

This exercise is intended to apply many of the key concepts presented in the text to broad issues that are discussed by managers who make financial decisions. It does not replace the more detailed questions and problems at the end of the chapters. Instead, it focuses on broad financial issues to facilitate class discussion and simulate a boardroom discussion. It serves as a running case in which concepts from every chapter are applied to the same business throughout the school term. The exercise not only enables students to apply concepts to the real world, but also develops their intuition and communication skills.

This exercise can be used in a course in several ways:

1. Apply it on a chapter-by-chapter basis to ensure that the broad chapter concepts are understood before moving to the next chapter.
2. Use it to encourage online discussion for courses taught online.
3. Use it as a review before each exam, covering all chapters assigned for that exam.
4. Use it as a comprehensive case discussion near the end of the semester, as a means of reviewing the key concepts that were described throughout the course.
5. Use it for presentations, in which individuals or teams present their views on the questions that were assigned to them.

This exercise has been placed on the course website so that students can download it and insert their answers after the questions. By the end of the course, students will have applied all the major concepts of the text to a single firm. The focus on a single firm will allow students to recognize how some of their decisions in the earlier chapters interact with decisions to be made in later chapters.

BACKGROUND

One of the best ways to learn the broad concepts presented in this text is to put yourself in the position of an MNC manager or board member and apply the concepts to financial decisions. Although board members normally do not make the decisions discussed here, they must have the conceptual skills to monitor the policies that are implemented by the MNC's managers. Thus, they must frequently consider what they would do if they were making the managerial decisions or setting corporate policies.

This exercise is based on a business that you could easily create: a language school. Although this business is very basic, it still requires the same types of decisions faced by large MNCs.

Assume that you live in the United Kingdom and invest £60,000 to establish a language school called The Extrovert Language School in Italy. You set up a small subsidiary in Turin, with an office and an attached classroom that you lease. You hire local individuals in Italy who can speak a range of languages and teach them to others. Your school offers two types of courses: a one-month structured course in a range of languages and a one-week intensive course for individuals who already know the language but want to improve their skills before visiting the country. You advertise both types of teaching services in the local newspapers.

All revenue and expenses associated with your business are denominated in euros. Your subsidiary sends most of the profits from the business in Italy to you at the end of each month. Although your expenses are somewhat stable, your revenue varies with the number of clients who sign up for the courses in Italy.

This background is sufficient to enable you to answer the questions that are asked about your business throughout the term. Answer each question as if you were serving on the board or as a manager of the business. The questions in the early chapters force you to assess the firm's opportunities and exposure, while the later chapters force you to consider potential strategies that your business might pursue.

CHAPTER 1

1. Discuss the corporate control of your business. Explain why your business in Italy is exposed to agency problems.
2. How would you attempt to monitor the ongoing operations of the business?
3. Explain how you might be able to use a compensation plan to limit the potential agency problems.
4. Assume that you have been approached by a competitor in Italy to engage in a joint venture. The competitor would provide the classroom facilities (so you would not need to rent classroom space), while your employees would teach the classes. You and the competitor would split the profits. Discuss how your potential return and your risk would change if you pursue the joint venture.
5. Explain the conditions that would cause your business to be adversely affected by exchange rate movements.
6. Explain how your business could be adversely affected by political risk.

CHAPTER 2

Your business provides cassettes for free to customers who pay for the a language course that you offer in Italy. You are considering mass-producing the cassettes in the United Kingdom so that you can sell (export) them to distributors or to retail stores throughout Italy. You would price the cassettes in pounds when exporting them. The cassettes are less effective without the teaching, but still can be useful to individuals who want to learn the basics of a range of languages.

1. If you pursue this idea, explain how the factors that affect international trade flows (identified in Chapter 2) could affect the euro-zone demand for your cassettes. Which of these factors would likely have the largest impact on the euro-zone demand for your cassettes? What other factors would affect the euro-zone demand for the cassettes?
2. Suppose that you believe the European Union will impose a tariff or administrative regulations on the cassettes exported to Italy. How could you still execute this business idea at a relatively low cost while avoiding the tariff? Describe any disadvantages of this idea to avoid the tariff.

CHAPTER 3

Assume that the business in Italy grows. Explain how financial markets could help to finance the growth of the business.

CHAPTER 4

Given the factors that affect the value of a foreign currency, describe the type of economic or other conditions in Europe that could cause the euro to weaken and thereby to adversely affect your business.

CHAPTER 5

Explain how currency futures could be used to hedge your business in Italy. Explain how currency options could be used to hedge your business in Italy.

CHAPTER 6

1. Explain how your business will likely be affected (at least in the short run) if the European Central Bank intervenes in the foreign exchange market by exchanging euros for pounds.
2. Explain how your business will likely be affected if the European Central Bank uses indirect intervention by lowering euro interest rates (assume inflationary expectations have not changed).

CHAPTER 7

Euro interest rates are normally substantially lower than UK interest rates.

1. What does this imply about the forward premium or discount of the euro?
2. What does this imply about your business using forward or futures contracts to hedge your periodic profits in euros that must be converted into pounds?
3. Do you think you would frequently hedge your exposure to euros? Explain your answer.

CHAPTER 8

Euro interest rates are normally substantially higher than UK interest rates.

1. What does this imply about the inflation differential (euro inflation minus UK inflation), assuming that the real interest rate is the same in both countries? Does this imply that the euro will appreciate or depreciate? Explain.
2. It might be argued that the high euro interest rates should entice UK investors to invest in euro money market securities, which could cause the euro to appreciate. Reconcile this theory with your answer in question (1). If you believe that the high euro interest rates will not entice UK investors, explain your reasoning.
3. Assume that the difference between the euro and UK interest rates is typically attributed to a difference in expected inflation in the two countries. Also assume that purchasing power parity holds. Do you think that your business cash flows will be adversely affected? In reality, purchasing power parity does not hold consistently. Assume that the inflation differential (euro inflation minus UK inflation) is not fully offset by the exchange rate movement of the euro. Will this benefit or hurt your business? Now assume that the inflation differential is more than offset by the exchange rate movement of the euro. Will this benefit or hurt your business?
4. Assume that the nominal interest rate in Italy is currently much higher than the UK interest rate and that this difference is due to a high rate of expected inflation in the euro area. You are considering hiring a local firm to promote your business, but you would have to borrow funds to finance this marketing campaign. A consultant advises you to delay the marketing campaign for a year so that you can capitalize on the high nominal interest rate in Italy. He suggests that you retain the profits that you would normally have remitted to the United Kingdom and deposit them in an Italian bank.

The euro cash flows that your business deposits will grow at a high rate of interest over the year. Should you follow the advice of the consultant?

CHAPTER 9

1. Euro interest rates are normally substantially higher than UK interest rates. What does this imply about the forward rate as a forecast of the future spot rate?
2. Does the forward rate reflect a forecast of appreciation or depreciation of the euro? Explain how the degree of the expected change implied by the forward rate forecast is tied to the interest rate differential.
3. Do you think that today's forward rate or today's spot rate of the euro provides a better forecast of the future spot rate of the euro?

CHAPTER 10

Recall that your business invoices in euros.

1. You are already aware that a decline in the value of the euro could reduce your pound cash flows. Yet, according to purchasing power parity, a weak euro should occur only in response to a high level of euro inflation, and such high inflation should increase your profits. If this theory holds precisely, your cash flows would not really be exposed. Should you be concerned about your exposure, or not? Explain.
2. If you change your policy and invoice only in pounds, how will your transaction exposure be affected?
3. Why might the demand for your business change if you change your invoice policy? What are the implications for your economic exposure?

CHAPTER 11

Euro interest rates are normally substantially higher than UK interest rates.

1. Assuming that interest rate parity exists, do you think hedging with a forward rate will be beneficial if the spot rate of the euro is expected to decline slightly over time?
2. Will hedging with a money market hedge be beneficial if the spot rate of the euro is expected to decline slightly over time (assume zero transaction costs)? Explain.
3. What are some limitations on using currency futures or options that may make it difficult for you to perfectly hedge against exchange rate risk over the next year or so?
4. In general, not many long-term currency futures and options on the euro are available. A consultant suggests that this is not a problem because you can hedge your position a quarter at a time. In other words, the profits that you remit at any point in the future can be hedged by taking a currency futures or options position three months or so before that time. Thus, although the consultant recognizes that the euro could weaken substantially in the long term, she sees no reason why you should worry about its decline as long as you continually create a short-term hedge. Do you agree?

CHAPTER 12

1. Explain how your business is subject to translation exposure.
2. How could you hedge against this translation exposure?
3. Is it worthwhile for your business to hedge the translation exposure?

CHAPTER 13

Assume that you want to expand your business to other non-euro countries where some individuals may want to learn to speak a range of languages.

1. Explain why you might be able to stabilize the profits of your total business in this manner. Review the motives for direct foreign investment that are identified in this chapter. Which of these motives are most important?
2. Why would a city such as Montreal be a less desirable site for your business than a city such as Turin?
3. Describe the conditions in which your total business would experience weak effects even if the business was spread across three or four countries.
4. What factors affect the probability that the conditions you identified in question (3) might occur? (In other words, explain why the conditions could occur in one set of countries, but not another set of countries.)
5. What data would you review to assess the probability that these conditions will occur?
6. Assume that your business has already created some pamphlets and cassettes that translate common business terms into a range of languages to supplement your primary service of teaching individuals in Italy to speak a range of languages. How could you expand your business in a manner that might allow you to benefit from economies of scale (and perhaps even benefit from your existing business reputation)? When you attempt to benefit from economies of scale, do you forgo diversification benefits? Explain.
7. How would you come to a decision on whether to pursue business expansion that capitalizes on economies of scale even though it would mean forgoing diversification benefits? Do you think economies of scale would be more or less important than diversification for your business?
8. Is there any way to achieve both economies of scale and diversification benefits?

CHAPTER 14

1. Review the different items that are used in the multinational capital budgeting example (Spartan ltd). Describe the items that you would include on a spreadsheet if you conducted a multinational capital budgeting analysis of investing pounds to expand your existing language business in a different location.
2. Assume that you recognize your limitations in predicting the future exchange rate of the invoice currency for your expanded business. You think that there are several possible exchange rate scenarios, each with equal probability of occurrence. Explain how you could use this information to estimate the future net present value (*NPV*) and make a decision about whether to accept or reject the project.
3. Now assume that there is also much uncertainty about individuals' demand for your service in the new location. Explain how you can incorporate this uncertainty along with the uncertainty of exchange rate movements so that you can make a decision about whether to accept or reject the project.
4. Explain how you would derive a required rate of return for your capital budgeting analysis. What type of information would you use to derive the required rate of return?

CHAPTER 15

1. Review the political risk factors, and identify those that could possibly affect your business. Explain how your cash flows could be affected.
2. Explain why threats of terrorism could possibly affect your business, even though the terrorism has no effect on the relations between the United Kingdom and Italy.
3. Assume that an upcoming election in Italy may result in a complete change in government. Explain why the election could have significant effects on your cash flows.

CHAPTER 16

1. Assume that your business is considering expanding in Italy. You plan to invest a small amount of UK pound equity into this project and finance the remainder with debt. You can obtain debt financing for the expansion in Italy, but euro interest rates are higher than UK rates. Yet, if you use mostly UK debt financing, you will be more exposed to exchange rate risk. Explain why.
2. You want to assess the feasibility of the new project in Italy if you use mostly UK debt financing versus mostly euro debt financing. You also want to capture possible exchange rate effects on your cash flows over time. How can you use capital budgeting to conduct your comparison?
3. You prefer to avoid using euro debt to finance your expansion in Italy because the interest rates are high. A consultant suggests that you seek one or more investors in Italy who would be willing to take an equity position in your business. You would provide them with periodic dividends, and they would be partial owners of your company. The consultant suggests that this strategy would circumvent the high cost of capital in Italy because it uses equity financing instead of debt financing. Is the consultant correct?

CHAPTER 17

Recall from the previous chapter that your business is considering expansion within Italy. Recall that you plan to invest a small amount of UK pound equity into this project and finance the remainder with debt. You can obtain debt financing for the expansion in Italy, but euro interest rates are higher than UK rates. Today, you receive credit offers from different banks. You can obtain a fixed rate loan in the United Kingdom at 8% for the life of this project or a floating rate loan (rate changes each year in response to market interest rates) in Italy at 10%. Explain how you could estimate the net present value (*NPV*) of the project for each alternative financing method. Include an explanation of how you would account for the uncertainty of future movements of euro interest rates.

CHAPTER 18

Recall that your business provides cassettes that complement the teaching provided by your employees in Italy. Assume that you decide to capitalize on these cassettes by selling them to a large retail store based in Italy. The cassettes are less effective without the teaching, but still can be useful to individuals who want to learn the basics of a range of languages. You do not want to take the risk of sending a case of cassettes to the retail store unless you can be sure of receiving payment. Explain how you can ensure payment for the cassettes.

CHAPTER 19

You are considering a major marketing campaign in Italy. If you implement it, you will incur high expenses in euros and will need to finance the cost. To cover the cost, you can either borrow pounds at a low interest rate and convert them to euros or borrow euros. You expect to pay off the loan on a monthly basis over the next year by using a portion of the revenue you generate from your business in Italy.

1. Will your business be more exposed to exchange rate risk if you borrow pounds or euros?

2. Explain how you would make the decision to borrow pounds versus euros. What is the key factor (other than the interest rate of each currency) that will determine whether you borrow pounds or euros?

CHAPTER 20

Assume that this year you decide not to implement the marketing campaign that you considered in the previous chapter. Instead, you will invest some of this year's profits in money market investments and then use this money to cover the campaign next year. You can retain the profits earned this year by investing them in a euro bank where interest rates are high. Alternatively, you could invest the profits in a pound-denominated bank account. That is, you could convert your euro profits to pounds periodically and accumulate the pounds over the year. At the end of the year, you could convert the pounds back to euros to pay for the marketing campaign. Explain how you would decide between these two alternatives.

ADDITIONAL READING 1

You have an opportunity to purchase a private competitor called Fernand in Italy. If you decide to purchase the company, you will use only your own funds.

1. When you attempt to determine the value of this company, how will you derive your required rate of return? Specifically, should you use the UK or the euro risk-free rate as a base when deriving your required rate of return? Why?
2. Another euro firm called Vascon is also considering acquiring this firm. Explain why Vascon's required rate of return may be higher than your required rate of return. Is there any reason why Vascon's required rate of return may be lower than your required rate of return?
3. Assume that you and Vascon have the same expectations regarding the euro cash flows that will be generated by Fernand. Fernand's owner is willing to sell the company for 2 million euros. You and Vascon use a similar process to determine the feasibility of acquiring the target. You both compare the present value of the target's cash flows to the purchase price. Based on your analysis, Fernand would generate a positive net present value (*NPV*) for your firm. Based on Vascon's analysis, Fernand would generate a negative *NPV* for Vascon. How could you determine that the acquisition of Fernand is feasible, while Vascon determines that the acquisition is not feasible?
4. Repeat question (3), but reverse the assumptions. That is, you determine that Fernand would generate a negative *NPV* for your firm, whereas Vascon determines that Fernand would generate a positive *NPV*. How could you determine that the acquisition of Fernand is not feasible, while Vascon determines that the acquisition of Fernand is feasible?