

# **Sovereign Risk, Spot Exchange Rates and Non-deliverable Forwards in Emerging Markets: Evidence from Brazil**

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*Abstract* - Forward contracts and non-deliverable forward contracts are widely used tools in foreign exchange markets. Under the assumption of rational expectations and uncovered interest parity, the forward premium should provide an unbiased predictor of changes in the exchange rate. The available evidence shows that the forward exchange rate is a biased predictor of the future spot rate. This evidence is primarily drawn from mature economies with highly liquid currency markets and deliverable forwards. I expand research in this area by considering non-deliverable forward contracts (NDFs) for emerging market economies. By analyzing the behavior of Brazilian real-U.S. dollar NDF contracts, I show that the implied forward premium drawn from emerging markets' NDFs is also a biased predictor of the future spot rate. Using cointegration analysis, I relate this bias to a time-varying risk premium that is captured by Brazil's sovereign risk.

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