Chapter Objectives

- Describe the key components of an MNC’s capital.
- Identify the factors that affect an MNC’s capital structure.
- Explain the interaction between a subsidiary and parent in capital structure decisions.
- Explain how the cost of capital is estimated.
- Explain why the cost of capital varies among countries.

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Components of Capital (1 of 4)

An MNC needs capital to expand its operations. In general, an MNC can increase its capital either internally by retaining earnings or externally with debt or equity. These sources of capital are described in turn.

- **Retained Earnings**
  - An MNC's parent and its subsidiaries commonly generate earnings, which can be retained and reinvested to support existing operations or expansion. An MNC might use retained earnings in many different ways.
    - First, the MNC might allow each subsidiary to retain sufficient earnings to cover its expected operating expenses denominated in the same currency in the near future.

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Components of Capital (2 of 4)

- **Retained Earnings (continued)**
  - First, the MNC might allow each subsidiary to retain sufficient earnings to cover its expected operating expenses denominated in the same currency in the near future.
  - The MNC might also use retained earnings to further expand its operations internationally by establishing a new subsidiary in another country, in which it again invests some cash to create an equity investment.

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Components of Capital (3 of 4)

Sources of Debt

- **Domestic Bond Offering** — MNCs commonly engage in a domestic bond offering in their home country in which the funds are denominated in their local currency.
- **Global Bond Offering** — MNCs can engage in a global bond offering, in which they simultaneously sell bonds denominated in the currencies of multiple countries.
- **Private Placement of Bonds** — MNCs may offer a private placement of bonds to financial institutions in their home country or in the foreign country where they are expanding.
- **Loans from Financial Institutions** — An MNC's parent commonly borrows funds from financial institutions.

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Components of Capital (4 of 4)

External Sources of Equity

- **Domestic Equity Offering** — MNCs can engage in a domestic equity offering in their home country in which the funds are denominated in their local currency.
- **Global Equity Offering** — Some MNCs pursue a global equity offering in which they can simultaneously access equity from multiple countries.
- **Private Placement of Equity** — Offer a private placement of equity to financial institutions in their home country or in the foreign country where they are expanding.
- **Subsidiary's Offering of Its Own Stock** — A foreign subsidiary of the MNC could engage in a public offering of its own stock, assuming that it receives approval from the parent.

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The MNC's Capital Structure Decision (1 of 3)

Influence of Corporate Characteristics

- **MNC's Cash Flow Stability** — MNCs with more stable cash flows can handle more debt because there is a constant stream of cash inflows to cover periodic interest payments on debt.
- **MNC's Credit Risk** — MNCs that have lower credit risk have more access to credit.
- **MNC's Access to Retained Earnings** — Highly profitable MNCs may be able to finance most of their investment with retained earnings and therefore use an equity-intensive capital structure.
- **MNC's Guarantees on Debt** — If the parent backs the debt of its subsidiary, the subsidiary's borrowing capacity might be increased.
- **MNC's Agency Problems** — If a subsidiary in a foreign country cannot easily be monitored by investors from the parent's country, agency costs are higher.

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The MNC’s Capital Structure Decision (2 of 3)

Influence of Host Country Characteristics

- **Interest Rates in Host Countries** — The cost of loanable funds may be lower in some countries.
- **Strength of Host Country Currencies** — If an MNC expects weakness of the currencies in its subsidiaries’ host countries, it may borrow in those currencies rather than rely on parent financing. If the subsidiary’s local currency is expected to appreciate, then the subsidiary may retain and reinvest its earnings.
- **Country Risk in Host Countries** — If an MNC’s subsidiary is exposed to the risk that the host government might confiscate its assets, the subsidiary may use much debt financing in that host country.
- **Tax Laws in Host Countries** — Foreign subsidiaries may be subject to a withholding tax when they remit earnings.

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The MNC's Capital Structure Decision (3 of 3)

Response to Changing Country Characteristics

- The country characteristics:
  - Vary among countries.
  - Change over time in any particular country.
- Therefore the ideal capital structure:
  - May vary among countries.
  - Could change within any particular country over time.

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Subsidiary Versus Parent Capital Structure Decisions

Some subsidiaries are subject to conditions that favor debt financing, while other subsidiaries are subject to conditions that favor equity financing.

Impact of Increased Subsidiary Debt Financing — When a subsidiary relies heavily on debt financing, its need for its internal equity financing (retained earnings) is reduced.

Impact of Reduced Subsidiary Debt Financing — The subsidiary will need to use more internal financing, will remit fewer funds to the parent, and will reduce the amount of internal funds available to the parent.

Limitations in Offsetting a Subsidiary's Leverage — Foreign creditors may charge higher loan rates to a subsidiary that uses a highly leveraged local capital structure because they believe that the subsidiary may be unable to meet its high debt repayments.

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Multinational Cost of Capital (1 of 7)

MNC's Cost of Debt: An MNC's cost of debt is dependent on the interest rate that it pays when borrowing funds.

MNC's Cost of Equity: An MNC creates equity by retaining earnings or by issuing new stock. An MNC's cost of equity contains a risk premium (above the risk-free interest rate) that compensates the equity investors for their willingness to invest in the equity.

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Multinational Cost of Capital (2 of 7)

Estimating an MNC's Cost of Capital

$$k_c = \left(\frac{D}{D+E}\right)k_d(1-t) + \left(\frac{E}{D+E}\right)k_e$$

where

k_c weighted average cost of capital

D amount of the firm's debt

k_d before-tax cost of its debt

t corporate tax rate

E firm's equity

k_e cost of financing with equity

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Multinational Cost of Capital (3 of 7)

Comparing Costs of Debt and Equity (Exhibit 17.1)

- There is an advantage to using debt rather than equity as capital because the interest payments on debt are tax deductible.
- The greater the use of debt, however, the greater the interest expense and the higher the probability that the firm will be unable to meet its expenses.
- As an MNC increases its proportion of debt, the rate of return required by potential new shareholders or creditors will increase to reflect the higher probability of bankruptcy.

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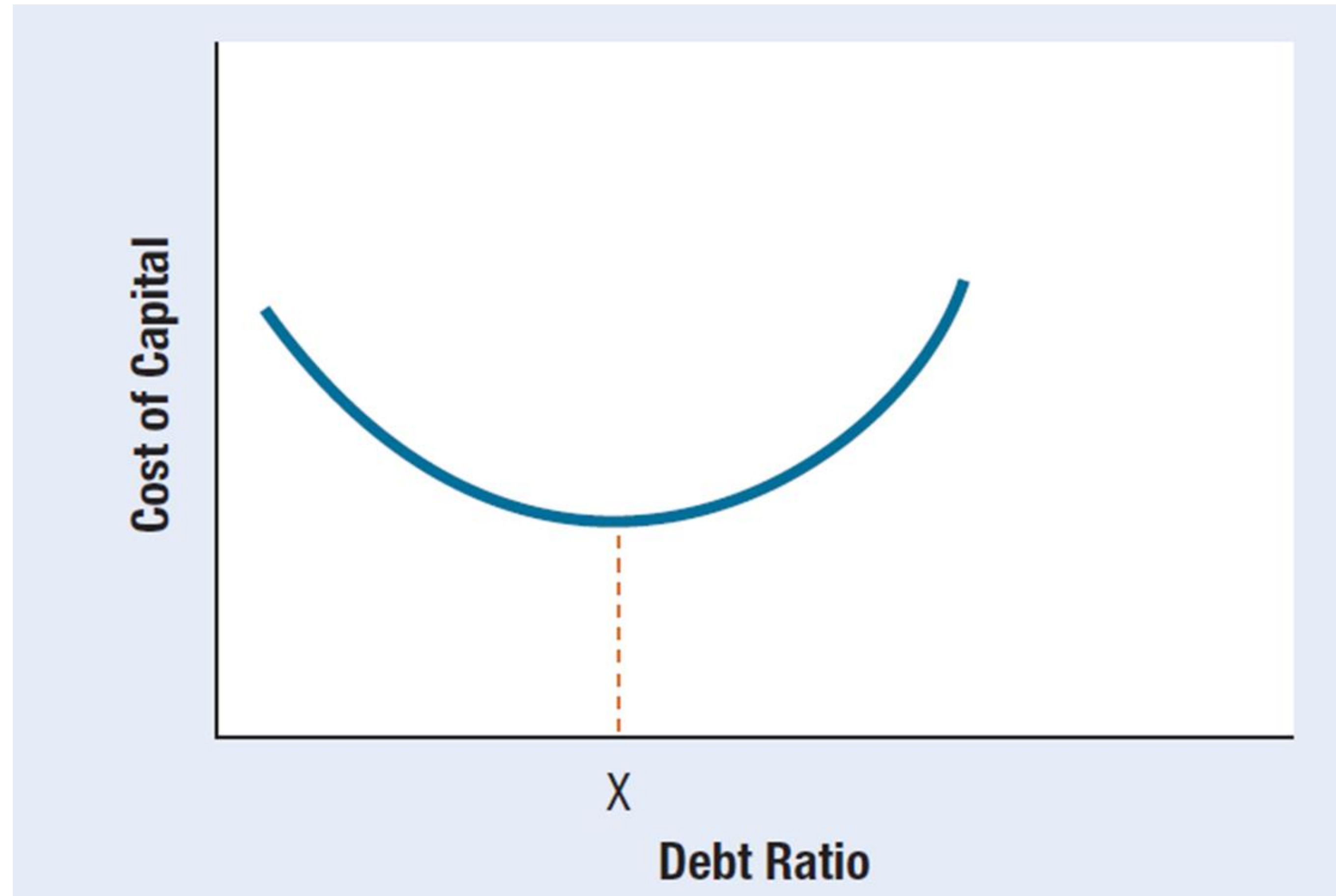
Exhibit 17.1 Searching for the Appropriate Capital Structure



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Multinational Cost of Capital (4 of 7)

Cost of Capital for MNCs versus Domestic Firms may differ because of:

- **Size of firm** — An MNC that often borrows substantial amounts may receive preferential treatment from creditors, thereby reducing its cost of capital.
- **Access to international capital markets** — MNC's access to the international capital markets may allow it to obtain funds at a lower cost than that paid by domestic firms.
- **International diversification** — If a firm's cash inflows come from sources all over the world, those cash inflows may be more stable because the firm's total sales will not be highly influenced by a single economy.

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Multinational Cost of Capital (5 of 7)

Cost of Capital for MNCs versus Domestic Firms may differ because of: (continued)

- **Exposure to exchange rate risk** — An MNC's cash flows could be more volatile than those of a domestic firm in the same industry if it is highly exposed to exchange rate risk.
- **Exposure to country risk** — An MNC that establishes foreign subsidiaries is subject to the possibility that a host country government may seize a subsidiary's assets.
- See Exhibit 17.2 on next slide.

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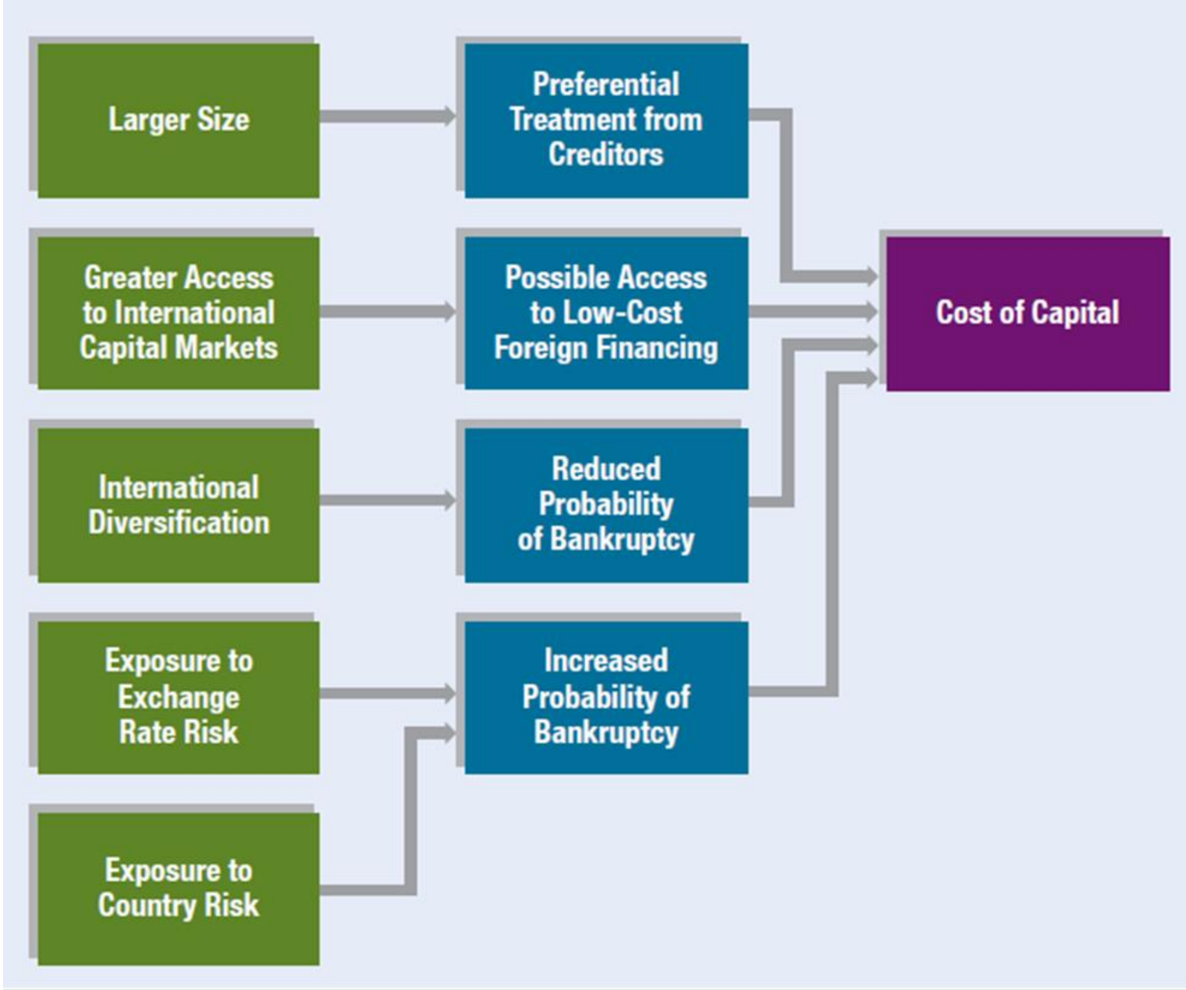
Exhibit 17.2 Summary of Factors that Cause the Cost of Capital of MNCs to Differ from that of Domestic Firms



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Multinational Cost of Capital (6 of 7)

Cost of Equity Comparison Using the CAPM

$$k_e = R_f + B(R_m - R_f)$$

Where k_e = required return on stock

R_f = risk-free rate of return

R_m = market return

B = beta of stock

The CAPM suggests that required return is a positive function of:

- The risk-free rate of interest
- The market rate of return
- The stock's beta

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Multinational Cost of Capital (7 of 7)

Cost of Equity Comparison Using the CAPM

- Implications of the CAPM for an MNC's risk:
  - U.S. based MNC may be able to reduce its beta by increasing its international business.
- Implications of the CAPM for an MNC's projects:
  - Because many projects of U.S.-based MNCs are in foreign countries, their cash flows are less sensitive to general U.S. market conditions leading lower project betas.
- Applying CAPM with a World Market Index:
  - A world market may be more appropriate than a U.S. market for determining the betas of U.S.-based MNCs.

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Costs of Capital Across Countries (1 of 2)

Country differences in the cost of debt

- **Differences in the risk-free rate** — The risk-free rate is the interest rate charged on loans to a country's government that is perceived to have no risk of defaulting on the loans.
- **Differences in the Credit Risk Premium** — The credit risk premium paid by an MNC must be large enough to compensate creditors for taking the risk that the MNC may not meet its payment obligations.
- **Comparative costs of debt across countries** — There is some positive correlation between country cost-of-debt levels over time. (Exhibit 17.3)

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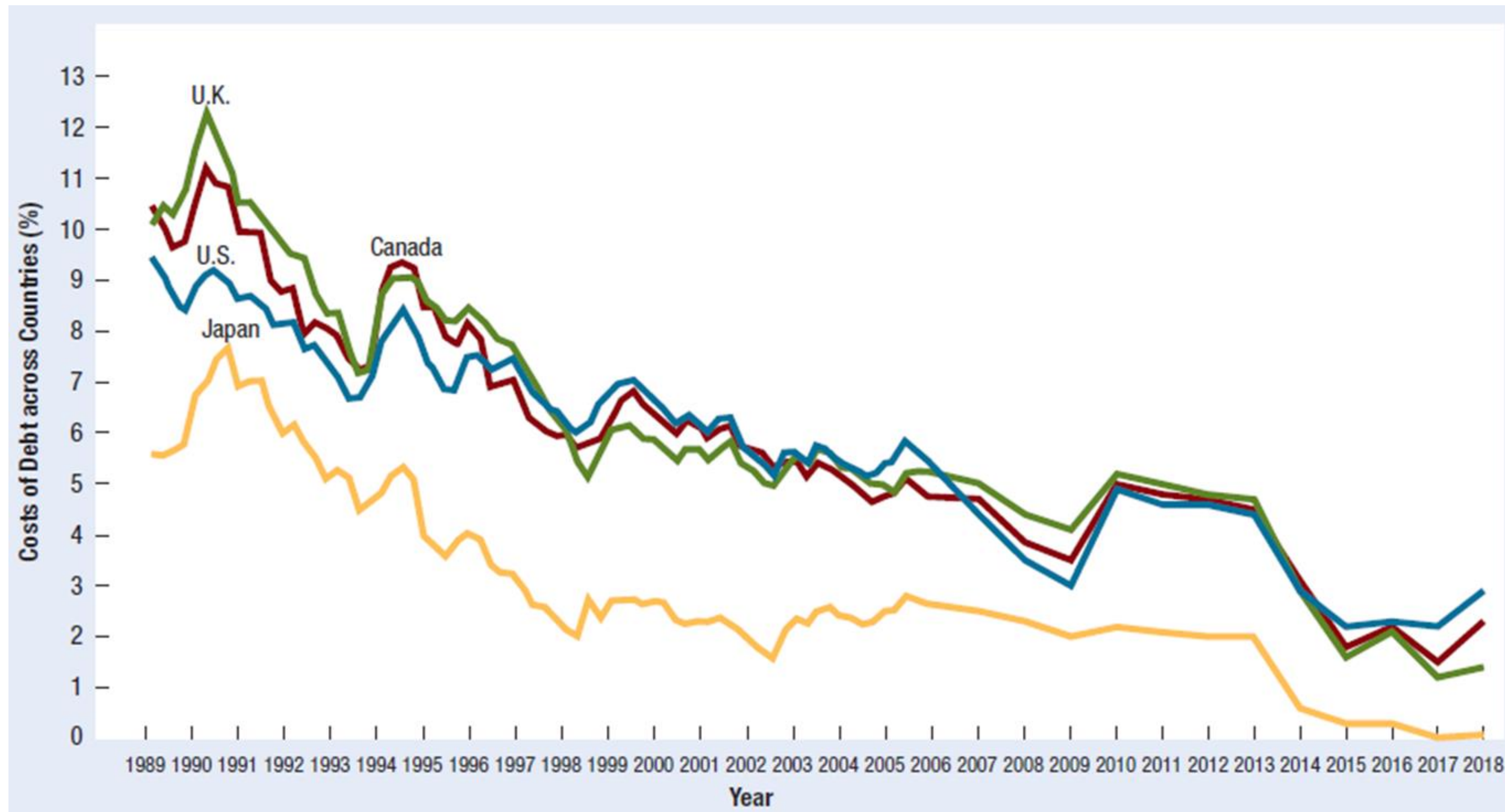
Exhibit 17.3 Costs of Debt across Countries



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Costs of Capital Across Countries (2 of 2)

Country differences in the cost of equity

- **Differences in the risk-free rate** — When the country's risk-free interest rate is high, local investors would only invest in equity if the potential return is sufficiently higher than that they can earn at the risk-free rate.
- **Differences in the Equity Risk Premium** — Based on investment opportunities in the country of concern; a second factor that can influence the equity risk premium is the country risk.

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Summary (1 of 4)

- An MNC's capital consists of debt and equity. MNCs can access debt through domestic debt offerings, global debt offerings, private placements of debt, and loans from financial institutions. They can access equity by retaining earnings and by issuing stock through domestic offerings, global offerings, and private placements of equity.

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Summary (2 of 4)

- An MNC's capital structure decision is influenced by corporate characteristics such as the stability of the MNC's cash flows, its credit risk, and its access to earnings. The capital structure is also influenced by characteristics of the countries where the MNC conducts business, such as interest rates, strength of local currencies, country risk, and tax laws. Some characteristics favor an equity-intensive capital structure because they discourage the use of debt. Other characteristics favor a debt-intensive structure because of the desire to protect against risks by creating foreign debt.

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Summary (3 of 4)

- If an MNC's subsidiary's financial leverage deviates from the global target capital structure, the MNC can still achieve the target if either another subsidiary or the parent takes an offsetting position in financial leverage. However, even with these offsetting effects, the cost of capital might be affected.
- The cost of capital may be lower for an MNC than for a domestic firm because of characteristics peculiar to the MNC, including its size, its access to international capital markets, and its degree of international diversification. Yet some characteristics peculiar to an MNC can increase the MNC's cost of capital, such as exposure to exchange rate risk and to country risk.

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Summary (4 of 4)

- Costs of capital vary across countries because of country differences in the components that constitute the cost of capital. Specifically, there are differences in the risk-free rate, the risk premium on debt, and the cost of equity among countries. Countries with a higher risk-free rate tend to exhibit a higher cost of capital.

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