BUS 419   05-2
Bocconi Cod. 4195. 5161
MIDTERM EXAM

Rules for Submitting Midterm Exam: Answers to questions are to be typed, single spaced, of length 1 page ***each*** for all questions, 8"x11" standard paper, with 1" margin and type point not less than 12. (This assignment is typed in 12 point.) For questions with multiple parts, e.g., a) and b), answer all parts. Violations will be subject to deductions. For those wanting an assessment before the end of term, the assignment is due at the start of class one week from the Monday class it is handed out. Otherwise, the assignment is due in WMX 3333 on Aug. 3, 2005.

Do both Questions; be sure to answer all parts of the question. (Total length 2 pages)

1. a) Explain the <u>arbitrage</u> underlying the covered interest parity theorem. What assumptions are being made about both the execution of the arbitrage and the underlying securities?

b) For Fri. July 15, 2005 the closing values for spot, 1 month, 3 month, 6 month, and one year forward rates for the Canadian dollar (per US dollar) were: spot,$1.2206; 1 month forward, 1.2197; 3 months forward, 1.2177; 6 months forward, 1.2145; and 12 months forward, 1.2088. What true yield interest rate (bond equivalent yield) on US dollar instruments would be consistent with the interest-rate-parity theorem if the one, three and six month Canadian money market interest rates were: 2.37%, 2.53% and 2.72% and the one year (true yield) bond yield was 2.95%?

c) Will CIP hold for all types of money market instruments? Which money market security will produce the smallest deviations from the covered interest parity conditions? Why? What institutional characteristics of bankers' acceptances, commercial paper and treasury bills would make it difficult for CIP transactions to be instantaneously executed in those markets? Be as complete as possible in explaining your answer.

2.a) Derive the profit profile for a spread trade with equal position sizes. What factors determine the profitability of this trade? Derive the profit profile for a tailed spread and explain how this trade is different from a trade with one-to-one position sizes. Does your answer depend on the commodity under consideration?

b) Derive the profit profile for a currency tandem and explain how the profitability of this trade differs from a one-to-one currency spread.

c) Assume that you are convinced that the spread between the implied carry return in gold futures will narrow relative to the return implied in silver futures. How would you design a trade to profit on your predictive ability in this case?