Università Carlo Cattaneo - LIUC
Course in Asset Management

Special Lectures on Currency in International Investment

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Take Home Question

In the Wednesday lecture, we discussed how there could be a tendency for mean reversion in real exchange rates so that deviations from PPP were reduced over time. And on Friday, we showed (slide 25 of the second set of slides) that a strategy of buying undervalued currencies and selling overvalued currencies could be profitable.

You will be provided with a spreadsheet containing data for 10 major industrial countries – Australia, Canada, Germany, Italy, Japan, New Zealand, Norway, Switzerland, United Kingdom, and the United States.

The data are monthly for the period 1985 – 2005 and include measurements on the Real Effective Exchange Rate, the spot exchange rate, and a local short-term interest rate.

Suppose you implement the following investment strategy: Each month, examine the real exchange rates to identify the 3 most overvalued and 3 most undervalued currencies. Assume that you build a portfolio with long positions of equal weight on the 3 most overvalued currencies financed by short positions of equal weight on the 3 most undervalued currencies.

a) Calculate the total, cumulative percentage profit you would have earned by following the above strategy over the 21 years.
b) Prepare a chart like on slide 25, showing the year by year percentage profits from the trading strategy and the Sharpe ratio (excess return divided by standard deviation of return)
c) Discuss whether you think the returns from this trading strategy appear favorable or not versus other trading strategies that an institutional investor could follow, either in currency or other asset classes.

Notes: 1) There are some missing observations in the data marked "n.a." Make an assumption that you think is reasonable and then fill in numerical values.
2) From January 1999 onwards, there are no spot rate or interest rate data for Germany or Italy. Use the column marked "Euro Area" instead.