



Australian Dollar carry trades: Time varying probabilities and determinants



Suk-Joong Kim*

Discipline of Finance, The University of Sydney Business School, The University of Sydney, 2006 NSW, Australia

ARTICLE INFO

Article history:

Received 4 October 2014

Received in revised form 15 March 2015

Accepted 20 March 2015

Available online 28 March 2015

JEL classification:

E44

F31

G15

Keywords:

AUD carry trade

Regime shifting

News

Order flows

Speculative positions

ABSTRACT

This paper investigates the nature and the determinants of the Australian dollar (AUD) carry trades using a Markov regime shifting model over the period 2 Jan 1999 to 31 Dec 2012. We find that the AUD could have been used, except for a number of short periods notably surrounding the outbreak of the GFC, as an investment currency in a carry trade regime. For daily horizon, prior to September 2008, carry trade probabilities are significantly lower in response to higher realized volatility of the USD/AUD, number of trades, the announcements of unexpected inflation and unemployment in Australia. They are significantly higher when order flows are positive (more buyer than seller initiated trades of AUD) and when RBA policy interest rate unexpectedly increase. At weekly horizon, realized skewness and net long futures position in the AUD contributed to the carry trade probabilities. On the other hand, post-September 2008 period shows a breakdown in the relationship between the carry trade probabilities and their determinants.

© 2015 Elsevier Inc. All rights reserved.

1. Introduction

A currency carry trade, the strategy of investing in high yielding currencies funded by low yielding ones, has recently received much attention due to the abrupt reversals of the emerging market currency carry trades in the summer of 2013 after the US Fed implied an impending tapering of their quantitative easing program. The result was a substantial loss of value in the emerging market currencies that had been on the receiving end of carry trade flows. Profitable carry trades represent a direct violation of interest rate parities which form an important building block in the study of international finance. In both covered and uncovered forms, interest rate parity relationships require that the current nominal interest differential between domestic and foreign currencies should equal either the current forward premium in the foreign currency and/or its expected rate of appreciation. This suggests that the currency with the higher nominal interest rate for a given holding period is expected to fall in value at the rate equal to the interest rate differential over the period.

However, researchers have consistently reported that the forward premium is notoriously unreliable in predicting future spot exchange

rate movements and various exchange rate forecasting services fare not much better on average. Both the magnitude and direction of forecasts can be incorrect. That is, instead of depreciating, higher yielding currencies were more likely to appreciate over the relevant holding period (Burnside, Eichenbaum, Kleshchelski, & Rebelo, 2006). This is most likely due to a combination of higher real interest rate and risk premium in the higher yielding currency. In order to exploit this opportunity, investors take speculative positions on higher yielding currencies (investment currencies, e.g. most emerging market currencies and commodity currencies such as Australian dollar, New Zealand dollar) funded in lower yielding ones (funding currencies, e.g. Japanese Yen and recently the US dollar). This strategy is now regarded as an alternative asset class in portfolio investments (e.g. Das, Kadapakkam, & Tse, 2013; Lusig, Roussanov, & Verdelhan, 2014). For example, the persistent positive interest rate differentials between Australia and the US (and other major countries, especially Japan) since the early 2000s was instrumental in the AUD becoming one of the more consistent investment currencies. The motivation behind such a carry trade is the likelihood that the ex ante risk premium associated with the higher yielding currencies would not be completely offset by the ex post exchange rate changes leading to sufficient rewards for the risk taking behavior. For instance, sovereign default risk, as measured by sovereign Credit Default Swap spreads, contributes to carry trade gains during booms (Coudert & Mignon, 2013). On the other hand, profitable carry trade positions can abruptly be turned into significant losses and this crash risk is associated with unexpectedly

* Tel.: +61 2 9114 0940; fax: +61 2 9351 6461.
E-mail address: sukjoong.kim@sydney.edu.au.

high exchange rate volatilities. A number of researchers report profitable carry trade strategies. Burnside, Eichenbaum, and Rebelo (2008) show significant carry trade gains from a portfolio of currencies where the typical Sharpe ratio of hedge funds is improved by more than 50%. Colavecchio (2008) reports significant Yen carry trade opportunities. Mollick and Assefa (2011) report evidence in support of carry trades involving the Swiss Franc as well as the Yen. Jurek (2014) shows that the crash risk premia are responsible for one-third of the excess returns in G10 currency carry trades.

Furthermore, there is some evidence of currency carry trades having a significant impact in other financial market segments within the country and also in other countries. For example, Cheung, Cheung, and He (2012) report that various measures of Yen carry trades have varying influences on stock market returns in Australia, Canada, UK, Mexico and New Zealand. In a similar vein, Fung, Tse, and Zhao (2013) find that carry trades Granger cause Asian stock market returns, while Lee and Chang (2013) report that G10 currency carry trade returns Granger cause stock market returns, especially during bull market periods, but not vice versa. Tse and Zhao (2012), however, find a significant correlation but no causality between US stock returns and carry trades, although stock market volatility

Granger causes carry trades. Moreover, Fong (2013) reports that optimism in the stock market seems to lead to currency carry trades by hedge funds.

This paper aims to investigate the empirical determinants of the AUD currency carry trades at both daily and weekly horizons over the period 2 Jan 1999 to 31 Dec 2012. In particular, the thresholds of underlying market (financial markets in general and foreign exchange market in particular) conditions that trigger the reversal of the carry trades (i.e., crash risk) will be empirically determined. The AUD is one of the few major currencies that have consistently provided carry trade opportunities. This has been due to persistent and at times considerably large positive interest rate differentials between the AUD and other major currencies (especially the USD, see Fig. 1, and the Yen). Since the positive interest rate gap has mostly reflected higher real interest rates and/or risk premium instead of higher inflation in Australia, the AUD tended to appreciate during the 2000s in the face of the positive interest rate differentials. Carry traders take long positions on the AUD to take advantage of the relatively high Australian interest rates and this has resulted in persistent deviations of the AUD from its economic fundamentals and occasional abrupt reversals of the movements whenever the carry

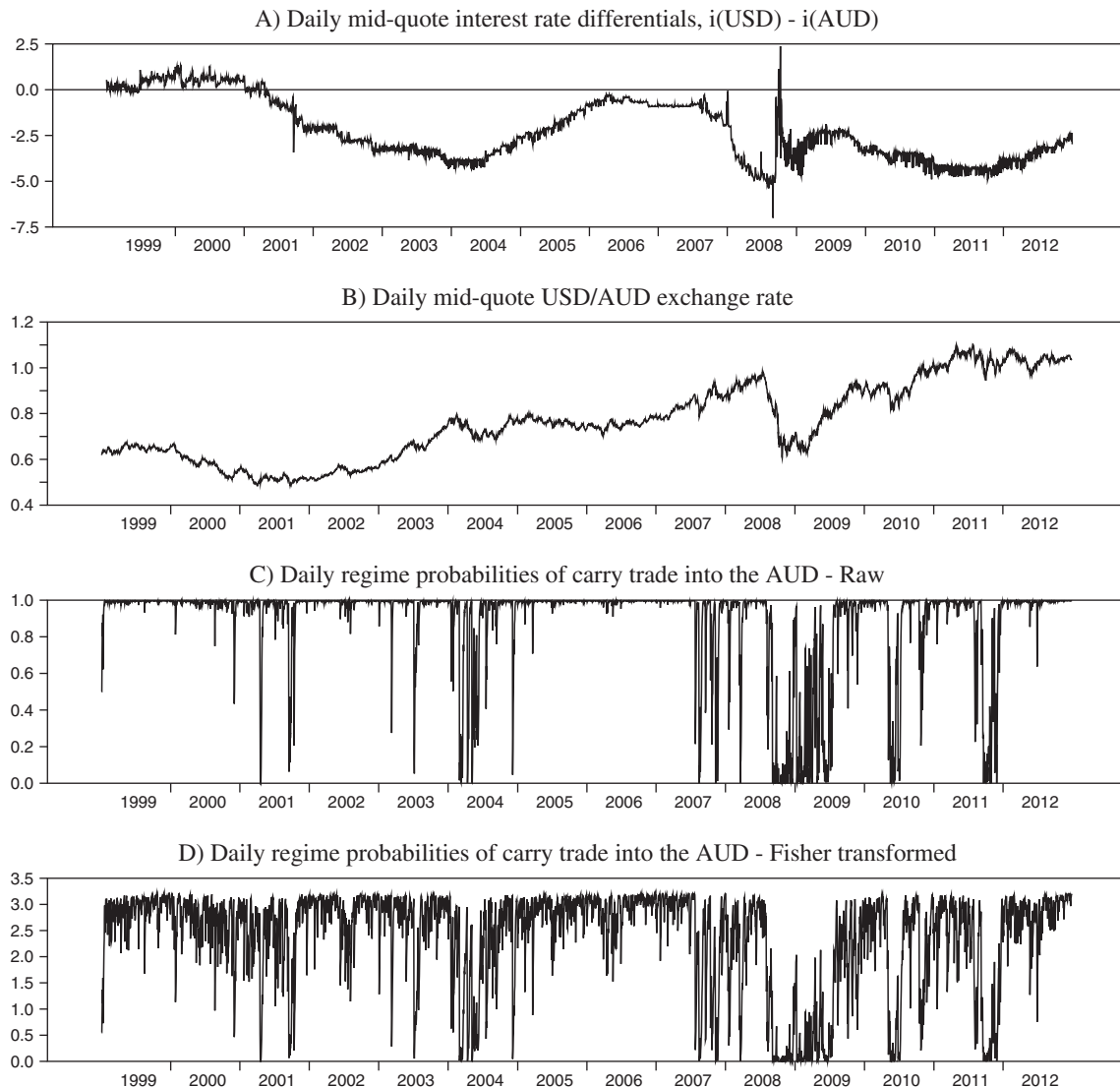


Fig. 1. Daily AUD carry trade variables.

Download English Version:

<https://daneshyari.com/en/article/5084677>

Download Persian Version:

<https://daneshyari.com/article/5084677>

[Daneshyari.com](https://daneshyari.com)