Chapter 11

Securities Markets

Learning Objectives

- LO 11.1 Describe the processes and institutions used by businesses to distribute new securities to the investing public in the primary market including the use of underwriting and best efforts agreements.
- LO 11.2 Summarize activities of a well-known public offering
- LO 11.3 Explain various ways that investment banks can assist security offerings in addition to traditional underwriting efforts.
- LO 11.4 Describe the costs of "going public" when issuing securities in the primary market

Learning Objectives

- LO 11.5 Describe other functions of investment bankers, their recent attempts to innovate, and the regulations they follow.
- LO 11.6 Explain the role of secondary markets in securities trading and the structure of organized exchanges such as the New York Stock Exchange
- LO 11.7 Summarize the types of orders used in securities trading and when they might be used by traders.
- LO 11.8 Describe the various types of over-thecounter markets for securities trading.

Learning Objectives

- LO 11.9 Explain factors that make for a good market for trading securities and the role of brokerage commissions in securities trading.
- LO 11.10 Discuss issues of importance to investors, including how security market indexes are constructed and how to trade foreign securities.
- LO 11.11 Recognize the role and importance of ethics in securities transactions and analysis.

LO 11.1 Issuing Securities: Primary Security Markets

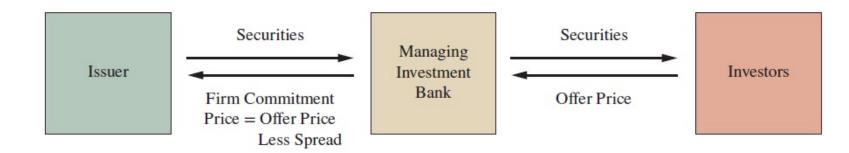
- Primary versus secondary securities markets
- Initial Public Offerings (IPOs)
- Investment Banks

Functions of Investments Banks

- Three Main Functions:
 - Origination
 - Underwriting
 - Selling
- Origination
 - Public Offering
 - Private Placement
 - Prospectus

Investment Bank Functions, continued

- Underwriting
 - "Carrying the risk"



Best efforts

Investment Bank Functions, continued

- Selling
 - Syndicate
 - Tombstone Ad
 - Aftermarket

LO 11.2 Facebook IPO

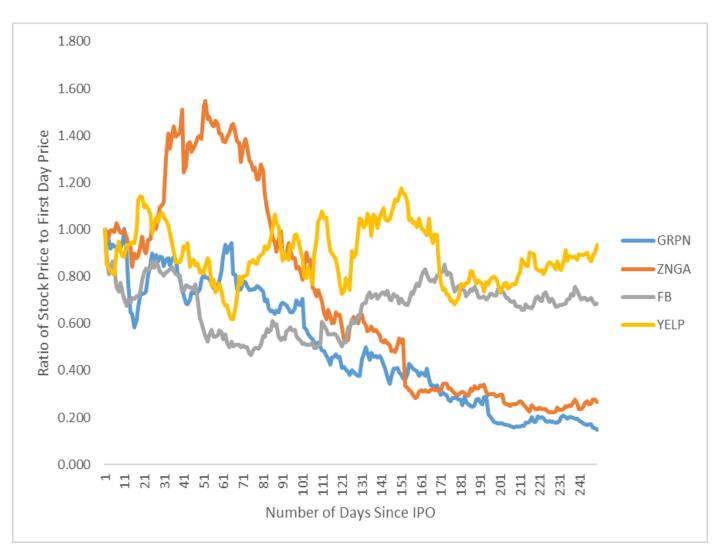
- Syndicate: Morgan Stanley (lead) and 32 other investment banking firms
- Offer price: \$38 per share
 - Firm value at offer price: \$104 billion
 - Underwriting fees: \$176 million
 - Underwriters, firm agreed to raise offer price to \$38 and increase number of shares to be sold shortly before the IPO

Facebook IPO

- Initial 'pop' at IPO...followed by price decline
 - Computer and trading issues at Nasdaq
 - Disappointing sales, profit news; GM pullout
 - Research analysts were reducing profit estimates for FB
 - Tough market—Groupon, Yelp, and Zynga hi-tech IPOs followed by price declines

Facebook IPO

Figure 11.3 Panel A Share price performance of Selected High-tech IPOs from IPO to One Year Later

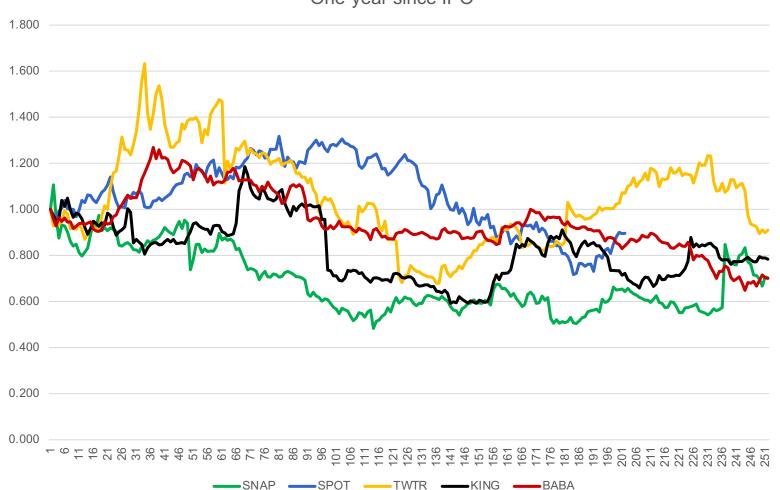


Facebook IPO

Figure 11.3 Panel B Share price performance of Selected High-tech IPOs from IPO to One Year Later

(SPOT: only ¾ year due to data restrictions)

One-year since IPO



LO 11.3 Other Ways Investment Banks Can Assist with Security Offerings

- Shelf registration
- Private placement
- Rights offerings
- Competitive bids
- Dutch auction

Dutch Auction Example

Yoogle to offer 100 million shares

Bidder Price Number of shares

A \$20.50 25 million

B \$20.47 25 million

C \$20.45 25 million

D \$20.43 25 million

E \$20.40 25 million

Clearing price: \$20.43

LO 11.4 The Costs of Raising Capital

- The costs of issuing stocks and bonds are called "flotation costs."
 - Out-of-pocket costs
 - Spread
 - Underpricing
- The sum of these costs can total 20-30% or more of the funds raised
- Hot/cold IPO markets

LO 11.5 Other Investment Bank Functions, Regulations, Innovations

- Commercial paper
- Mergers and acquisitions
- Manage investment funds (e.g., company pension funds)

Investment Banking Regulations

- Securities Act of 1933
 - Full, fair, and accurate disclosure
 - Prevent fraud
- Securities Exchange Act of 1934
 - Established SEC
 - Brokers, dealers register with SEC
- State "blue sky" laws

Investment Banking Regulations

- Glass-Steagall Act
 - Commercial banks cannot underwrite securities
- Gramm-Leach-Bliley Act
 - Removed many restraints of Glass-Steagall on financial services firms

Innovations in Investment Banking

- Security design to meet needs of issuers/purchases
- Offering securities via internet "dutch auctions"—both stocks and bonds (Internotes, Direct Access Notes)

LO 11.6 Trading Securities: Secondary Securities Markets

- Organized Exchange versus Over-the-Counter (OTC)
- Organized Exchange: NYSE
- NYSE is a private firm which went "public" in 2006 by acquiring a publicly traded firm (Archipelago) which offers electronic trading of securities

Structure of the NYSE

- Before 2006: members own "seats"
- Now: 1500 trading licenses exist called Stock Exchange Auction Trading System (SEATS)
- SEATS allow holders access to the NYSE trading floor (physical location) and electronic trading access.

Structure of the NYSE

- Floor brokers
 - House or commission brokers
 - Independent brokers
- Registered traders
- Designated Market Makers
 - Maintain inventory of stocks assigned to them
 - Maintain a liquid and orderly market
 - Took over the role of "specialists" on the NYSE

Securities Markets and Ethics Issues

- In the past, some market makers and specialists have been accused of:
 - -Front running
 - Negative obligation
 - Maintaining high spreads

Structure of the NYSE

- Companies need to meet listing requirements, pay fees
- Original listing fee: \$125,000-\$250,000
- Annual fee: \$42,000-\$500,000 depending on number of shares
- Listing requirements:

LO 11.7 Security Transactions

- Bid price: offered by buyer
- Ask: requested by seller
- Spread: the difference between them
 - Narrower spreads imply more liquidity and faster completion of a trade
- Typical display:
 - Bid: 30.42 x 50900
 - Ask: 30.43 x 50800

Security Transactions

- Market order
- Limit order
- Stop order
- Short sale
 - Uptick rule
 - 19.95 19.95 20.00 20.00: can do short sale
 - 20.07 20.01 20.01: cannot do short sale
 - Current rule: restricts short sales on stocks whose price has fallen more than 10 percent from previous day's closing price

Buying on Margin

- "Buying on margin" means to use some of your money (equity) and some borrowed funds to purchase a security
- Margin: investor's equity position
- Margin requirements: minimum percentage of the purchase price that the investor must pay from his/her funds

Margin's effect on trading profits Assume: 60% margin

Initially buy securities worth \$50,000 Initial

position t=1 t=2

Mkt value \$50,000 \$55,000 \$45,000

Less: borrowed

funds <u>20,000</u> <u>20,000</u> <u>20,000</u> Equity \$30,000 \$35,000 \$25,000

More investing terms

- Margin call
- Maintenance margin

Margin = equity/market value

- = (MV \$ borrowed)/MV
- = (price x # shares \$ borrowed)

price x # shares

Price for margin call:

\$ borrowed/[# shares (1-maint. margin)]

More terms...

- Round lot
- Odd lot
- Program trading

LO 11.8 Over-The-Counter Market (OTC)

- NASDAQ
- Not just for small firms
 - Intel, Apple, Microsoft
- Centralized versus non-centralized location
- Specialists versus dealers

Other Secondary Markets

- Third Market
 - Large blocks (10,000 shares) traded
 OTC
- Fourth Market
 - Electronic trading, ECNs

Need for speed—High-frequency Trading (HFT)

- Trading by computers with preprogrammed algorithms to try to detect profitable trades.
- Trades executed in milliseconds; but need more speed to beat other traders.
- Pro: provide liquidity and can correctly correct small mispricing
- Con: trading strategies give the illusion of more market orders than really exist; can the small investor compete?

LO 11.9 What Makes a Good Market?

- NYSE, AMEX, NASDAQ, 3rd and 4th market all compete for listings, trades
- Four characteristics of a "good" market:
 - Liquidity (breadth and depth)
 - Quick, accurate trade execution
 - Reasonable listing requirements
 - Low costs

Commissions

Commission affected by:

- Type of broker
 - Full service brokers
 - Discount brokers
 - On-line brokers
- Size of trade, security price
- Liquidity of securities traded
- Ethics:
 - Account churning
 - Placing funds in high-commission or "fee kickback" products

Some issuing firms allow...

- Direct investing
 - Buy shares directly from the firm
- Dividend Reinvestment Plan

LO 11.10 Indexes and Investing Overseas

- How's the Market Doing?
- Security Market Indexes are used to track overall market and sector performance for stocks, bonds, and other investments
- Well-known stock market indexes:
 - Dow Jones Industrial Average
 - Based on price
 - Standard & Poor's (S&P) 500
 - Based on market value

Wandering from Home: Investing Overseas

- Diversification benefits
- Harder to do trades
 - Liquidity
 - Currency differences
 - Regulations, tax laws
- Solutions:
 - American Depository Receipts
 - Global Depository Receipts
 - Mutual funds--professional investing

LO 11.11 Ethics Issues

- Insider trading
- An insider: someone with access to important non-public information
- can be a corporate officer, investment banker, major shareholder
- blue-collar workers, too (e.g., printing press operators)

Ethics

- Regulation FD
- Churning of accounts
- Professional designations (CFA®, CFPTM) have ethics components as a central feature of their certification programs

Learning Extension 11 Introduction to Futures and Options

- What is a derivative security?
- Why do they exist?
- Future Contracts
- Options

What is a derivative security?

A derivative security has its value determined by, or derived from, the value of another investment vehicle.

They represent a contract on an underlying security or asset

Why do derivatives exist?

- Shift risk from those who don't want to carry risk to those who are willing to do so.
- Bring additional information into the market from hedgers, speculators, market expectations.
- Lower commissions and margin requirements than in spot market

Futures contracts

A futures contract <u>obligates</u> the owner to purchase the underlying asset at a specified price (the <u>exercise</u> or <u>strike</u> price) on a specified date

Types of futures contracts

- Corn, wheat, soybeans...
- Stock indexes, interest rates, foreign currency values...
- Gold, copper, silver, oil...
- Coffee, sugar, cocoa...

Options

An options contract gives the owner the <u>choice</u> of trading the underlying asset at a specified price (the exercise or strike price) on or before a specified date or expiration date.

Two basic types of options

Call option: an option to <u>buy</u> the underlying asset at the strike price

Put option: an option to <u>sell</u> the underlying asset at the strike price

Call Options

- Suppose you buy an option to buy 100 shares of ExxonMobil stock at \$75 a share. How much is the option worth if on the expiration date the price of Exxon is:
- a) \$60 a share?
- b) \$75 a share?
- c) \$80 a share?

Call Options--ANSWERS

- Suppose you buy an option to buy 100 shares of ExxonMobil stock at \$75 a share. How much is the option worth if on the expiration date the price of Exxon is:
- a) \$60 a share? \$0—cheaper to buy in the market at \$60 than at the \$75 strike price
- **b)** \$75 a share? \$0—as strike price = market price
- **c)** \$80 a share? \$5—intrinsic value as option allow you to purchase for \$75 a stock with a market value of \$80.

Put Options

- Suppose you buy an option to sell 100 shares of ExxonMobil stock at \$75 a share. How much is the option worth if on the expiration date the price of Exxon is:
- a) \$60 a share?
- b) \$75 a share?
- c) \$80 a share?

Put Options--ANSWER

- Suppose you buy an option to sell 100 shares of ExxonMobil stock at \$75 a share. How much is the option worth if on the expiration date the price of Exxon is:
- a) \$60 a share? \$15—can sell for a price of \$75 when the market price is \$60.
- **b)** \$75 a share? \$0—as strike price = market price
- **c)** \$80 a share? \$0—can sell for a higher price in the market than the put's strike price of \$75