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One currency, two markets: the renminbi's growing influence in Asia-Pacific ☆

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ABSTRACT

This study presents evidence of the renminbi's growing influence in the Asia-Pacific region. The CNH market – the offshore renminbi foreign exchange market – is found to exert an effect on Asian currencies that is distinct from that of the onshore (CNY) market. Changes in the RMB/USD rates in both markets have a statistically and economically significant impact on changes in Asian currency rates against the US dollar, after controlling for other major currency moves and the transmission of China's monetary policy to the region. The continuing growth of the offshore renminbi market points to rising influence of the CNH market, but how long the independent impact will last will likely depend on China's progress in liberalising its capital account. The findings also suggest that China's regional influence is increasingly transmitted through financial channels.

1. Introduction

China has risen to become the second largest economy in the world. Its economic weight is particularly notable in Asia-Pacific, being the largest trading partner of most of the economies in the region. In more recent years, the country's financial markets and financial linkages with Asia and the rest of world have also been expanding rapidly. One reflection of such developments is the finding by the Bank for International Settlements's (2013) Triennial Central Bank Survey that the renminbi now ranks the ninth most traded currency in the world, and the most traded in Asia. This naturally raises the question of what role the Chinese currency, the renminbi, plays and will play in the Asia-Pacific region. This question will inevitably become more important as China's weight in the global economy and financial system will likely rise further with its continuing robust growth and financial liberalisation. Yet, this issue, as the general topic of China's influence in regional and global financial markets, has not yet been studied in much depth.

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A major international currency can influence the behaviour of other currencies through actions taken by both the official and private sectors. For instance, as a component of currency baskets against which the exchange rate of local currencies is determined, movements in the international currency are more likely to prompt local authorities to take action to stabilise their own currencies. In addition, if portfolio managers (both in the official and private sectors) have an increased share of their portfolio in a new international currency, they may be more likely to react at the margin to exchange rate movements in that currency by adjusting their holdings of related currencies. Growing trade links as well as domestic use of the international currency may also encourage authorities to stabilise the exchange rate of the domestic currency against the international currency (He and McCauley (2013)).

There are indications that the renminbi might have begun to play a growing role in influencing Asian currencies. A number of studies (e.g. Shu, Chow, and Chan (2007), Fratzscher and Mehl (2011), Henning (2012) and Subramanian and Kessler (2012)) find that, since China moved to a managed float regime in July 2005, the renminbi's impact on the Asian currencies has become increasingly significant. This may be owing to China's significant trade ties with other Asian economies and with the rest of the world. To China, Asian economies can be suppliers, partners and competitors in regional and global trade, and for many, these three roles are rolled into one. Thus, the influence of the renminbi may be a conscious decision on the part of Asian central banks to include the renminbi in the basket of currencies they track, with a view to maintaining competitiveness against China in global trade and to reducing volatility in their trade flows. These decisions can intertwine with the actions of international investors who might tie currency movements in Asia to those of the renminbi, resulting in market-driven co-movements between the renminbi and regional currencies.

The renminbi's regional influence has been strengthened by two important developments in China's exchange rate policy in recent years – greater exchange rate flexibility and renminbi internationalisation. Increased fluctuations in the RMB/USD rate provide pricing signals, and help other central banks and market participants extract information about economic and market conditions in China. Increased external use of the renminbi has allowed the development of offshore renminbi markets. Historically, the development of offshore markets encourages the use of a currency outside the home country: He and McCauley (2010) posit that, without offshore markets, the US dollar would not have attained its dominant role as an international currency.

This study provides the first evidence of how the offshore markets for a currency provide an additional dimension when measuring the regional influence of that currency. As pointed out by He and McCauley (2010, 2013), due to the spatial separation between onshore and offshore currencies, central banks and portfolio managers may pay separate attention to offshore markets of an international currency for a number of reasons. For one, some of their assets are invested in offshore markets rather on onshore markets. In fact, the majority of the US dollar reserves held by central banks are held outside the United States (He and McCauley (2010)). In the case of the renminbi, central banks are known to have bought renminbi bonds issued by China's Ministry of Finance in Hong Kong SAR.[1] Second, the offshore market is less regulated than the onshore market, and thus may provide additional and distinct information that may be useful to both central banks and fund managers.

Deviations in the onshore and offshore markets can be particularly informative in the case of the renminbi. The onshore market, known as the CNY market, notwithstanding its increasing flexibility, remains constrained by the central bank's intervention and the stipulation of a daily trade band. By contrast, there is no presence of a central bank in the price formation process or in setting trading range limits in the offshore renminbi foreign exchange market, known as the CNH market. While the onshore and offshore currencies are essentially the same financial asset, the segmentation of the two markets can mean that price differentials can arise from different market conditions or the responses of different players in the two markets to the same set of fundamentals and policy announcements. In this paper, we attempt to capture the overall influence of movements in the renminbi by considering both the onshore and offshore exchange rate.

This study contributes to two strands of literature – renminbi internationalisation and China's global influence. First, the literature on the progress and process of renminbi internationalisation is both extensive and growing rapidly: e.g. Chen and Peng (2010), Gao (2010), He and McCauley (2010), Prasad and Ye (2011) and He (in press). Some studies have focused on China's onshore and offshore foreign exchange markets, mostly in the context of causality and deviations between the two, e.g. Cheung and Rime (2014), Wu and Pei (2012) and Maziad and Kang (2012). Our study adds another dimension to this literature by looking at the role of the offshore market in the impact of the renminbi on Asian currencies. Second, China's global influence has been typically studied from the perspective of real linkages (e.g. IMF (2011), Subramanian, Mishra, and Mattoo (2012)). Our study is among the first to examine how China's influence is transmitted through financial linkages including its exchange rate movements and monetary policy. Adapting the well established Frankel and Wei (1994) framework for the empirical analysis, this paper has undertaken more rigorous tests than the previous studies that have used this framework, addressing concerns over potential reverse causality from Asian currencies.

This paper is organised as follows. Section 2 introduces the institutional characteristics of the CNY and CNH markets that give rise to price signals of the CNH market which are distinct from those of the CNY markets. Section 3 reviews the literature on the renminbi's influence in Asia. Section 4 discusses the data and methodology of the empirical analysis. Section 5 presents evidence of the impact of the renminbi on other Asian currencies, an effect that is additional to that exerted by China's monetary policy shocks. The CNH and CNY markets have separate influence on Asian currencies. The final section considers the policy implications.

[1] In the last several Ministry of Finance bond IPOs in Hong Kong SAR, a tranche is allocated to eligible central banks. See http://www.hkma.gov.hk/eng/key-information/press-releases/2012/20120614-6.shtml.