

## Topic 7 Cost of Capital and Political Risk

### *Cost of Capital*

1. Why are large multinational corporations located in small countries such as Sweden, Holland, and Switzerland interested in developing a global investor base?
2. Suppose that your firm is operating in a segmented capital market. What actions would you recommend to mitigate the negative effects?
3. Explain why and how a firm's cost of capital may decrease when the firm's stock is cross-listed on foreign stock exchanges.
4. Discuss how the cost of capital is determined in segmented versus integrated capital markets.
5. Explain how the premium and discount are determined when assets are priced to market. When would the law of one price prevail in international capital markets even if foreign equity ownership restrictions are imposed?
6. A firm with a corporate-wide debt/equity ratio of 1:2, an after-tax cost of debt of 7%, and a cost of capital of 15% is interested in pursuing a foreign project. The debt capacity of the project is the same as for the company as a whole, but its systematic risk is such that the required return on equity is estimated to be about 12%. The after-tax cost of debt is expected to remain at 7%. (\*)
  - (a) What is the project's weighted average cost of capital? How does it compare with the parent's WACC?
  - (b) If the project's equity beta is 1.21, what is its unlevered beta?
7. Comment on the following statement: "There is a curious contradiction in Corporate Finance theory: Since equity is more expensive than debt, highly leveraged subsidiaries should be assigned a low hurdle rate. But, when the highly leveraged subsidiaries are in risky nations, country risk dictates just the opposite: a high hurdle rate."
8. Boeing Commercial Airplane Co. manufactures all its planes in the United States and prices them in dollars, even the 50% of its sales destined for overseas markets. What financing strategy would you recommend for Boeing? What data do you need? (\*)
9. The CFO of Eastman Kodak is thinking of borrowing Japanese yen because of their low interest rate, currently at 4.5%. The current interest rate on U.S. dollars is 9%. What is your advice to the CFO? (\*)

10. Nord Resource's Ramu River property in Papua New Guinea contains one of the world's largest deposits of cobalt and chrome outside of the Soviet Union and South Africa. The cost of developing a mine on this property is estimated to be around \$150 million.
  - (a) Describe three major risks in undertaking this project.
  - (b) How can Nord structure its financing so as to reduce these risks?
  - (c) How can Nord use financing to add value to this project?
11. Although the one-year interest rate is 10% in the United States, one-year, yen-denominated corporate bonds in Japan yield only 5%. (\*)
  - (a) Does this present a riskless opportunity to raise capital at low yen interest rates?
  - (b) Suppose the current exchange rate is  $\text{¥}140 = \$1$ . What is the lowest future exchange rate at which borrowing yen would be no more expensive than borrowing U.S. dollars?
12. The manager of an English subsidiary of a U.S. firm is trying to decide whether to borrow, for one year, dollars at 7.8% or pounds sterling at 12%. If the current value of the pound is \$1.70, at what end-of-year exchange rate would the firm be indifferent now between borrowing dollars and pounds? (\*)
13. All-Nippon Airways, a Japanese airline, flies exclusively within Japan. It is looking to finance a recent purchase of Boeing 737s. The director of finance for All-Nippon is attracted to dollar financing because he expects the yen to keep appreciating against the dollar. What is your advice to him? (\*)
14. What factors should be considered in deciding whether the cost of capital for a foreign affiliate should be higher, lower, or the same as the cost of capital for a comparable domestic operation?
15. A foreign project that is profitable when valued on its own will always be profitable from the parent firm's standpoint. True or false. Explain.
16. What are some of the market imperfections said to be important in the firm's decision to make foreign investments overseas. (Give examples, with some discussion) (\*)

### ***Past Exam Question***

#### ***Political Risk***

1. What factors affect the degree of political risk faced by a firm operating in a foreign country?
2. What are some indicators of country risk? Of country health? (\*)
3. How does a firm hedge against political risk? (\*)

4. What indicators would you look for in assessing the political riskiness of an investment in Eastern Europe?
5. What can we learn about economic development and political risk from the contrasting experiences of East and West Germany, North and South Korea, and communist China and Taiwan, Hong Kong and Singapore?
6. In the early 1990s, China decided that by 2000 it would boost its electricity-generating capacity by more than half. To do that, it is planning on foreigners' investing at least \$20 billion of the roughly \$100 billion tab. However, Beijing has informed investors that, contrary to their expectations, they will not be permitted to hold majority stakes in large power-plant or equipment-manufacturing ventures. In addition, Beijing has insisted on limiting the rate of return that foreign investors can earn on power projects. Moreover, this rate of return will be in local currency without official guarantees that the local currency can be converted into dollars and it will not be permitted to rise with the rate of inflation. Beijing says that if foreign investors fail to invest in these projects, it will raise the necessary capital by issuing bonds overseas. However, these bonds will not carry the "full faith and credit of the Chinese government."
  - (a) What problems do you foresee for foreign investors in China's power industry?
  - (b) What options do potential foreign investors have to cope with these problems?
  - (c) How credible is the Chinese government's fallback position of issuing bonds overseas to raise capital in lieu of foreign direct investment?
7. What are some ways in which firms can minimize their exposure to political risk? (Give three examples, with some discussion) (\*) *Past Exam Question*
8. Suppose Oil & Gas Corp (OGC) is considering a joint project with Arafura Petroleum, an oil company in Arafura. OGC's contribution to the project is \$75 million and it predicts it will generate \$50 million per year for two years. They estimate the hurdle rate to be 10%. However the political situation in Arafura is unstable and the current leader has issued statements hinting at nationalising various sectors including Arafura Petroleum. Given this information, OGC's managers estimate the probability that the government will expropriate the property is 12% per year and if this happens cash flows from the project will be zero. (\*)
  - (a) What is the value of the project when there is no expropriation?
  - (b) How does the value change after incorporating the possibility of expropriation?

9. **Past Exam Question (\*)**

- (a) Biloela Resources (BR), a Queensland based mining company, is considering developing a copper mine in Brazil. It plans to use a subsidiary, *Bahia Mines*, to develop the mine. BR has a 90% share in *Bahia Mines* with the remaining 10% owned by the government of the state of Bahia. BR has completed exploration and feasibility studies and has spent the last few years in the process of acquiring permits to begin development. The proposed mine has “proven and probable reserves” of 50 million tonnes of copper. BR has so far spent USD 200 million and will need an additional USD 800 million to complete the developmental phase of the mine. The plan is to use open pit mining and use “heap leaching”, a process that involves using chemicals to extract copper from crushed ore. It is being considered because it is a low cost process with recovery rates of around 70%. The planned life of the mine is 20 years.

Given the recent Samarco disaster, in the nearby state of Minas Gerais, where the tailings dam at the iron ore mine burst resulting in the loss of lives and the pollution of the Doce river, local community interest groups have become more vocal in their opposition to the mine. These local stakeholders have raised concerns about the potential damage to the tourism sector and to the environment if the use of cyanide contaminates aquifers.

BR estimates that the mine will create jobs and inject billions of dollars into the Brazilian economy and over \$2 billion directly to the treasury of the state of Bahia. However, BR is concerned about this escalating political issue affecting its stock price and the chances of final approval for the project. Given its declining cash reserves it is keen to get started on the developmental phase of the project. The NPV approach indicates that the mining project has a positive valuation and this value is robust to sensitivity analyses done utilizing various key inputs such as cost of capital, royalties paid to the state of Bahia, quantity of reserves, price of copper etc. Despite this upbeat assessment, BR is concerned about its financing needs. The project is currently funded entirely by equity. Its stock is currently trading at around 75 cents.

How can Bahia ensure it receives the final approval for the mine? If the project is approved, what do you believe, based on understanding of the benefits/costs of various types of financing, is the best way to finance its CAPEX needs?

- (b) In March 2020, the Australian Treasurer announced that the Foreign Investment Review Board (FIRB) would assess all foreign proposals to acquire Australian firms. He said in a statement that “These measures are necessary to safeguard the national interest as the coronavirus outbreak puts intense pressure on the Australian economy and Australian businesses.” (Reuters March 30, 2020). Evaluate the argument that the Australian government should impose restrictions because a depreciation of the Australian dollar offers a significant financial advantage to foreign bidders for Australian firms/assets.

**10. Past Exam question from 2023 (\*)**

Suppose it is the end of 2023. *High on the Hog*, an Australian hospitality firm, is planning to sell the subsidiary it owns in Chile in two years. Given projections about the state of the economy, projected revenues and costs, the expected sale price is 50 million pesos. Chile has a currency board and its currency is trading at 1 peso per Australian dollar. However, your banker informs you that economists at his bank estimate the probability the currency board will collapse at 20%. Should it collapse, economists expect a devaluation of the local currency against the dollar of 25%. Furthermore, political risk analysts at ICRG contend that there is a 10% chance of complete expropriation in the event of the currency board collapsing. What is the maximum price that *High on the Hog* can hope to receive from the sale?