

# Exchange rate essay sample

[Economics](#), [Currency](#)



1. Utah Bank's bid price for Canadian dollars is \$. 7938 and its ask price is \$. 81. What is the bid/ask percentage spread?
2. Of what use is a forward contract to an MNC?
3. If a euro is worth \$. 80, what is the value of a dollar in euros?
4. What is the function of the Eurocurrency market?
5. Why do interest rates vary among countries? Why are interest rates similar for those European countries that use the euro as their currency?

### Small Business Dilemma

Use of the Foreign Exchange Markets by the Sports Exports Company (see textbook, 8th edition)

### Chapter 4

#### Questions

1. Assume that the U. S. inflation rate becomes high relative to Canadian inflation. Other things being equal, how should this affect the (a) U. S. demand for Canadian dollars, (b) supply of Canadian dollars for sale, and (c) equilibrium value of the Canadian dollar?
2. Assume that the U. S. income level rises at a much higher degree than does the Canadian income level. Other things being equal, how should this affect the (a) U. S. demand for Canadian dollars, (b) supply of Canadian dollars for sale, and (c) equilibrium value of the Canadian dollar?
3. What is the expected relationship between the relative real interest rates of two countries and the exchange rate of their currencies?
4. Explain why a public forecast by a respected economist about future interest rates could affect the value of the dollar today. Why do some

forecasts by well-respected economists have no impact on today's value of the dollar? 5. Every month, the U. S. trade deficit figures are announced. Foreign exchange traders often react to this announcement and even attempt to forecast the figures before they are announced. a. Why do you think the trade deficit announcement sometimes has such an impact on foreign exchange trading? b. In some periods, foreign exchange traders do not respond to a trade deficit announcement, even when the announced deficit is very large. Offer an explanation for such a lack of response.

## Chapter 5

### Questions

1. How can currency futures be used by corporations? How can currency futures be used by speculators? 2. When would a U. S. firm consider purchasing a put option on euros for hedging? 3. When should a speculator purchase a put option on Australian dollars? 4. List the factors that affect currency call option premiums and briefly explain the relationship that exists for each. Do you think an at-the-money call option in euros has a higher or lower premium than an at-the-money call option in British pounds (assuming the expiration date and the total dollar value represented by each option are the same for both options)? 5. Assume that a March futures contract on Mexican pesos was available in January for \$.09 per unit. Also assume that forward contracts were available for the same settlement date at a price of \$.092 per peso. How could speculators capitalize on this situation, assuming zero transaction costs? How would such speculative activity affect the difference between the forward contract price and the futures price?

## Small Business Dilemma

Use of Currency Futures and Options by the Sports Exports Company (see textbook, 8th edition)

## Chapter 6

### Questions

1. What are some advantages and disadvantages of a freely floating exchange rate system versus a fixed exchange rate system? 2. How can a central bank use indirect intervention to change the value of a currency? 3. The media frequently reports that “ the dollar’s value strengthened against many currencies in response to the Federal Reserve’s plan to increase interest rates.” Explain why the dollar’s value may change even before the Federal Reserve affects interest rates. 4. Assume there is concern that the United States may experience a recession. How should the Federal Reserve influence the dollar to prevent a recession? How might U. S. exporters react to this policy (favorably or unfavorably)? What about U. S. importing firms? 5. What is the impact of a weak home currency on the home economy, other things being equal?

## Chapter 7

### Questions

1. Assume the following information:

Bank X Bank Y

Bid price of New Zealand dollar\$. 401\$. 398

Ask price of New Zealand dollar\$. 404\$. 400

Given this information, is locational arbitrage possible? If so, explain the steps involved in locational arbitrage, and compute the profit from this arbitrage if you had \$1, 000, 000 to use. 2. Based on the information in the previous question, what market forces would occur to eliminate any further possibilities of locational arbitrage? 3. Explain the concept of triangular arbitrage and the scenario necessary for it to be plausible. 4. Assume the following information for a particular bank:

Quoted Price

Value of Canadian dollar in U. S. dollars\$. 90

Value of New Zealand dollar in U. S. dollars\$. 30

Value of Canadian dollar in New Zealand dollarsNZ\$3. 02

Given this information, is triangular arbitrage possible? If so, explain the steps that would reflect triangular arbitrage, and compute the profit from this strategy if you had \$1, 000, 000 to use. 5. Based on the information in the previous question, what market forces would occur to eliminate any further possibilities of triangular arbitrage?

## Chapter 8

### Questions

1. Explain the theory of purchasing power parity (PPP). Based on this theory, what is a general forecast of the values of currencies in countries with high inflation? 2. Explain the rationale behind PPP theory.
3. Explain how you could determine whether PPP exists.
4. Inflation differentials between the U. S. and industrialized countries have

typically been a few percentage points in any given year. Yet, in many years annual exchange rates between the corresponding currencies have changed by 10 percent or more. What does this information suggest about PPP? 5. Explain why PPP does not hold.

## Chapter 9

### Questions

1. Explain the technical technique for forecasting exchange rates. 2. Explain the fundamental technique for forecasting exchange rates. 3. Explain the market-based technique for forecasting exchange rates. 4. What are some limitations of using a fundamental technique to forecast exchange rates?

### Small Business Dilemma

Exchange Rate Forecasting by the Sports Exports Company (see textbook, 8th edition)

## Chapter 10

### Questions

1. Your employer, a large MNC, has asked you to assess its transaction exposure. Its projected cash flows are as follows for the next year:

Current Exchange Rate in U. S.	Currency	Total Inflow	Total Outflow
Dollars	Danish krone (DK)	DK50, 000, 000	DK40, 000, 000
\$. 15	British pound (£)	£2, 000, 000	£1, 000, 000
			\$1. 50

Assume that the movements in the Danish krone and the pound are highly correlated. Provide your assessment as to your firm's degree of transaction exposure (as to whether the exposure is high or low). Substantiate your

answer. 2. Using the following cost and revenue information shown for DeKalb, Inc., determine how the costs, revenue, and earnings items would be affected by three possible exchange rate scenarios for the New Zealand dollar (NZ\$): (1) NZ\$ = \$. 50, (2) NZ\$ = \$. 55, and (3) NZ\$ = \$. 60. (Assume U. S. sales will be unaffected by the exchange rate.) Assume that NZ\$ earnings will be remitted to the U. S. parent at the end of the period.

Revenue and Cost Estimates: DeKalb Inc.

(in millions of U. S. dollars and New Zealand dollars)

New Zealand

U. S. Business

Sales \$800 NZ\$800

Cost of Goods Sold 500 100

Gross Profit \$300 NZ\$700

Operating Expenses 300 0

Earnings Before Interest and Taxes \$0 NZ\$700

Interest Expense 100 0

Earnings Before Taxes -\$100 NZ\$700

3. Toyota Motor Corp. measures the sensitivity of exports to the yen exchange rate (relative to the U. S. dollar). Explain how regression analysis could be used for such a task. Identify the expected sign of the regression coefficient if Toyota primarily exported to the United States. If Toyota established plants in the United States, how might the regression coefficient on the exchange rate variable change?

## Blades, Inc. Case

Assessment of Exchange Rate Exposure (see textbook, 8th edition)

## Chapter 11

## Questions

1. Assume that Stevens Point Co. has net receivables of 100, 000 Singapore dollars in 90 days. The spot rate of the S\$ is \$. 50, and the Singapore interest rate is 2% over 90 days. Suggest how the U. S. firm could implement a money market hedge. Be precise. 2. Assume that Loras Corp. imported goods from New Zealand and needs 100, 000 New Zealand dollars 180 days from now. It is trying to determine whether to hedge this position. Loras has developed the following probability distribution for the New Zealand dollar:

## Possible Value of

## New Zealand Dollar in 180 Days Probability

\$. 40 5%

. 45 10%

. 48 30%

. 50 30%

. 53 20%

. 55 5%

The 180-day forward rate of the New Zealand dollar is \$. 52. The spot rate of the New Zealand dollar is \$. 49. Develop a table showing a feasibility analysis for hedging. That is, determine the possible differences between the costs of hedging versus no hedging. What is the probability that hedging will be more costly to the firm not hedging? 3. Using the information from



question 9, determine the expected value of the additional cost of hedging.

4. Assume the following information:

90-day U. S. interest rate = 4%

90-day Malaysian interest rate = 3%

90-day forward rate of Malaysian ringgit = \$. 400

Spot rate of Malaysian ringgit = \$. 404

Assume that the Santa Barbara Co. in the United States will need 300, 000 ringgit in 90 days. It wishes to hedge this payables position. Would it be better off using forward hedge or money market hedge? Substantiate your answer with estimated costs for each type of hedge.

## Chapter 12

### Questions

1. St. Paul Co. does business in the United States and New Zealand. In attempting to assess its economic exposure, it compiled the following information. a. St. Paul's U. S. sales are somewhat affected by the value of the New Zealand dollar (NZ\$), because it faces competition from New Zealand exporters. It forecasts the U. S. sales based on the following three exchange rate scenarios:

Revenue from U. S. Business

Exchange Rate of NZ\$(in millions)

NZ\$ = \$. 48\$100

NZ\$ = . 50105

NZ\$ = . 54110

b. Its New Zealand dollar revenue on sales to New Zealand invoiced in New Zealand dollars are expected to be NZ\$600 million. c. Its anticipated cost of goods sold is estimated at \$200 million from the purchase of U. S. materials and NZ\$100 million from the purchase of New Zealand materials.

d. Fixed operating expenses are estimated at \$30 million.

e. Variable operating expenses are estimated at 20 percent of total sales (after including New Zealand sales, translated to a dollar amount). f. Interest expense is estimated at \$20 million on existing U. S. loans, and the company has no existing New Zealand loans. Create a forecasted income statement for St. Paul Co. under each of the three exchange rate scenarios. Explain how St. Paul's projected earnings before taxes are affected by possible exchange rate movements. Explain how it can restructure its operations to reduce the sensitivity of its earnings to exchange rate movements without reducing its volume of business in New Zealand.

2. Baltimore, Inc., is a U. S.-based MNC that obtains 10 percent of its supplies from European manufacturers. Sixty percent of its revenues are due to exports in Europe, where its product is invoiced in euros. Explain how Baltimore can attempt to reduce its economic exposure to exchange rate fluctuations in the euro.

3. Denver, Inc., is concerned with how shareholders react to changes in consolidated earnings but prefers not to hedge its translation exposure. How can it attempt to reduce shareholder reaction to a decline in consolidated earnings that results from a strengthened dollar?

Blades, Inc. Case

Assessment of Economic Exposure (see textbook, 8th edition)

## Chapter 13

### Questions

1. Raider Chemical Co. and Ram, Inc., had similar intentions to reduce the volatility of their cash flows. Raider implemented a long-range plan to establish 40 percent of its business in Canada. Ram, Inc., implemented a long-range plan to establish 30 percent of its business in Europe and Asia, scattered among 12 different countries. Which company will more effectively reduce cash flow volatility once the plans are achieved? 2. Offer your opinion on why economies of some less developed countries with strict restrictions on international trade and DFI are somewhat independent from economies of other countries. Why would MNCs desire to enter such countries? If these countries relaxed their restrictions, would their economies continue to be independent of other economies? Explain. 3. Bronco Corp. has decided to establish a subsidiary in Taiwan that will produce stereos and sell them there. It expects that its cost of producing these stereos will be one-third the cost of producing them in the United States. Assuming that its production cost estimates are accurate, is Bronco's strategy sensible? Explain. 4. Consider the typical motives for a U. S. firm to engage in DFI. Which of these motives might have encouraged a U. S. firm to invest in Asia since the Asian crisis? (Assume the firm previously had no business in Asia.)

### Blades, Inc. Case

Consideration of Direct Foreign Investment (see textbook, 8th edition)

## Chapter 14

### Questions

1. Wolverine Corp. currently has no existing business in New Zealand but is considering establishing a subsidiary there. The following information has been gathered to assess this project: The initial investment required is \$50 million in New Zealand dollars (NZ\$). Given the existing spot rate of \$. 50 per New Zealand dollar, the initial investment in U. S. dollars is \$25 million. In addition to the NZ\$50 million initial investment for plant and equipment, NZ\$20 million is needed for working capital and will be borrowed by the subsidiary from a New Zealand bank. The New Zealand subsidiary will pay interest only on the loan each year, at an interest rate of 14 percent. The loan principal is to be paid in 10 years. The project will be terminated at the end of year 3, when the subsidiary will be sold. The price, demand, and variable cost of the product in New Zealand are as follows:

Year	Price	Demand	Variable Cost
1	NZ\$50	40, 000 units	NZ\$30
2	NZ\$51	150, 000 units	NZ\$35
3	NZ\$53	060, 000 units	NZ\$40

The fixed costs, such as overhead expenses, are estimated to be NZ\$6 million per year. The exchange rate of the New Zealand dollar is expected to be \$. 52 at the end of Year 1, \$. 54 at the end of Year 2, and \$. 56 at the end of Year 3. The New Zealand government will impose an income tax of 30 percent on income. In addition, it will impose a withholding tax of 10 percent on earnings remitted by the subsidiary. The U. S. government will allow a tax credit on the remitted earnings and will not impose any additional taxes. All cash flows received by the subsidiary are to be sent to the parent at the end

of each year. The subsidiary will use its working capital to support ongoing operations. The plant and equipment are depreciated over 10 years using the straight-line depreciation method. Since the plant and equipment are initially valued at NZ\$50 million, the annual depreciation expense is NZ\$5 million. In three years, the subsidiary is to be sold. Wolverine plans to let the acquiring firm assume the existing New Zealand loan.

The working capital will not be liquidated but will be used by the acquiring firm when it sells the subsidiary. Wolverine expects to receive NZ\$52 million after subtracting capital gains taxes. Assume that this amount is not subject to a withholding tax. Wolverine requires a 20 percent rate of return on this project. a. Determine the net present value of this project. Should Wolverine accept this project? b. Assume that Wolverine is also considering an alternative financing arrangement, in which the parent would invest an additional \$10 million to cover the working capital requirements so that the subsidiary would avoid the New Zealand loan. If this arrangement is used, the selling price of the subsidiary (after subtracting any capital gains taxes) is expected to be NZ\$18 million higher. Is this alternative financing arrangement more feasible for the parent than the original proposal? Explain. c. From the parent's perspective, would the NPV of this project be more sensitive to exchange rate movements if the subsidiary uses New Zealand financing to cover the working capital or if the parent invests more of its own funds to cover the working capital?

Explain. d. Assume Wolverine used the original financing proposal and that funds are blocked until the subsidiary is sold. The funds to be remitted are

reinvested at a rate of 6 percent (after taxes) until the end of Year 3. How is the project's NPV affected? e. What is the break-even salvage value of this project if Wolverine uses the original financing proposal and funds are not blocked? f. Assume that Wolverine decides to implement the project, using the original financing proposal. Also assume that after one year, a New Zealand firm offers Wolverine a price of \$27 million after taxes for the subsidiary and that Wolverine's original forecasts for Years 2 and 3 have not changed. Should Wolverine divest the subsidiary? Explain.

2. When Walt Disney World considered establishing a theme park in France, were the forecasted revenues and costs associated with the French park sufficient to assess the feasibility of this project? Were there any other "relevant cash flows" that deserved to be considered?

3. PepsiCo recently decided to invest more than \$300 million for expansion in Brazil. Brazil offers considerable potential because it has 150 million people and their demand for soft drinks is increasing. However, the soft drink consumption is still only about one-fifth of the soft drink consumption in the U. S. PepsiCo's initial outlay was used to purchase three production plants and a distribution network of almost 1, 000 trucks to distribute its products to retail stores in Brazil. The expansion in Brazil was expected to make PepsiCo's products more accessible to Brazilian consumers. a. Given that PepsiCo's investment in Brazil was entirely in dollars, describe its exposure to exchange rate risk resulting from the project.

Explain how the size of the parent's initial investment and the exchange rate risk would have been affected if PepsiCo had financed much of the

investment with loans from banks in Brazil. b. Describe the factors that PepsiCo likely considered when estimating the future cash flows of the project in Brazil. c. What factors did PepsiCo likely consider in deriving its required rate of return on the project in Brazil? d. Describe the uncertainty that surrounds the estimate of future cash flows from the perspective of the U. S. parent. e. PepsiCo's parent was responsible for assessing the expansion in Brazil. Yet, PepsiCo already had some existing operations in Brazil. When capital budgeting analysis was used to determine the feasibility of this project, should the project have been assessed from a Brazil perspective or a U. S. perspective? Explain.

## Chapter 15

### Questions

1. Savannah, Inc., a manufacturer of clothing, wants to increase its market share by acquiring a target producing a popular clothing line in Europe. This clothing line is well established. Forecasts indicate a relatively stable euro over the life of the project. Marquette, Inc., wants to increase its market share in the personal computer market by acquiring a target in Thailand that currently produces radios and converting the operations. Forecasts indicate a depreciation of the baht over the life of the project. Funds resulting from both projects will be remitted to the respective U. S. parent on a regular basis. Which target do you think will result in a higher net present value? Why? 2. Why are valuations of privatized businesses previously owned by the governments of developing countries more difficult than valuations of existing firms in developed countries? 3. Blore Inc., a U. S.-based MNC, has screened several targets. Based on economic and political considerations,

only one eligible target remains in Malaysia. Blore would like you to value this target and has provided you with the following information:

- Blore expects to keep the target for three years, at which time it expects to sell the firm for 300 million Malaysian ringgit (MYR) after any taxes.
  - Blore expects a strong Malaysian economy. Consequently, the estimates for revenue for the next year are MYR200 million. Revenue are expected to increase by 8% over the following two years.
  - Cost of goods sold are expected to be 50% of revenue.
  - Selling and administrative expenses are expected to be MYR30 million in each of the next three years.
  - The Malaysian tax rate on the target's earnings is expected to be 35%.
  - Depreciation expenses are expected to be MYR20 million per year for each of the next three years.
  - The target will need MYR7 million in cash each year to support existing operations.
- 
- The target's stock price is currently MYR30 per share. The target has 9 million shares outstanding.
  - Any remaining cash flows will be remitted by the target to Blore Inc. Blore uses the prevailing exchange rate of the Malaysian ringgit as the expected exchange rate for the next three years. This exchange rate is currently \$. 25.
  - Blore's required rate of return on similar projects is 20%.
- a. Prepare a worksheet to estimate the value of the Malaysian target based on the information provided. b. Will Blore Inc. be able to acquire the Malaysian target for a price lower than its valuation of the target?
4. Refer to question 7. What are some of the key sources of uncertainty in Blore's valuation of the target? Identify two reasons why the



expected cash flows from an Asian subsidiary of a U. S.-based MNC would have been lower as a result of the Asian crisis.

## Chapter 16

### Questions

1. How could a country risk assessment be used to adjust a project's required rate of return? How could such an assessment be used instead to adjust a project's estimated cash flows? 2. Explain some methods of reducing exposure to existing country risk, while maintaining the same amount of business within a particular country. 3. When NYU Corp. considered establishing a subsidiary in Zenland; it performed a country risk analysis to help make the decision. It first retrieved a country risk analysis performed about one year earlier, when it had planned to begin a major exporting business to Zenland farms. Then it updated the analysis by incorporating all current information on the key variables that were used in that analysis, such as Zenland's willingness to accept exports, its existing quotas, and existing tariff laws. Is this country risk analysis adequate? Explain. 4. MNCs such as Alcoa, DuPont, Heinz, and IBM donated products and technology to foreign countries where they had subsidiaries. How could these actions have reduced some forms of country risk?