Research in International Business and Finance 25 (2011) 266–276

Contents lists available at ScienceDirect

Research in International Business and Finance

journal homepage: www.elsevier.com/locate/ribaf

Currency risk exposure of Chinese corporations

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ARTICLE INFO

Article history:
Received 2 August 2010
Received in revised form 11 February 2011
Accepted 13 February 2011
Available online 22 February 2011

Keywords:
Corporate finance
Foreign exchange
Currency risk management
Chinese firms
Chinese currency

ABSTRACT

In spite of the rise of China and its currency, the currency risk of Chinese firms has not been studied adequately. In this paper we document for the first time that the stock returns of Chinese firms are significantly exposed to currency risks with many firms benefiting from the rise of the Yuan. Further, the magnitudes of the currency risk coefficients for Chinese companies (<10%) are smaller than those previously documented for other countries (20–40%). However, our results also indicate that Chinese export firms are exposed to significant risk related to the ASEAN currency index. Yuan appreciation also impacts exporters to India, Australia and Russia in some industries. The results documented in this study should be of much interest to managers, scholars, and policymakers.

Published by Elsevier B.V.

1. Introduction

The Chinese economy and Chinese firms are both becoming ever more important in the global economy and rising exports are a very important feature of the Chinese economy. In addition, in recent years, the Chinese government has once again gone to a managed float system for its currency. Chinese firms and US firms including those buying from or selling to China now again have to cope with a changing exchange rates. The impact of these exchange rate fluctuations may be particularly important for Chinese firms that engage in exports and imports. Despite the growing importance of Chinese international trade, the foreign exchange exposure of Chinese companies has not been adequately investigated in the extant literature.

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0275-5319/$ – see front matter. Published by Elsevier B.V.
doi:10.1016/j.ribaf.2011.02.002

This paper examines the foreign exchange risks faced by Chinese companies. We compute currency risks faced by Chinese firms with respect to various currencies associated with China's major trading partners and we explore the following questions. What is the level of currency risk exposure faced by Chinese firms overall and how does this compare to similar exposures of firms in other countries? How do the currency risk exposures of Chinese firms differ across industries? Do exporting firms have a higher currency risks than firms with domestic business only?

This paper documents that the magnitudes of the currency risk coefficients for Chinese companies (<10%) are smaller than those previously documented for firms in other countries (20–40%). In addition, while Chinese exporters have insignificant currency risk exposures associated with the currencies of China's top four trading partners, EU, US, Japan and Hong Kong, Chinese export firms are exposed to significant risk related to the ASEAN currency index. Further, Chinese exporters in three industries (agricultural/diary/fishing/hunting, textiles/apparel/footwear, and lumber/furniture/wood products) are statistically significantly adversely affected when Yuan appreciates against USD. Finally, Yuan appreciation also impacts Chinese exporters to India, Australia and Russia in industries such as construction, machinery/equipment and healthcare/pharmaceutical. Given the rising importance of Chinese international trade, these findings should be of much interest for scholars, managers, and policy-makers.The rest of the paper is organized as follows. Section 2 discusses Chinese exchange rates, exposures attributable to currency risks, the nature of currency risk management, and relevant prior studies. Section 3 describes the sample firms and methodology along with empirical results. Section 4 offers our main conclusions.

2. Exchange rate risks and Chinese companies

2.1. Chinese exchange rates

The Chinese currency Yuan was pegged to USD at 8.27 Yuan per USD from 1997 to 2005 and it was contended that Chinese exporters used to have a competitive advantage in the global market due to the stability of the Yuan relative to US dollar. Further, as a result, the Yuan's values relative to other currencies were also considered to be more predictable and manageable. This era of a fixed exchange rate changed when on July 21, 2005, the People's Bank of China announced that its exchange rate regime has moved into a managed floating exchange rate regime (with respect to a currency basket).[3] Under the new managed floating foreign exchange regime, government intervention and market forces are combined to set exchange rates. Consequently, the People's Bank of China, the central bank in China, sometimes intervenes in the foreign exchange markets in an attempt to influence the price of its currency, the Yuan. For example, the bank uses its foreign currency reserves to buy Yuan to increase its value, or alternatively, it sells Yuan for foreign currency to lower its price.

It has been generally contended that after this 2005 foreign exchange reform, China did not actively revalue the Yuan/USD rate and perhaps limited its rise in an attempt to help exporters overcome a decline in global demand and rising shipping costs. However, this new exchange rate policy is also guided by the need to alleviate the pressure of China's rapidly rising foreign exchange reserves. As suggested by Zheng and Yi (2007), US$ 400 billion would be an appropriate level of foreign exchange reserves for China. However, according to *China Business News* in 2006, China's foreign exchange reserve has been over US$700 billion by 2005. By February 2006 China had foreign exchange reserves of US$ 853 billion that have grown to over US$2.5 trillion by now; far exceeding the foreign exchange reserve held by any other country and becoming the largest foreign exchange reserve holding country. Many economists have suggested that this huge accumulation of foreign exchange reserves by China is evidence of an artificially under-valued currency (Frankle and Wei, 2007).

These rapidly rising trade surpluses in the face of a slowly rising Yuan imply that these changes in exchange rates have exerted only a limited influence on the competitiveness of Chinese exporting

[3] After a period of fixed exchange rates between mid 2008 and mid 2010, the Chinese Yuan is once again in a managed float with gradual appreciation against the US dollar. While the empirical analysis in this study is based on the floating rate period beginning in 2005 (due to minimum data requirements), the general findings regarding currency exposure should also illuminate the current floating period.