



AFRICAN ECONOMIC RESEARCH CONSORTIUM

JOINT FACILITY FOR ELECTIVES
JULY-OCTOBER, 1998

INTERNATIONAL FINANCE
Second Session: Final Examination

Time: 9am - 12 noon

Tuesday September 29, 1998

INSTRUCTIONS:

Answer all questions. Well reasoned and clearly presented arguments will be rewarded.

1. A South African institutional investor can adopt any of the under listed investment strategies, based on the following market information: [1] $r_{s,t}$ and $r_{u,t}$ are interest rates in South Africa and USA respectively, payable on investments in local currencies between time, t and $(t+n)$. [2] s_t is the spot rate in number of rands per dollar, and $f_{n,t}$ is the n -period forward rate for dollars.

- **Strategy 1:** Invest one million dollars at the spot rate, in South African treasury bonds.
- **Strategy 2:** Under a forward contract at time t , the one million dollars could be held in United States treasury bonds for the n period and then converted into rand.
- **Strategy 3:** Invest the one million dollars in United States treasury bonds for the n periods and convert into rand at the spot rate at time, $(t+n)$.

Question: If risk neutral investors consider these investment strategies to be equivalent except for interest rates and currencies, show how this belief implies that the forward rate is an unbiased predictor of expected future spot rate - "the unbiasedness hypothesis." Given that the expected future spot rate is unobservable, how can we finesse around this problem in empirical work?

2. An importer in Cameroun must settle his payables to Kenya, Botswana, Malawi, Zimbabwe and Ghana. For each currency, he receives two quotes - one from his local bank and one from a bank in each of the five countries.

Which currencies should the importer purchase in Cameroun and which ones abroad?



where $1/10$ denotes the reaction index. Characterize the adjustment to equilibrium in a hyper-inflationary environment

ALL QUESTIONS ARE WEIGHTED EQUALLY. GOODLUCK!