

Chapter 11

Raising Long-Term Financing

Answers to Concept Review Questions

1. What is a financial intermediary, and what role do these firms play in providing long-term capital to publicly traded U.S. non-financial corporations?

A financial intermediary (FI) is an institution that raises capital by issuing liabilities against itself—for example, in the form of demand or savings deposits. The intermediary then pools the funds raised and uses these to make loans to borrowers or, where allowed, to make equity investments in non-financial firms. Borrowers repay the intermediary and have no direct contact with the individual savers who actually funded the loans. In the United States, commercial banks' corporate financing role has until recently been very limited; in fact, it was effectively restricted by law to making commercial loans and to providing closely related services, such as leasing, until the McFadden Act was repealed in 1994 and the Glass-Steagall Act was repealed in 1999.

2. What patterns are observed in U.S. security issues each year? How do these patterns compare to those in international security issues?

There is a trend toward securitization, the repackaging of loans and other bank-based credit products into securities that can be re-sold to public investors. U.S. issuers account for a very large proportion—over two-thirds - of total security offerings worldwide. Companies are issuing more debt than equity and (until very recently) IPOs are accounting for a larger proportion of new equity issued. The European securities market is the largest non-U.S. market. Internationally, new equity issues are rising.

3. What does the phrase “bulge bracket” mean?

Bulge bracket firms are the largest IBs providing a wide range of services. Bulge-bracket firms generally occupy the lead or co-lead manager's position in large, new security offerings, meaning that they take primary responsibility for the new offering (even though other banks participate as part of a syndicate), and as a result, they earn higher fees.

4. What is the guiding principle behind most of the important U.S. securities legislation? What role does the security registration play in implementing this philosophy?

The guiding principle behind legislation is fairness to investors – that the firms and the bankers will not take advantage of investors who do not know as much as firm management or their bankers. Security registration requires that firms disclose information about the company, so investors can be aware of the firm's history, its past performance, and how it intends to use the funds from the securities issued.

5. What is shelf registration? Why do you think this has proven to be so popular with issuing firms?

In a shelf registration firms file a document asking to issue a certain amount of securities over a two-year period. With this, the firm doesn't need to redo the paperwork every

time it wishes to issue securities, and its makes the process of issuing new debt and equity less costly.

6. What patterns have been observed in the types of firms going public in the United States? Why do you think that certain industries become popular with investors at different times?

IPO financing is cyclical. There are “hot” and “cold” markets when IPO activity peaks and then wanes. Industries may for a time be the “hot” industry, for example, tech firms in the late 1990s. Previously, there were clusters of IPO activity in energy, biotechnology, and communications. Industries become popular at certain times because of their high growth rates and high returns. High tech companies had very high returns (but also high risk) in the late 1990s.

7. What are the principal benefits of going public? What are the key drawbacks?

The benefits of going public include: raising new capital for the company, providing publicly traded stocks that can be used in acquiring other companies, having listed stock that can be used to compensate and retain key employees and providing personal wealth and liquidity for entrepreneurs. Key drawbacks include the high financial cost of an IPO (transactions fees for doing the deal), high managerial costs (management time taken up in managing the deal rather than the core business), external pressures to maximize stock price once the firm has gone public, and required, continuing information disclosures.

8. Distinguish between an equity carve-out and a spin-off. How might a spin-off create value for shareholders?

In an equity carve-out only part of the company’s equity is sold. This is sometimes called a partial IPO. The parent company maintains control of the company, typically, but gets the benefit of new capital raised in the external markets. In a spin-off, a part of the company becomes a new, stand-alone company. Wealth may be created because it is easier to value a spun off company, which will have its own set of financial statements. It may also be possible to structure management compensation contracts to more correctly reward managing the spun off business. The spun off business may be better focused than when it was a division of a larger company.

9. What does the term “underpricing” refer to? If the average IPO is underpriced by about 15 percent, how might an unsophisticated investor who regularly invests in IPOs earn an average return less than 15 percent?

Underpricing refers to the fact that IPO shares typically rise on the first day of trading, indicating that they could have been priced higher to begin with. An unsophisticated investor who invests in IPOs is likely to earn lower than average returns. Some IPOs are underpriced, some very underpriced and some just slightly underpriced, while others are overpriced. Sophisticated investors with more information about the IPO will choose to invest only in the best, most underpriced deals. If an unsophisticated investor is able to invest in an IPO, it is probably because there is low demand for that IPO because it is not priced favorably for the investor. In other words, if an average investor can buy into the deal, it is probably a below average deal.

10. How does underpricing add to the cost of going public?

Underpricing adds to the cost of going public because the company must issue more shares at a lower price, and ultimately raises less money with the IPO. If issues were

correctly valued, the company could either raise more money or it would have less dilution from issuing fewer shares.

11. What happens to a firm's stock price when the firm announces plans for a seasoned equity offering? What are the long-term returns to investors following an SEO?

A firm's stock price goes down when it announces a seasoned equity offering. The market knows that the company knows more about the firm than average investors do, and will only issue new equity when the stock is overvalued. The issuance of new equity sends a sell signal to investors. There is some evidence that SEOs are bad news for shareholders over the one to five year period following the SEO – negative risk-adjusted returns have been observed in this time period.

12. Why do you think that rights offerings have largely disappeared in the United States?

Companies—and their shareholders—found that restricting share sales to existing shareholders severely restricted the potential market for new share sales. By voluntarily allowing public firms to make general cash offers to all investors, shareholders allowed companies to sell equity capital at a much higher price than would be possible if these were restricted to existing investors only.

13. What is a *qualified institutional buyer*? How does this differ from an *accredited investor*?

An accredited investor is one who meets certain income and wealth requirements. Accredited investors presumably don't need the protection afforded by the registration process. Qualified institutional buyers are institutions with assets greater than \$100 million.

14. What are the relative advantages and disadvantages of private placements compared to those of public offerings of stock and bond issues?

Private placements are less costly in terms of time and money than registering with the SEC. Issuers do not have to reveal confidential information. Since there are fewer investors, terms may be easier to negotiate. The disadvantages are that the issues don't have a readily available market price, are illiquid and there is a smaller group of potential investors than in the public market.

15. In what ways are non-U.S. (private-sector) initial public offerings similar to U.S. IPOs, and in what ways are they different?

Less IPO money is raised in non-U.S. countries, and international IPOs are generally smaller than U.S. company IPOs. Like U.S. IPOs, there is often significant first day underpricing, sometimes even larger than U.S. IPO underpricing. U.S. and international IPO companies also earn below average returns in the period following the IPO. Popular non-U.S. IPOs are also oversubscribed, with allocation rules mandated by national law or exchange regulations. Hot issue markets occur internationally as well as in the U.S. Taxation issues, in particular capital gains tax issues, significantly impact how issues are priced. Many international governments impose rules on firms going public, such as requiring them to allocate minimum fractions of the issue to their employees or other targeted groups.

16. What are *American Depositary Receipts (ADRs)*, and how are these created? Why do you think ADRs have proven so popular with U.S. investors?

American Depositary Receipts are dollar denominated claims issued by U.S. banks which represent ownership of shares in a foreign company's stock held on deposit by the U.S. bank in the issuing firm's home country. U.S. banks create them. They are popular because they allow U.S. investors to easily diversify internationally. ADRs allow U.S. investors to eliminate foreign exchange risk, which would exist without the creation of ADRs. The shares are covered by U.S. securities laws and pay dividends in dollars.

- 17.** In what key ways do *share issue privatizations (SIPs)* differ from private-sector share offerings? Why do you think governments deliberately underprice SIPs?

In a share issue privatization a government sells all or part of its ownership in a state-owned enterprise to private investors via a public share offering. These have done a great deal to develop many national stock markets. SIPs tend to be very large and often dramatically increase the national market's volume and liquidity. SIPs are almost always secondary offerings – the proceeds go to the government rather than the firm being privatized. Governments underprice SIPs to create excess demand. The issuing government then allocates shares to ensure maximum political benefit. Governments typically favor employees and small domestic investors, with domestic institutions and foreign investors allocated fewer shares than desired.

Answers to Self-Test Problems

- ST11-1.** Last year Guaraldi Instruments Inc. conducted an IPO, issuing 2 million common shares with a par value of \$0.25 to investors at a price of \$15 per share. During its first year of operation, Guaraldi earned net income of \$0.07 per share and paid a dividend of \$0.005 per share. At the end of the year, the company's stock was selling for \$20 per share. Construct the equity account for Guaraldi at the end of its first year in business, and calculate the firm's market capitalization.

Immediately after the IPO, during which Guaraldi Instruments sold 2 million shares with a par value of \$0.25 each at a price of \$15 each, the company's equity account would have the following entries:

<i>Common stock, at par value (\$0.25 x 2 million)</i>	<i>\$500,000</i>
<i>Paid-in capital surplus (($\\$15.00 - \\0.25) x 2 million)</i>	<i>29,500,000</i>
<i>Retained earnings</i>	<i>0</i>
<i>Total stockholders' equity</i>	<i>\$30,000,000</i>

After the first year's net income (after dividend payments) are credited to Guaraldi's balance sheet, the equity accounts will have the following entries:

<i>Common stock, at par value (\$0.25 x 2 million)</i>	<i>\$500,000</i>
<i>Paid-in capital surplus (($\\$15.00 - \\0.25) x 2 million)</i>	<i>29,500,000</i>
<i>Retained earnings (($\\$0.07 - \\0.005) x 2 million)</i>	<i>130,000</i>
<i>Total stockholders' equity</i>	<i>\$30,130,000</i>

Guaraldi's market capitalization at the end of the first year would be \$40 million (\$20/share x 2 million shares).

- ST11-2.** The Bloomington Company needs to raise \$20 million of new equity capital. Its common stock is currently selling for \$42 per share. The investment bankers require an underwriting spread of 7 percent of the offering price, and the company's legal,

accounting, and printing expenses associated with the seasoned offering are estimated to be \$450,000. How many new shares must the company sell to net \$20 million?

The Bloomington Company needs to raise $\$20,000,000 + \$450,000 = \$20,450,000$

$7\% \times 42 = \$2.94$

The shares will net \$39.06 a share

$20,450,000/39.06 = 523,554$ shares

ST11-3. Assume that Zurich Semiconductor Company (ZSC) wishes to create a sponsored ADR program worth \$75 million to trade its shares on the NASDAQ stock market. Assume that ZSC is currently selling on the SWX Swiss Exchange for SF25.00 per share, and the current dollar/Swiss franc exchange rate is \$0.8000/SF. American Bank and Trust (ABT) is handling the ADR issue for ZSC and has advised the company that the ideal trading price for high-technology shares on the NASDAQ is about \$60 per share (or per ADR).

- a. Describe the precise steps ABT must take to create an ADR issue meeting ZSC's preferences.
- b. Assume that ZSC's stock price declines from SF25.00 to SF22.50 per share. If the exchange rate does not also change, what will happen to ZSC's ADR price?
- c. If the Swiss franc depreciates from \$0.8000/SF to \$0.7500/SF, but the price of ZSC's shares remains unchanged in Swiss francs, how will ZSC's ADR price change?

- a. *ZSC wants to start an ADR program equivalent to about \$75 million.*

Current ZSC stock price = SF25.00

Exchange rate: \$0.8000/SF

Current ZSC stock price in dollars = $\text{SF}25.00 \times \$0.8000 = \$20.00/\text{share}$.

Since the preferred ADR price is about \$60/share, bundle three ZSC shares into each ADR

ADR price in dollars = $3 \times \$20/\text{share} = \60

To raise roughly \$75 million, ZSC must sell about 1,250,000 ADRs at \$60 each.

To begin ADR creation process, ABT would purchase 3,750,000 shares of ZSC ($1.25 \text{ ADR} \times \text{shs/ADR}$).

Step 1: Purchase 3,750,000 ZSC shares = $3,750,000 \times \text{SF}25.00/\text{share} = \text{SF}93,750,000$

Step 2: Package stock into 1,250,000 ADRs and sell to US buyers for \$60/ADR, raising $1,250,000 \text{ ADRs} \times \$60/\text{ADR} = \$75,000,000$.

Step 3: Convert dollar proceeds from selling ADRs into Swiss francs to cover cost of purchasing stock $\$75,000,000 \div \$0.8000/\text{SF} = \text{SF}93,750,000$; this covers ABT's costs.

- b. *If ZSC's stock price declines to SF25.00/share from SF22.50/share, what happens to ADR \$ price?*

New ADR price in dollars: $\text{SF}22.50/\text{share} \times 3 \text{ shares/ADR} \times \$0.8000/\text{SF} = \underline{\underline{\$54/\text{ADR}}}$.

- c. *If ZSC stock price remains unchanged, but SF depreciates, what happens to ADR \$ price?*

New ADR price in dollars: $\text{SF}25.00/\text{share} \times 3 \text{ shares/ADR} \times \$0.7500/\text{SF} = \underline{\underline{\$56.25/\text{ADR}}}$.