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Foreign exchange risk management: a description and assessment of Australian Firms' practices

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**FOREIGN EXCHANGE RISK MANAGEMENT: A DESCRIPTION AND
ASSESSMENT OF AUSTRALIAN FIRMS' PRACTICES**

A thesis is submitted in fulfilment of the requirements for the award of the degree

Doctor of Philosophy

From

University of Wollongong

By

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The School of Accounting and Finance
2006

CERTIFICATION

I, Bunyamin, declare that this thesis, submitted in fulfilment of the requirements for the award of Doctor of Philosophy, in the School of Accounting and Finance, University of Wollongong, is wholly my own work unless otherwise referenced or acknowledged. The document has not been submitted for qualifications at any other academic institution.

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Bunyamin
31st August 2006

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Abstract

The extension of floating exchange-rate regimes and going change in the global nature of business are the two of the most critical factors that constitute business risk today. Australian firms engaging in international business have to manage the adverse consequences of exchange rate movements because firms may confront greater business risk that arises from, among other factors, the volatility of the Australian dollar since floating in 1983, the nature of the Australian products sold overseas, and the increase in international operations of the firm. Recent corporate crashes, indeed, demonstrate the urgency for managing foreign exchange exposure as part of providing adequate corporate governance.

Against this background, this study aims to examine how Australian firms with significant foreign exchange exposure respond to such business environments. Specifically, this study is aimed at identifying and assessing the firms' practices on the management of foreign exchange exposure. This study also goes beyond a descriptive nature by investigating the potential association between firm-specific characteristic variables that may contribute to the efficacy of such practices and management practice variables.

The selected firms in the study comprise large Australian firms covering major industries, both foreign and domestic owned, based in New South Wales with annual sales equal to and greater than \$10 million AUD and those with significant foreign exchange exposure. Data was gathered from Dun & Bradstreet (D&B). From 25,580 Australian firms compiled by the database at June 2002, 9646 firms were based in New South Wales. From this number, 299 firms were selected for sample. A mailed questionnaire was sent to the selected firms and 20.4 percent were found to be useable for analysis.

The first part of analysis is essentially descriptive concerning the Australian firms' practices on foreign exchange exposure management. The description covers issues that are classified into exposure identification, policy adoption, and the techniques used in foreign exchange exposure management. Three types of foreign exchange exposures, translation, transaction, and economic exposures have been recognized by Australian firms of which transaction exposure is the most important form. Most of the surveyed firms identified that foreign sales and purchases were the major source of transaction exposure while forecasts based on 'orders' and 'cash-by-currency' were the principle techniques used for identification. An analysis on translation exposure revealed that the majority of participating firms do not manage this exposure because it is perceived as either not real or it is primarily addressed only at headquarters. A particular analysis on economic exposure showed that many Australian firms recognized this exposure type although only few firms managed it. This indicates an increase in the awareness of this type of exposure.

The analysis also described major aspects of foreign exchange exposure management policy. Most of the participating firms stated that 'the volatility of the foreign exchange of currency with which they are dealing' is the major factor driving the firms' foreign exchange exposure management. In terms of objectives, Australian firms tend to be more conservative and a passive policy is shown to be most popular. A particular analysis on forecasting policy also revealed that most firms undertake

formal foreign exchange forecasts which are mostly supplied by banks in particular forms, namely, 'indication of expected direction of movement' and 'point estimate of the expected rate at given future date'. As with previous studies, it is also reaffirmed that Australian firms have a high degree of centralization.

Finally, the use of internal and external techniques in this study showed that the most two popular internal techniques are 'netting' and 'a multi-currency billing system'. This study also found that there are a large number of firms that do not use any internal techniques due to insufficient information technology skills. With respect to the external techniques, forward contract is the most popular technique used.

The analysis in this study is then carried out to evaluate the efficacy of the firms' practices on foreign exchange exposure management. In general, this study suggests ineffective practices found in many exposure-management elements. In terms of identification, economic exposure is the only exposure that has not been properly identified and it appears to be properly managed by only a few firms. With respect to policy adoption, most Australian firms have a conservative attitude in their foreign exchange exposure management, which is reflected in their preference for a passive policy. Implementing a passive policy, particularly for firms with transaction exposure as their major type, is ineffective because most of the surveyed firms have sufficient forecasting components and a higher degree of centralization. In terms of techniques used, it appears that forward contracts are used as an implementation of passive policy although the use of the forward contracts in this way is arguably ineffective. This is because most Australian firms have employed a sufficient forecasting policy concentrating on currencies they are dealing with in the form of either 'an indication of expected direction of movement' or 'point of estimate at a given future date'. By having this forecasting information, it is possible to save costs by adopting a more active policy.

Finally, there are firm-specific factors that apparently contribute to the firms' practices on foreign exchange exposure management. Chi-squared tests for independence are used to investigate the association between firm-specific variables (firm size, the degree of foreign involvement, and ownership) and management practice variables (the adoption of either an active or passive policy, the degree of centralization and the techniques used). Although, there is no conclusive result, it appears that larger firms use more varied techniques than smaller firms because firm size implies greater resources that are available to cover the costs and potentially have a greater access to expertise. The degree of foreign involvement was found to be the only significant variable associated with the adoption of either an active or passive policy. This also suggests a more conservative attitude amongst firms. The degree of centralization is also another management practice variable found to be the only variable that has a significant association with ownership. It appears that foreign-owned firms need head office approval for foreign borrowing or lending of funds, conducting business involving foreign currencies, and entering into the foreign exchange markets for hedging purposes. Finally, there is a significant association between the degree of centralization and the adoption of either an active or passive policy. This provides a better result than previous studies that suggest an active policy when centralization is implemented. However, it has been found here that Australian firms tend to adopt a passive policy, even though a higher degree of centralization is implemented.

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