Discussion:
Covered Interest Parity in the Yen Forward Market:
New Insights from Threshold Non-Linear Dynamics

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Summary

The main goal of the paper:

- Investigate the deviation of the actual forward USD-Yen exchange rate curve from the prediction coming from a parity.

- Uses a Bivariate Threshold Auto-regressive model (BTAR).

- Finds three regimes:

  1. USD borrowers have advantage;

  2. Yen borrowers have advantage;

  3. white noise around theoretical exhange rate.

Covered Interest Parity

- Notation

  - e_{sm} = spot exchange rate;

  - e_{fm} = forward exchange rate;

  - i_m = domestic interest rate;

  - i_m^* = foreign interest rate;

- Main arbitrage-free relationship:

$$(1 + i_m) = \frac{e_{sm}}{e_{fm}}(1 + i_m^*).$$

- Estimated forward exchange rate

$$e_{fm}^* = \frac{(1 + i_m^*)}{(1 + i_m)}\, e_{sm}.$$

Arbitrage opportunities

Define
$$\delta_m = e_{fm} - e^*_{fm}.$$

Should be *white noise.*

- If $\delta_m > 0$, sell e_{fm}, buy e^*_{fm} by buying USD spot, lending USD, buying Yen.

- If $\delta_m < 0$, converse.

Questions

- Can the arbitrages be effectively be exploited?

- Will hedge funds catch on and eliminate?

- How strongly model dependent are the findings?

- Are thee violations more likely in less popular currency pairs?

- On the other hand, if so, does lower liquidity make them less exploitable?