Ch. 18 Multinational Capital Budgeting

Topics

- Capital Budgeting
- Multinational Capital Budgeting
  - Complexities of a Foreign Project
  - Factors in Multinational Capital Budgeting
  - Adjusting for Risk

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Multinational Capital Budgeting

- Like domestic capital budgeting, multinational capital budgeting focuses on the cash inflows and outflows associated with prospective long-term investment projects.
- Multinational capital budgeting follows same framework as domestic capital budgeting.
  - Identify initial capital invested or put at risk
  - Estimate cash inflows, including a terminal value or salvage value of investment
  - Identify appropriate discount rate for PV calculation
  - Apply traditional NPV or IRR analysis

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Capital Budgeting Review

- Estimating NPV:
  1. Estimate initial costs.
  2. Estimate future cash flows: how much? and when?
  3. Estimate discount rate.
  - Minimum Acceptance Criteria: Accept if NPV > 0.
  - Reinvestment assumption: NPV rule assumes that all cash flows can be reinvested at the discount rate.
- Estimating IRR: Discount that sets NPV to zero.
  - Minimum Acceptance Criteria: Accept if the IRR exceeds the required return.
  - Reinvestment assumption: All future cash flows assumed reinvested at the IRR.

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Multinational Capital Budgeting

- Subsidiary versus Parent Perspective
  - Tax Differentials
  - Restricted Remittances
  - Excessive Remittances
  - Exchange Rate Movements

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Complexities of a Foreign Project

1. Parent cash flows must be distinguished from project.
2. Parent cash flows often depend on the form of financing, thus cannot clearly separate cash flows from financing.
3. Additional cash flows from new investment may in part or in whole take away from another subsidiary; thus as stand alone may provide cash flows but overall adds no value to entire organization.
4. Parent must recognize remittances from foreign investment because of differing tax systems, legal and political constraints.
5. Managers must evaluate political risk.

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Complexities of a Foreign Project

6. An array of non-financial payments can generate cash flows to parent in form of licensing fees, royalty payments, etc.
7. Managers must anticipate differing rates of national inflation which can affect differing cash flows.
8. Use of segmented national capital markets may create opportunity for financial gain or additional costs.
9. Use of host government subsidies complicates capital structure and parent's ability to determine appropriate WACC.
10. Terminal value is more difficult to estimate because potential purchasers have widely divergent views.

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Major Input Variables

- Initial investment
- Consumer demand
- Product price
- Variable cost
- Fixed cost
- Project lifetime
- Salvage (liquidation) value
- Fund-transfer restrictions
- Tax laws
- Exchange rates
- Required rate of return

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Factors to Consider

- Exchange Rate Fluctuations
- Inflation
- Financing Arrangement
- Blocked Funds
- Uncertain Salvage Value
- Impact of Project on Prevailing Cash Flows
- Host Government Incentives
- Probability of a Host Government Takeover

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Adjusting Project Assessment for Risk

- If an MNE is unsure of the cash flows of a proposed project, it needs to adjust its assessment for this risk.

1. Use risk-adjusted discount rate: The greater the uncertainty, the larger the discount rate that is applied.
2. Apply sensitivity/scenario analysis and simulation: Develop a range of possible values that each input variable desirable to develop a distribution of possible NPVs in order to assess the probability that NPV will be positive.

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