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Final Examination
International Economics: Finance

Spring 2007
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DIRECTIONS: If a question has multiple parts, indicate exactly where you answer each part. This exam has two (2) sections; be sure to follow the directions for each section.

1. LONG ANSWERS (30 points each):

ALL STUDENTS MUST ANSWER THE FIRST QUESTION AND ONE MORE FOR A TOTAL OF TWO (2) OF THE FOLLOWING QUESTIONS:

Time allotted: 30 minutes per question.

(Ph.D. students must include detailed supportive algebra.)

- LA1. What is exchange rate “overshooting” and why is it important? Under what conditions does overshooting occur? (Give a detailed algebraic exposition, and a detailed graphical analysis, carefully providing full “intuition” for the model.) How supportive has empirical work been of the basic overshooting model? (Refer *in detail* to specific studies.)
- LA2. Set up the mean-variance optimization problem discussed in class and solve for the optimum portfolio of domestic and foreign bonds. Make sure you explain the role of first-order *and* second-order conditions for optimization in this problem. Supplement your algebra with detailed verbal explanations of the framework and a thorough verbal interpretation of your algebraic results. (For example, be sure to *prove* that the optimum portfolio can be expressed as the sum of two components, and to provide a detailed interpretation of each component.)
- LA3. Use the method of undetermined coefficients to solve the monetary approach model under rational expectations when fundamentals follow the AR(2) process:

$$\tilde{m}_t = \mu_0 + \mu_1 \tilde{m}_{t-1} + \mu_2 \tilde{m}_{t-2} + u_t$$

where u_t is white noise.

- LA4. What “puzzles” were found in the forward exchange rate data by Fama? (Give a full derivation, integrating discussion of the empirical results.) Is there a necessary conflict between rational expectations and the empirical results? (Explain why Fama thought so, and offer a model based response.)
- LA5. Use dynamic programming to solve the consumption problem of an infinitely-lived forward-looking consumer, derive the implications for current account behavior, and discuss how these implications differ from those of traditional models.

2. MULTIPLE CHOICE (1 point each):

ANSWER ALL OF THESE. Choose the best answer.

- MC1. Why did Milton Friedman (and others) expect speculation to be stabilizing under floating exchange rates?
- (a) Speculation was poorly understood in the 1950s.
 - (b) Monetarists have an inordinate faith in the stability of competitive markets.
 - (c) Successful speculation increases the demand for foreign exchange when demand is low and increases the supply of foreign exchange when supply is low.
 - (d) They carefully modeled the contribution of rational “noise traders”.

- (e) All of the above.
- MC2. The total income of the private sector is
- (a) GDP
 - (b) GNP
 - (c) GNP plus unilateral transfers received from abroad
 - (d) GNP plus M2
 - (e) GNP less taxes
- MC3. In our Classical model of a small open economy with perfect capital mobility and flexible exchange rates, an increase in government expenditure
- (a) increases income.
 - (b) decreases income.
 - (c) improves the current account ($\Delta CA > 0$)
 - (d) deteriorates the current account ($\Delta CA < 0$)
 - (e) none of the above
- MC4. Imported TV sets are entered in the balance of payments as a
- (a) credit to merchandise trade in current account.
 - (b) debit to merchandise trade in current account.
 - (c) debit to merchandise trade in private capital account.
 - (d) credit to direct investment in private capital account.
 - (e) all of the above
- MC5. If a U.S. citizen rents a car in Paris, the rental should generate a
- (a) credit for merchandise trade in current account.
 - (b) debit for merchandise trade in private capital account.
 - (c) credit for direct investment in private capital account.
 - (d) debit for transportation services in current account.
 - (e) not enough information to tell.
- MC6. Suppose exchange rate “fundamentals” are constant except for the domestic money supply, which follows a random walk. According to the monetary approach under rational expectations, a 1% increase in the domestic money supply will cause
- (a) a 1% increase in price level
 - (b) a 1% increase in exchange rate
 - (c) no change in real money balances.
 - (d) no change in expected inflation.
 - (e) All of the above