SIMON FRASER UNIVERSITY

Midterm Exam

BUS 418 02-3

International Financial Management

Rules for Submitting Assignments: Answers to questions are to be typed, single spaced, of length no more than 1 page for each of the four questions selected, with 1" margins and type point not less than 12. (This exam is typed in 11 point.) Violations will be subject to deductions. Assignment is due in class on Thurs., Oct. 24.

Answer all parts each of the four questions (25 points each):

1.a) Explain the possible motivations for using currency swaps, being sure to identify the gains to be realized by both counter-parties to the swap. Also, be sure to discuss whether each of these potential rationales is consistent with the rapid growth in currency swap trading in the last decade.

b) Explain the relationship between a N-period fully hedged borrowing and a N-period fixed-to-fixed currency swap (N > 1)? (Be sure that your answer examines the transactions underlying the N-period hedged borrowing and compare cash flows with the currency swap.) Under what conditions will a fully hedged borrowing be preferred to a currency swap?

2.a) Explain the arbitrage underlying the forward-forward covered interest parity theorem. What assumptions are being made about the underlying securities? Explain how the forward-forward arbitrage relates to an arbitrage between a N period and T period foreign exchange swap?

b) Will covered interest parity hold for all types of money market securities? How does covered interest arbitrage differ for money market securities and securities with greater than one year to maturity?

3. a) On Oct. 15, 2002, the bid/offers for ¥/US$ and C$/US$ spot to six month exchange rates were:

Maturity	¥/US$ Bid	¥/US$ Offer	C$/US$ Bid	C$/US$ Offer
Spot	124.69	124.79	1.5850	1.5860
3 month	124.11	124.21	1.5895	1.5905
6 month	123.57	123.67	1.5949	1.5959

Calculate bid/offers for the associated ¥/C$ foreign exchange rate consistent with triangular arbitrage. Be sure to explain how you arrived at your answers.

b) Given the exchange rate information in a), what "risk-free" interest rate (true yield) on Canadian dollar and yen instruments would be consistent with the interest-rate-parity theorem if the 3 month and 6 month (annualized) LIBID/LIBOR rates on US dollar instruments were both 1.72% and 1.82%, respectively? Be sure to provide all relevant calculations.

4. Derive the profit functions for a one-to-one currency spread, a tailed currency spread, and a currency tandem. What factors determine the profitability of these three types of spreads? When will the profit for a one-to-one spread be approximately the same as a tailed spread? What is the relationship between the profit function for a one-to-one spread and a trade that is short the N period FX swap and long a T period FX swap?