CHAPTER 18

International Managerial Finance

INSTRUCTOR'S RESOURCES

Overview

In today's global business environment, the financial manager must also be aware of the international aspects of finance. A variety of international finance topics are presented in this chapter, including taxes, accounting practices, risk, the international capital markets, and the effect on capital structure of operating in different countries. This chapter discusses limited techniques but provides a broad overview of the financial considerations of the multinational corporation.

PMF DISK

This chapter's topics are not covered in the *PMF Tutor* or the *PMF Problem-Solver*.

PMF Templates

A spreadsheet template is included for the following problem:

Problem	Topic
18-1	Tax credits

Study Guide

The following *Study Guide* example is suggested for classroom presentation:

Example	Topic
1	Exchange rates

ANSWERS TO REVIEW QUESTIONS

18-1 The first trading bloc was created by the *North American Free Trade Agreement (NAFTA)* which is the treaty that establishes free trade and open markets between Canada, Mexico, and the United States. The *European Open Market* is a second trading bloc and was created by a similar agreement among the 12 western European nations of the European Economic Community (now called the European Union, or EU) and eliminates tariff barriers to create a single marketplace. The EU is establishing a single currency for all participating countries called the Euro. The third bloc is called the *Mercosur Group* and consists of many of the countries in South America.

An important component of free trade among countries, including those not part of one of the three trading blocs, is the *General Agreement on Tariffs and Trade (GATT).* GATT extends free trade to broad areas of activity–such as agriculture, financial services, and intellectual property–to any member country. GATT also established the *World Trade Organization (WTO)* to police and mediates disputes between member countries.

18-2 A *joint venture* is a partnership under which the participants have contractually agreed to contribute specified amounts of money and expertise in exchange for stated proportions of ownership and profit. It is essential to use this type of arrangement in countries requiring that majority ownership of MNC joint venture projects be held by domestically-based investors.

Laws and restrictions regarding joint ventures have effects on the operating of MNCs in four major areas: 1) majority foreign ownership reduces management control by the MNC, 2) disputes over distribution of income and reinvestment frequently occur, 3) ceilings cap profit remittances to parent company, and 4) there is political risk exposure.

18-3 From the point of view of a U.S.-based MNC, key tax factors that need to be considered are 1) the level of foreign taxes, 2) the definition of taxable income, and 3) the existence of tax agreements between the U.S. and the host country. Unitary tax laws refer to taxes placed by state governments on MNCs, who pay taxes based on a percentage of their total worldwide income rather than on their earnings arising within the jurisdiction of each respective government.

18-4 The emergence and the subsequent growth of the Euromarket, which provides for borrowing and lending currencies outside the country of origin, have been attributed to the following factors: the desire by the Russians to maintain their dollars outside the U.S.; consistent U.S. balance of payments deficits; and the existence of certain regulations and controls on dollar deposits in the United States.

Certain cities around the world—including London, Singapore, Hong Kong, Bahrain, Luxembourg, and Nassau—have become known as *major offshore centers* of Euromarket business, where extensive Eurocurrency and Eurobond activities take place. Major participants in the Euromarket include the U.S., Germany, Switzerland, Japan, France, Britain, and the OPEC nations. In recent years, developing nations have also become part of the Euromarkets.

18-5 The rules for consolidation of foreign subsidiaries currently rely on a parent MNC's percentage of beneficial ownership in a subsidiary. For 0-19% ownership, consolidation of only dividends as received by the parent is required; in the 20%-49% range, a pro rata inclusion of profits and losses is required; and for 50%-100%, full consolidation must take place. FASB No. 52 requires MNCs first to convert the financial statement accounts of foreign subsidiaries into functional currency (the currency of the economy where the entity primarily generates and spends cash and where its accounts are maintained) and then to translate the accounts into the parent firm's currency, using the all-current-rate method.

18-6 The *spot exchange rate* is the rate of exchange between two currencies on any given day. The *forward exchange rate* is the rate of exchange between two currencies at some future date. Foreign exchange fluctuation affects individual accounts in the financial statements; this risk is called *accounting exposure*. *Economic exposure* is the risk arising from the potential impact of exchange rate fluctuations on the firm's value. Accounting exposure demonstrates paper translation losses, while economic exposure is the potential for real loss.

18-7 If one country experiences a higher inflation rate than a country they trade with, the high inflation country will experience a decline (depreciation) in the value of their currency. This depreciation results from the fact that relatively high inflation causes the price of goods to increase. Foreign purchasers will decrease their demand for the high inflations country's products due to the higher cost. This decrease in demand forces the value of the inflated currency is decline to bring the exchange-rate-adjusted price back into line with pre-inflation prices.

18-8 *Macro political risk* means that due to political change, all foreign firms in the country will be affected. *Micro political risk* is specific to the individual firm or industry which is targeted for nationalization. Techniques for dealing with political risk are outlined in Table 18.4 and include joint venture agreements, prior sale agreements, international guarantees, license restrictions, and local financing.

18-9 If cash flows are blocked by local authorities, the NPV of a project and its level of return is "normal," from the subsidiary's point of view. From the parent's perspective, however, NPV in terms of repatriated cash flows may actually be "zero." The life of a project, of course, can prove to be quite important. For longer projects, even if the cash flows are blocked during the first few years, there can still be meaningful NPV from the parent's point of view if later years' cash flows are permitted to be freely repatriated back to the parent.

18-10 Several factors cause MNCs' capital structure to differ from that of purely domestic firms. Because MNCs have access to international bond and equity markets and, therefore, to a greater variety of financial instruments, certain capital components may have lower costs. The particular currency markets to which the MNC has access will also affect capital structure. The ability to diversify internationally also affects capital structure and may result in either higher leverage and/or higher agency costs. The differing political, legal, financial, and social aspects of each country can also impact capital structure considerations.

18-11 A *foreign bond* is an international bond sold primarily in the country of the currency in which it is issued. A *Eurobond* is sold primarily in countries other than the country of the currency in which the issue is denominated. Foreign bonds are generally sold by those resident underwriting institutions which normally handle bond issues. Eurobonds are usually handled by an international syndicate of financial institutions based in the United States or Western Europe. In the case of foreign bonds, interest rates are generally directly correlated with the domestic rates prevailing in the respective countries. For Eurobonds, several domestic and international (Euromarket) interest rates can influence the actual rates applicable to these bonds.

18-12 In terms of potential political risks and adverse actions by a host government, having more local debt (and thus more local investors or investments) in a foreign project can prove to be a valuable protective measure over the long-run. This strategy will likely cause the local government to be less threatening in the event of governmental or regulatory changes, since the larger amount of local sources of financing are included in the subsidiary's capital structure.

18-13 The *Eurocurrency market* provides short-term, foreign-currency financing to MNC subsidiaries. Supply and demand are major factors influencing exchange rates in this market. In international markets, the *nominal interest rate* is the stated interest rate charged when only the MNC's parent currency is involved. *Effective interest rates* are nominal rates adjusted for any forecast changes in the foreign currency relative to the parent MNC's currency. Consideration of effective rates of interest is critical to any MNC investment and borrowing decisions.

18-14 In dealing with "third parties," when the subsidiary's local currency is expected to appreciate in value, attempts must be made to increase accounts receivable and to decrease accounts payable. The net result would be to increase the subsidiary's resources in the local currency when it is expected to appreciate relative to the parent MNC's currency.

18-15 When it is expected that the subsidiary's local currency will depreciate relative to the "home" currency of the parent, intra-MNC accounts payable must be paid as soon as possible while intra-MNC accounts receivable should not be collected for as long as possible. The net result would be to decrease the resources denominated in that local currency.

18-16 The motives of international business combinations are much the same as for domestic combinations: growth, diversification, synergy, fund-raising, increased managerial skills, tax considerations, and increased ownership liquidity. Additional considerations are entry into foreign markets, and a conducive legal, corporate and tax environment.

SOLUTIONS TO PROBLEMS

18-1 LG 1: Tax Credits

MNC's receipt of dividends can be calculated as follows:

Subsidiary income before local taxes	$250,000
Foreign income tax at 33%	82,500
Dividend available to be declared	$167,500
Foreign dividend withholding tax at 9%	15,075
MNC's receipt of dividends	$152,425

a. If tax credits are allowed, then the so-called "grossing up" procedure will be applied:

Additional MNC income		$250,000
U.S. tax liability at 34%	$85,000	
Total foreign taxes paid (credit)		
($82,500 + $15,075)	(97,575)	(97,575)
U.S. taxes due		0
Net funds available to the MNC		$152,425

b. If no tax credits are permitted, then:

MNC's receipt of dividends	$152,425
U.S. tax liability ($152,425 x .34)	51,825
Net funds available to the MNC	$100,600

18-2 LG 3: Translation of Financial Statements

Balance Sheet

	12/31/03 U.S.$	12/31/04 U.S.$*
Cash	26.67	28.17
Inventory	200.00	211.27
Plant and Equipment (net)	106.67	112.68
Total	333.34	352.12
Debt	160.00	169.01
Paid-in capital	133.33	140.85
Retained earnings	40.00	42.25
Total	333.33**	352.11**

Income Statement

	12/31/03 U.S.$	12/31/04 U.S.$
Sales	20,000.00	21,126.76
Cost of goods sold	19,833.33	20,950.70
Operating profits	166.67	176.06

* At 6% appreciation, the new exchange rate becomes 1.42 €/U.S.$
** Differences in totals result from rounding.

18-3 LG 5: Euromarket Investment and Fund Raising

The effective rates of interest can be obtained by adjusting the nominal rates by the forecast percent revaluation in each case:

	US$	MP	¥
Effective rates			
Euro market	5.0%	8.0%	7.2%
Domestic	4.5%	7.6%	6.7%

Following the assumption outlined in the problem, the best sources of investment and borrowing are the following:

$80 million excess is to be invested in the MP Mexican
$60 million to be raised in the US$ Euromarket.

CHAPTER 18 CASES

Assessing a Direct Investment in Chile by U.S. Computer Corporation

In this case, students evaluate the feasibility of a proposed foreign investment—construction of a factory in Chile. They must consider many factors that make international transactions complex, including political and foreign exchange rate risks and raising funds in international markets.

a. Cost of Capital-US$:

Type of Capital	Amount	Weight	Cost	Weighted Cost
Long-term debt	6,000,000	60.00%	6.0%	3.60%
Equity	4,000,000	40.00 %	12.0%	4.80%
Total	$12,000,000	100.00%		8.40%

WACC = 8.40%, or 8% to the nearest whole percent

* Includes both dollar- and peso-denominated working capital

b. Present value, 5 years:

Operating cash flow = sales x .20
= $20,000,000 x .20
= $4,000,000

PV = $4,000,000 x $PVIFA_{8\%,5\text{ yrs.}}$
PV = $4,000,000 x 3.993
PV = $15,972,000

If the dollar appreciates (gets stronger) against the Chilean peso, it takes more pesos to buy each dollar. For example, if the exchange rate changes to 500 pesos per dollar, sales of Ps 8 billion equals $16,000,000, compared to $20,000,000 at the current exchange rate. Peso cash flows are therefore worth less, and the PV would decrease.

c. USCC faces foreign exchange risks because the value of the Chilean peso can fluctuate against the dollar, and it is not a currency that can be hedged. Any changes in exchange rates will result in a corresponding change in USCC's dollar-denominated revenues, costs, and profits.

To minimize foreign exchange risk, USCC can purchase more components with pesos, sell more products priced in dollars, or both. It could purchase or produce more computer components in Chile rather than importing them from the U.S. USCC could also export finished computers to market outside of Chile with sales denominated in dollars.

d. Local (peso) financing carries a much higher cost, 12% for working capital versus 5% in the Eurobond market, and 14% for long-term funds versus 6% in the Eurobond market. Also, if the peso depreciates against the dollar, the value of USCC's investment will decrease, as will any repatriated amounts. The use of peso financing minimizes exchange rate risk.

An unstable political environment increases both political and exchange rate risks. The factory could be seized by the Chilean government if it decides to nationalize foreign assets. The value of the peso relative to the dollar would be likely to depreciate.

Joining NAFTA would strengthen Chile's economic ties with the U.S. This should make the project more attractive.

INTEGRATIVE CASE 6
ORGANIC SOLUTIONS

Integrative Case 6, Organic Solutions, asks students to evaluate a proposed acquisition by means of either a cash transaction or a stock swap. The effects on the short- and long- term EPS should be calculated and other proposals to achieve the merger discussed. The students must also consider the qualitative implications of acquiring a non-U.S.-based company.

a. Price for cash acquisition of GTI:

Year	Incremental Cash Flow	PVIF,16%	Present Value of GTI
1	$18,750,000	.862	$16,162,500
2	18,750,000	.743	13,931,250
3	20,500,000	.641	13,140,500
4	21,750,000	.552	12,006,000
5	24,000,000	.476	11,424,000
6-30	25,000,000	(6.177 - 3.274)	72,575,000
		Total	$139,239,250
		Calculator Solution:	$139,243,245

The maximum price Organic Solutions (OS) should offer GTI for a cash acquisition is $139,239,250.

b. (1) *Straight bonds* – Financing such a large portion of the acquisition with straight bonds will dramatically increase the financial risk of the firm. The management of OS must be very comfortable that the combined firm is able to generate adequate cash to service this debt. The coupon rate on these bonds could also be quite high. The potential benefit to the OS owners is the magnified return on equity that could result from the leverage.

(2) *Convertible bonds* – Initially convertibles will provide much of the same concern as straight bonds since financial leverage will increase. There are two benefits to convertible bonds not available with straight bonds. First is that the coupon rate will be lower. Investors will value the conversion feature and will be willing to pay more, thus reducing the cost, for the convertible bond. The second advantage is that the leverage will decrease as conversion occurs, assuming the benefits of the acquisition ultimately proves favorable, and the value of the firm increases by the merger. The drawback is the potential dissolution of ownership that will occur if and when the bonds are converted.

(3) *Bonds with stock purchase warrants attached* – The benefits and disadvantages of this security mix are similar to those of a convertible bond. However, there is one major difference. The attached warrants may eventually be used to supply the firm with additional equity capital. This inflow of capital will lower the financial risk of the firm and generate additional funds. There will still be the dissolution of ownership potential.

c. (1) Ratio of exchange: $30 ÷ $50 = .60
Organic Solutions must exchange .60 shares of its stock for each share of GTI's stock to acquire the firm in a stock swap.

(2) The exchange of stock should increase Organic Solutions' EPS to $3.93, an increase from $3.50.

Calculations:

New OS shares required:	4,620,000 x .60	=	2,772,000
Total OS shares:	10,000,000 + 2,772,000	=	12,772,000

EPS for OS: $\dfrac{\$35{,}000{,}000 + \$15{,}246{,}000}{12{,}772{,}000} = \$3.93$

EPS for GTI: $3.93 x .60 = $2.36, a decrease from $3.30

The decrease in EPS for GTI can be explained by looking at the price/earnings ratio for OS and the price/earnings ratio based on the price paid for GTI:

	OS	GTI
Price per share	$50 (market)	$30 (price paid)
EPS - premerger	$3.50	$3.30
P/E ratio	14.29	9.09
EPS - postmerger	$3.93	$2.36

When the P/E ratio paid is less than the P/E ratio of the acquiring company, there is an increase in the acquiring company's EPS and a decrease in the target's EPS.

(3) Over the long run, the EPS of the merged firm would probably not increase. Usually the earnings attributable to the acquired company's assets grow at a faster rate than those resulting from the acquiring company's premerger assets.

d. OS could make a tender offer to GTI's stockholders or the firm could propose a combination cash payment-stock swap acquisition.

e. The fact that GTI is actually a foreign-based company would impact many areas of the foregoing analysis. Regulations that apply to international operations tend to complicate the preparation of financial statements for foreign-based subsidiaries. Certain factors influence the risk and return characteristics of a multinational corporation (MNC), particularly economic and political risks. There are two forms of political risk: macro, which involves all foreign firms in a country, and micro, which involves only a specific industry, individual firm, or corporations from a particular country. International cash flows can be subject to a variety of factors, including local taxes in host countries, host-country regulations that may block the return of MNCs' cash flow, the usual business and financial risks, currency and political actions of host governments, and local capital market conditions. Foreign exchange risks can also complicate international cash management.