

[A century of arbitrage and disaster risk pricing in the foreign exchange market](#)

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A long-standing puzzle in international finance is that a positive interest rate differential systematically forecasts an exchange rate appreciation—the Uncovered Interest Parity (UIP) puzzle. Hence, a carry trade portfolio long in high yield currency bonds funded by borrowing in low yield currencies can be expected to yield positive profits. Following the Great Financial Crisis, however, the sign of the puzzle has changed—positive differentials forecast excessive depreciation—and carry trade has withered after the large losses suffered by investors in 2007-2008. In this paper, we use a century-long time series for the GBP/USD exchange rate to show that a sign switch is neither new, nor, arguably, a new puzzle. First, it is not new in the data—by virtue of a long sample featuring infrequent, non-overlapping currency crashes, we document that switches systematically occur in crises such as the Great Depression in the 1930s and the exchange rate turmoil of the 1990s. However, UIP deviations, sharp in either direction for short- to medium-horizon portfolios, remain small to almost negligible for long-horizon investment portfolios. Second, we argue that our century-long evidence is consistent with models featuring a time-varying probability of disasters or ‘Peso events,’ specified so to account for the difference in UIP deviations in crisis and normal times, as well as for a decreasing term structure of carry trade returns that on average characterize the data.

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