian dollar reduces the size of Australian entities' overall net foreign liability position by increasing the Australian dollar value of foreign currency assets relative to foreign currency liabilities (the converse is true for an appreciation). This is true even before any derivatives-based hedging of these foreign currency positions is taken into account (although the Survey of Foreign Currency Exposure shows that hedging actually increases this foreign currency asset position further).

Of course, it is possible that the economy's aggregate net foreign currency asset position could be masking the existence of net foreign currency liability positions for individual entities or sectors. To this end, the Survey of Foreign Currency Exposure also collects data at a broad sectoral level. In particular, these data show that the banking sector as a whole *does* have a net foreign currency liability position before hedging is taken into account, but that this position is eliminated entirely by the use of hedging derivatives (which are also maturity matched). Other financial institutions and non-financial corporations sector both have net foreign currency asset positions both before and after hedging is taken into account.

Taken together, the results of the Survey suggest that foreign currency mismatches are not a significant problem – at least at an aggregate sectoral level – for Australian entities. This is reassuring as it implies that the benefits for the real economy of a floating exchange rate have not been diminished by vulnerabilities arising from entities' exposure to exchange rate fluctuations.

The results of the survey are available in the ABS publication *Foreign Currency Exposure, Australia* Cat. No. 5308.0. A review of the results by the Reserve Bank can be found in the December 2013 issue of the [Reserve Bank Bulletin](#), in the article *Foreign Currency Exposure and Hedging in Australia*.<sup>2</sup>

## Appendix 1.

### The Survey of Foreign Currency Exposure: Description

#### Scope and Coverage

##### *Scope:*

Implementation of the Survey of Foreign Currency Exposure (SFCE) was in the context of how best to harness the potential synergies with the ABS' Survey of International Investment, particularly with respect to the collection of good quality derivatives data and net foreign currency positions.

Net foreign currency positions are published in the *Balance of Payments and International Investment Position* (cat. no 5302.0). However figures are presented on an aggregate basis for total assets and liabilities with no refinement of data for sectors, instruments or maturities.

Derivatives data presented in the 5302.0 publication is aggregated. Data is collected on a market price basis for net asset and liability positions, with no specification of instruments used. Direct comparison of data collected through the SFCE was not possible against the quarterly results of the Survey of International Investment as values for financial derivative contracts were requested on a notional principal basis to meet the needs of identifying the extent of position and maturity matching against underlying asset and liability exposures.

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<sup>2</sup> Rush, Sadeghian and Wright (2013), 'Foreign Currency Exposure and Hedging in Australia', *Reserve Bank of Australia Bulletin*, December.

A sectoral breakdown of released data was a key requirement of the RBA. It was an important objective of the RBA to gauge the sectoral composition of Australia's net exposure, and how this distribution of exposure may adversely impact financial stability and/or the real economy. The sectoral presentation in the *Foreign Currency Exposure, Australia* Cat. No. 5308.0 publication largely concurs with the presentation of sectors in *Balance of Payments and International Investment Position* (cat. no 5302.0). However, deviations between publications were introduced to improve the utility of data following consideration of ABS confidentiality restrictions and RBA objectives.

In order to better meet its objectives, a number of enhancements were made to the survey for the 2013 collection. The enhancements were:

- The addition of questions for individual debt instruments for both assets and liabilities. A breakdown of total assets and liabilities by type of instrument was added. The breakdown was: Long-term debt securities, Short-term debt securities, Loans, Deposits, and Other.
- The collection of direct information about hedging approaches. A supplementary question was included requesting all providers to supply a breakdown of reported assets and liabilities by *hedging approach*, in absolute dollars. Hedging approaches were defined as: (i) Fully hedged (ii) Some amount hedged (of which value hedged), and (iii) All other (including unhedged and natural hedges offset by holdings in the portfolio).
- The addition of this hedging approach question added significant value to the results, as hedging ratios could be determined directly without inference from qualitative data being applied to the notional value of derivatives as had been done in previous analyses.
- The collection of information which will identify maturity matching. The survey asked providers to supply information on maturity matching restricted to debt securities liabilities. This was collected as 'Hedging of Debt Security Liabilities by Residual Maturity'. This was broken down further into long-term and short-term securities, currencies, and maturity matching. This information will also allow the identification of rolling hedges.
- Two new maturity periods were collected, namely: 'More than 5 years but less than or equal to 10 years' and 'More than 10 years', replacing 'More than 5 years'.

**Coverage:**

The SFCE sample was approximately 900 units that report in the SII. This partial enumeration covered around 99% of all foreign assets and liabilities of the 3,600 units of the population of the SII survey.

The SII included all units with significant foreign assets and liabilities, including trade credits, which are defined as accounts payable/ receivable of importers and exporters. However, this item does not appear to capture all expected future payments and receipts of exporters and importers i.e. importers appear to have expected future payments well in excess of accounts payable that are reported in the IIS. For the purposes of the hedging survey, all expected future payments and receipts constitute foreign currency exposures and should be captured.

In order to effect this, the SFCE frame was supplemented to include importers and exporters with significant foreign currency denominated payments and receipts from the Survey of International Trade in Services (SITS) and Merchandise Trade frames. The underlying assumption is that past

foreign currency denominated payments and receipts are an indicator of expected future payments and receipts.

***Sample Design:***

The sample design for the 2013 survey was a partial coverage design. Several sectors, based on the Standard Economic Sector Classifications of Australia (SESCA) were completely enumerated. The partial coverage design was chosen as there was no appropriate variable on which to base a sample that would enable the accurate collection of hedging practices.

The sample design parameters were adjusted to ensure a total sample size around 970 was selected.

A copy of the form used is available at:

<http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/5308.0March%20Quarter%202013?OpenDocument>

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