



Contents lists available at ScienceDirect

# Journal of International Money and Finance

journal homepage: [www.elsevier.com/locate/jimf](http://www.elsevier.com/locate/jimf)



## The crisis in the foreign exchange market

Michael Melvin<sup>a,\*</sup>, Mark P. Taylor<sup>b,c,d</sup>

<sup>a</sup> *Barclays Global Investors, 400 Howard St, San Francisco, CA 94105, USA*

<sup>b</sup> *Barclays Global Investors, Murray House, Royal Mint Court, London EC3N 4HH, UK*

<sup>c</sup> *University of Warwick, Coventry CV4 7AL, UK*

<sup>d</sup> *Centre for Economic Policy Research, 53–56 Great Sutton Street, London EC1V 0DG, UK*

### A B S T R A C T

#### Keywords:

Financial crisis

Foreign exchange market

We provide an overview of the important events of the recent global financial crisis and their implications for exchange rates and market dynamics. Our goal is to catalogue all that was truly of major importance in this episode. We also construct a quantitative measure of crises that allows for a comparison of the current crisis to earlier events. In addition, we address whether one could have predicted costly events before they happened in a manner that would have allowed market participants to moderate their risk exposures and yield better returns from currency speculation.

© 2009 Elsevier Ltd. All rights reserved.

### 1. Introduction

The global financial crisis of 2007–? is in many respects unparalleled. Compared to the current crisis, recent financial crises such as the 1997 East Asian crisis or the 1998 crisis associated with the collapse of Long-Term Capital Management (LTCM) and the Russian bond default had a very much more muted global impact. Of course, these events sent shock waves through global financial markets, but the main damage was fairly contained. It is safe to say that the crisis beginning in 2007 is unlike anything anyone working today has ever lived through before. As a result, it is important to chronicle the major events that have unfolded and their implications.

In this paper, we focus our attention on the foreign exchange (FX) market. Given the relatively low transparency of this market compared to equities and fixed income, it is important to draw on knowledge possessed by market “insiders.” There have been many days of shocking events that have occurred since August 2007 and it is not easy for scholars to appreciate fully the magnitude of the

\* Corresponding author.

E-mail addresses: [michael.melvin@barclaysglobal.com](mailto:michael.melvin@barclaysglobal.com) (M. Melvin), [mark.taylor@barclaysglobal.com](mailto:mark.taylor@barclaysglobal.com) (M.P. Taylor).

dislocations that have occurred in the FX market. We hope successfully to combine our practitioner insights with the discipline of scholars in order to present a useful analysis of what happened and its importance.

In Section 2 we provide an overview of the important events of the crisis and their implications for exchange rates and market dynamics; the goal is to catalogue all that was truly of major importance in this episode. In Section 3 we construct a quantitative measure of crises that allows for a comparison of the current crisis to earlier events. In addition, we address whether one could have predicted costly events before they happened in a manner that would have allowed market participants to moderate their risk exposures and yield better returns from currency speculation. In Section 4 we provide a summary and conclusions.

## 2. Crisis timeline

The crisis in FX came relatively late. In the early summer of 2007, it was apparent that fixed income markets were under considerable stress. Then, in July 2007 equity markets appeared to experience remarkable volatility. In particular, supposedly market-neutral equity portfolios suffered huge losses and it was common to hear people referring to a “five (or larger) standard deviation event”. FX market participants watched these other markets with growing trepidation, wondering when, if and how the market turbulence would extend to exchange rates. Their fears were met on August 16, 2007: on this date a major unwinding of the carry trade occurred and many currency market investors suffered huge losses. As a result, we date the beginning of the crisis in the FX market as August 2007.

### 2.1. August 2007: contagion from other asset classes and the carry trade

A very popular strategy for currency investors is the so-called “carry trade.” This is a strategy of buying, or taking a long position, in high interest rate currencies, funded by selling, or taking a short position, in low interest rate currencies. For instance, in the summer of 2007, many currency investors were short Japanese yen (JPY) and long Australian and New Zealand dollars (AUD and NZD). Interest rate parity (IRP) suggests that the interest differential between two currencies should be offset by a change in the exchange rates. A carry trade investor bets that this exchange rate offset will not occur so that the interest differential is earned. So while IRP suggests that, with a low interest rate JPY and a high interest rate NZD, one should observe JPY appreciation relative to the NZD. However, there is a large literature indicating that, in fact, it is often the case that the low interest rate currency actually depreciates rather than appreciates against the high interest rate currency. Such an exchange rate movement results in even larger carry trade profits.

Carry trades tend to unwind during conditions of market stress and relatively modest unwinds have been seen historically once or twice a year on average. Prior to 2007, the most recent major carry trade unwind was in October 1998 following a Russian bond default and the collapse of Long-Term Capital Management.<sup>1</sup> The carry trade unwind occurring on August 16, 2007 was as devastating for many currency managers as was the 1998 episode: the 1-day change in the JPY price of the AUD on August 16, 2007 was  $-7.7\%$ , compare to the average daily change in that exchange rate for 2007 prior to August 15 of only  $0.7\%$ .

Fig. 1 displays the returns to the carry trade in 2007 as measured by Deutsche Bank’s Carry Index. Deutsche Bank computes the returns to a portfolio that is long the three highest yielding currencies and short the three lowest yielding currencies across the developed markets. There was a brief period of carry unwind in late February, early March associated with an emerging market sell-off that followed a sharp drop in Chinese equity prices. This brief carry unwind was followed by a long run of excellent returns to the carry trade that peaked on July 25. Throughout early August, carry traders experienced a drawdown that culminated in the bloodbath that occurred on August 16. The trough of the return to carry occurred on August 17 and then there was a period of positive carry

<sup>1</sup> For a description of this episode see Cai et al. (2001).

متن کامل مقاله

دریافت فوری ←

**ISI**Articles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات