

# **Securities Training Corporation**

# Series 7

General Securities
Registered Representative

# About the Series 7 Examination

250 multiple-choice questions

- Candidates are given 6 hours to complete the examination
- Administered in two (2) three-hour sessions
- Minimum required passing score is 72%

Each exam includes 10 experimental, unidentified questions

- These questions do not count for or against the score
- Therefore, each session will consist of 130 questions

30-, 30-, and 180-day waiting periods for failures

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# STC Study Materials

24 Chapter Study Manual

### 12 Final Examinations

- 130-question comprehensive exams
- Written explanations provided
  - First attempt
    - · Question / Answer method
    - Complete all Q&A exams before advancing to Closed-Book
  - · Second attempt
    - · Closed-Book method
    - Scores of 80% or higher indicate adequate retention
  - · Exam Preparation By Topic
    - Provides specific support by topic
    - · Allows student to focus on areas of weakness

# Supplemental Study Aids

### 16 Progress Exams (eight sets of two)

- Designed to gauge understanding as the candidate advances through the Study Manual
- At each of eight points in the reading, a candidate is offered two 25-question exams (A and B versions) covering the recently completed chapters
- Also included, two comprehensive 130-question Greenlight Exams

### STC On Demand Lecture

- Internet-based training brought to you
  - · Identical content as our live classes
  - · Professionally recorded lectures
  - Rewind, pause, start, and stop On Demand
  - · Test questions spread throughout
  - 24/7 learning at your pace and on your schedule

# Supplemental Study Aids

### STC Virtual Class Offerings

- Internet-based training with audio and visual support
  - Audio available via telephone or VoIP
  - · Regular classroom activities
    - Questions and answers
    - · Homework assignments

### STC Online Flashcards

- Internet-based learning designed by you
  - · Customize by topic, key concept, or exam breakdown
  - · Mark difficult items for further review
  - · Sharpen your math skills with key formulas
  - · Understand and remember key terms and acronyms

# **Contact Numbers**

### **Securities Training Corporation**

### Regional Sales Offices:

New York: 800-782-1223

Chicago: 800-782-8505

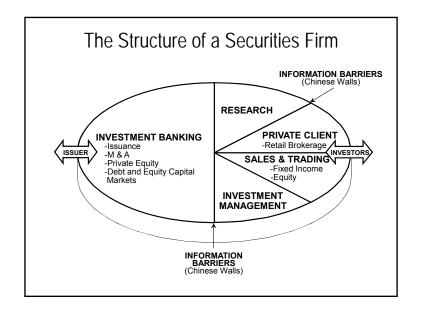
Boston: 800-782-2678

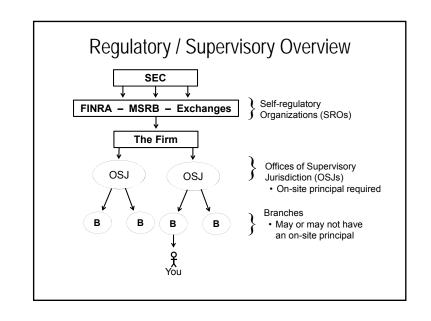
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Visit us on the web at www.STCUSA.com



Overview of Financial Markets and Regulation





Name of the Law	Key Words or Relevant Points	
Securities Act of 1933	<ul> <li>New issues (IPOs and other issuer sales)</li> <li>Prospectus</li> <li>Primary markets</li> <li>Red Herring</li> <li>Full disclosure</li> <li>No SEC approval</li> <li>The Paper Act</li> </ul>	
Securities Exchange Act of 1934	<ul> <li>Secondary market</li> <li>Antifraud rules</li> <li>Margin: Regulation T</li> <li>Creation of the SEC</li> <li>The Person Act (exchanges, firms, individuals)</li> </ul>	
Maloney Act of 1938	Created the former SRO for Over-the-Counter (OTC) markets (the NASD)	
Investment Company Act of 1940	Management Companies, Unit Investment Trusts, Face Amount Certificate Companies	
Investment Advisers Act of 1940	ABC Test (Advice, Business, Compensation)     Incidental advisers (lawyers, accountants, teachers, engineers) are excluded from the IA definition	

Name of the Law	Key Words or Relevant Points
Securities Investor Protection Act of 1970	Created SIPC to protect against BD bankruptcy     \$500,000 coverage per separate customer of which no more than \$250,000 may be in the form of cash
Insider Trading and Securities Fraud Enforcement Act of 1988	\$5,000,000 max. fine and/or 20 years in prison     Treble damages at the civil level     Any person may be in violation of insider trading     Tippers and tippees
Telephone Consumer Protection Act of 1991	Call time frame: 8:00 a.m. to 9:00 p.m. local time Firms maintain "Do Not Call" lists
USA PATRIOT Act of 2001	Anti-money laundering regulations     >\$10,000 = Currency Transaction Reports (CTRs)     ≥\$5,000 = Suspicious Activity Reports (SARs)     Customer Identification Procedures (CIP)



# Registered Representatives and Financial Firms

# **Industry Regulation**

### Continuing Education

- \* Regulatory Element:
  - Required after RR's 2-year anniversary and every three years thereafter
  - · Must be completed within 120 days of notice
- Firm Element:
  - · On-going training directed by the firm
  - · Based on "needs assessment"

### **Outside Activities**

 Employer must be notified of all outside <u>business</u> interests (not hobbies)

# Registration of Individuals

### Registration Requirements

- File Form U4 with CRD (Central Registration Depository)
- Statutory disqualification
  - Conviction of a securities-related misdemeanor or any felony within the last 10 years
- After two years of inactivity, individual must re-qualify

### Termination:

- ❖ Form U5 is filed with FINRA within 30 days of termination
  - · Copy given to individual

# Outside (Away) Brokerage Accounts

Rules apply when opening an account for an associated person of a member firm as well as any account in which securities transactions can be effected and the associated person has control or beneficial interest, including the account of the associated person's spouse or dependent children

- Employee must:
  - Obtain employer's prior written consent to open the account
  - Provide written notification to the carrying firm of employment with another member firm prior to opening the account
  - For an account the was opened prior to employment, the employee must obtain his firm's written consent and also notify the carrying firm of her association with another firm within 30 days of employment
- Carrying Firm must:
  - Send duplicate confirmations and statements if requested by the employing firm

Requirements of this rule do not apply to transactions that involve mutual funds, variable contracts, unit investment trusts, or 529 plans

# **Prohibited Activities**

Giving gifts to other member firm employees exceeding \$100

Entertainment and business expenses may be excluded

### Sharing in client profits and losses

 Unless a joint account is created, approval is obtained from both customer and firm, and sharing is proportionate

### Rebating

Offering to rebate commissions for previous transactions

### Private securities transactions

If trades are executed outside an RR's normal employment and compensation is to be received, employer must provide written approval and record activity on its books and records

An RR borrowing money from or lending money to a client

- Unless an exception applies such as:
  - · The RR and customer are immediate family members
  - · The customer is in the business of loaning money



# Customer Accounts Objectives and Tax Issues

# Suitability

Broker-dealers have a suitability obligation to each of their customers

Recommendations must be based on information obtained from the customer and used to create her investment profile which includes:

- Age
- Other investments
- Financial situation and needs
- Tax status
- Investment objectives and experience
- Liquidity needs
- Risk tolerance

# Suitability

FINRA has established three main suitability obligations:

- The reasonable-basis obligation—a member firm and its RRs must have a reasonable basis to believe that a recommendation is suitable for at least some investors
- The customer-specific obligation—a member firm and its RRs must have a reasonable basis to believe that a recommendation is suitable for a particular customer based on the customer's investment profile
- The quantitative obligation—a member firm and its RRs must have a reasonable basis to believe that a series of recommended transactions, even if suitable for a customer, are not excessive when the customer's investment profile is taken into consideration

# Types of Taxes

Progressive (graduated): The larger the amount subject to tax, the higher the rate at which it will be taxed

- Federal income taxes
- Estate taxes
- Gift taxes

Regressive (flat): System that results in taxes, as a percentage of income, being a larger percentage for low income taxpayers than for higher income earners

- Sales taxes
- Gasoline tax

# Taxation of Interest

	Subject to Tax By:	
<u>Source</u>	<u>Federal?</u>	State?
Corporate Bonds		
Municipal Bonds		
U.S. Treasury Debt		
Debt of Territories and Possessions		

# Ordinary Income

### Earned Income

- Wages, Salary
- Self-Employment

### Investment Income

- Interest
- Dividends
  - · Qualifying cash dividends are taxed at 20%
  - Taxes paid on foreign dividends can be used as a tax credit or as a deduction
- Stock dividends received are generally not taxed as income
  - This treatment is similar to stock splits
  - The investor's total basis is not changed; but the basis per share would be reduced

# Capital Gains and Losses

### Capital Gains

 Sale or redemption of an asset with proceeds that exceed basis

Short-term: Assets held for one year or less

Taxed at:

Long-term: Assets held for greater than one year

Taxed at:

Capital Losses (netted against gains without limit)

- If losses exceed gains, \$3,000 may be deducted from ordinary income that year
- Un-deducted losses are "carried forward"

# Capital Losses – Situation

Capital Losses	Capital Gains	Ordinary Income
\$40,000	\$25,000	\$110,000

How much could the investor realize in gains next year without tax?



# Customer Accounts — Documentation

# FINRA Rules for Opening Cash Accounts

### Required Information

- Each member shall maintain the following information (required):
  - · Customer's Name and Residence
  - · Whether customer is of legal age
  - Name of the registered representative (RR) who is responsible for the account
  - Signature of the principal who accepts the account (on the day account is opened)

# **Opening Accounts**

Each member shall also make a reasonable effort to obtain the following customer information:

- \* Tax I.D. / Social Security Number
- . Occupation and name / address of employer
- Whether associated with another broker-dealer
- Information to be used when making recommendations:
  - Income
  - · Net Worth
  - Risk Tolerance
  - · Objectives

# Permitting Third Parties to Trade

If a person who is not the account owner can effect trades in an account without the owner's prior knowledge, a discretionary account is established and written Power of Attorney is required

 Trading authorization may be full (allowing removal of assets) or limited

If discretionary authority is given to an RR, a principal's supervisory responsibilities include:

- Initial acceptance,
- . Prompt approval of all transactions, and
- Frequent review the account

Note: Power of attorney is not required for Not Held Orders

- Recognized by a customer indicating a desire to buy or sell, a specific security, and a certain quantity
  - "Sell 20,000 shares of IBM whenever you think it's best"
- Time and price may be left to the RR's discretion

# **USA PATRIOT Act**

Designed to deter, detect, and punish terrorists in the U.S. and abroad

### Required Reports:

Currency Transaction Report	Filed for all currency transactions by single customer during one business day exceeding \$10,000 - Filed also for <b>structured transactions</b>
Currency/Monetary Instrument Report (CMIR)	Filed whenever anyone physically transports or receives cash (or equivalents) exceeding \$10,000 into, or out of, the U.S
Suspicious Activity Report (SAR)	Filed whenever a transaction (or group of transactions) equals or exceeds \$5,000 and the firm is suspicious

# Customer Identification Program (CIP)

The USA Patriot ACT requires each broker/dealer to establish a written CIP to verify the identity of each customer who opens an account within a reasonable time of the account opening

- · Requirements of a broker/dealer's CIP
  - · Verify the identity of any person seeking to open an account
  - Maintain records of the information used to verify the customer's identity
  - Check name against a list maintained by the Treasury Department Office of Foreign Asset Control (OFAC list)
    - · Suspected terrorists or criminals
- If client's name appears on the list, all transactions must be blocked and law enforcement notified

# **Customer Identification Program**

What type of identifying information is required of customers?

- Name
- Date of birth
- Legal address (residence or business) and an
- Identification Number such as:

# For a U.S. person:

- Taxpayer ID or
- Social Security Number

### For a non-U.S. person:

- One or more of the following:
  - Taxpayer ID
  - Passport Number
  - Alien ID Card Number
  - Any other government-issued document establishing residence and identity

# SEC Regulation SP (Privacy Policy)

Requires all broker-dealers to adopt policies and procedures designed to protect the privacy of the confidential information they collect from their clients

Clients provided a description of these policies (privacy notice)

- The privacy notice must include:
  - · The type of personal information the firm collects
  - Categories of affiliated and non-affiliated third parties to whom the information may be disclosed
  - The fact that client's may opt out and refuse to allow disclosure

# Types of Accounts

### Joint Account

- New account information obtained for each owner
- Any owner may initiate activity
- Checks made payable to all parties

### Corporate

- Always examine Corporate Resolution
- To establish options or margin account, also Charter

### Fiduciary

- Person charged with responsibility of investing money wisely or safeguarding securities for a beneficiary
- Fiduciaries must provide documentation of their authority
  - · e.g. Trustees, executors, or administrators

### **Accounts for Minors**

### Custodial

- Opened under Uniform Gifts to Minors Act (UGMA) or a newer version, Uniform Transfers to Minors Act (UTMA)
  - · One minor
    - Legal owner
    - · Responsible for taxes; minor's Social Security Number
  - · One custodian
    - · Has authority to initiate activity
    - · Held to "Prudent (Man) Investor Rule"
  - · Gifts
    - Irrevocable
    - · Cash or securities (fully paid, no margin)
    - No limit on number of donors nor value of gifts

# **Trade Confirmations**

Sent on, or before, settlement of the transaction

Includes the following information:

- ❖ Buy / sell
- Price and quantity
- Trade and settlement dates
- Firm capacity (agent or principal)
- . For bonds, dollar price and yield information

But NOT solicited/unsolicited or discretionary; this information is included on the order ticket

# Regular Way Settlement

Unless a specific exception is made, settlement (the payment of funds by the buyer and delivery of securities by the seller) will occur as follows:

Type of Security or Trade	Settlement day
Corporate securities	Second business day after the trade (T + 2)
Municipal securities	Second business day after the trade (T + 2)
U.S. Government Securities	Next business day after the trade (T + 1)
Options trades	Next business day after the trade (T + 1)
For "Cash" for any security	Same day

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### Death of an Account Holder

### Individual Account:

- Cancel all open orders
- Mark the account "deceased"
- Await documents from administrator or executor

### Transfer on Death (TOD):

 Used to automatically transfer securities to a named beneficiary without going through probate

### Joint Account:

- Joint Tenants with Rights of Survivorship
  - Common for spouses
  - · If one dies, ownership passes to survivor without probate
- Tenancy-in-Common (TEN-COM)
  - · Common for business partners
  - · If one dies, decedent's portion to her estate

# **Account Rules**

### A firm may hold customer correspondence provided the firm:

- Receives written customer instructions which include the time period during which the mail will be held
  - If the requested time exceeds three consecutive months, the customer's instructions must include a valid reason for this request
- At reasonable intervals, verifies that the customer's instructions still apply

### **Account Statements**

- Must be sent by broker-dealers at least quarterly
- However, if an account is active, statements are sent monthly

# Securities Investors Protection Corporation

### SIPC

- Protects <u>Separate</u> <u>Customers</u> (not accounts) against B/D bankruptcy
- Non-profit; not a government agency
- Funded through assessments on broker-dealers

### Covered:

- Cash & street name securities:
- Will only cover cash up to:
- If limits are exceeded, customer becomes a:

Securities specifically identified as belonging to a customer are distributed to customer without limit

### Not covered by SIPC

Fraud (fidelity bond), futures contracts, commodities



# Fundamentals of Equity Investments

# Common Stock Voting Rights

Covers various issues affecting the corporation such as directors, authorizing additional shares, and stock splits (NOT for dividends -- cash or stock)

If shareholders wish to have someone else vote their shares, they sign a "Proxy"

- Voting "power of attorney"
- Solicited by corporations
  - · Required for NYSE and Nasdaq-listed issuers
  - · Regulated by SEC under the Act of '34

# **Dividend Dates**

### **Declaration Date:**

❖ The date on which a stock begins to trade with its dividend

### Payment Date:

The date that a dividend (cash or stock) is distributed

### Record Date:

- The date on which a person must own a stock to receive dividend (owner of record)
- For a <u>buyer</u> to receive the dividend, transaction must settle on, or before, record date

### Ex-Dividend Date:

- business days <u>before</u> the record date
- ❖ Stock begins to sell without dividend at reduced price
- · Regular way settlement is assumed

# **Dividend Dates**

	MAY					
Sun	Mon	Tues	Wed	Thurs	<u>Fri</u>	Sat
1	2	3	4	5	6	7
8	9	10	11	12	13	14

Trade Date	Settlement	Entitled to Dividend?
May 9	11th	Buyer
May 10	12th	Seller
May 11	13th	Seller
May 11 (cash)	11th	Buyer

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# Stock Splits and Stock Dividends

Company's attempt to improve marketability of its stock

- . No economic gain or loss for holders
- No change to issuer's capitalization
- No change to holder's percentage of equity ownership

### Two types of splits:

- Forward more shares, lower price
- Reverse fewer shares, higher price

Dividends per share are also adjusted proportionately

### Tax Treatment:

- The additional shares received are generally not taxed as income
- The investor's total basis is not changed; but the basis per share would be adjusted

# Stock Split Example

Example: Investor owns 100 shares of XYZ at \$180. XYZ Company executes a 3:1 split.

Before the Split:

After the Split:

Shares Owned:	Value Per Share:	Total Value:

# Preemptive Rights

Available to Common Shareholders

- Ability to maintain percentage of ownership
- Accomplished through the distribution of "rights"
- Current stockholders receive one right for every share owned
- Short-term right enabling holders to buy below the market price before stock is offered publicly

### Warrants

A security that allows the holder to buy shares of common stock at a pre-set price

- Attached to an offering of a bond or preferred stock of the company
- When issued, the pre-set price is a premium to the current market price
- Long-term expire in years; may be perpetual
- May be "detached" and traded separately

Rights Issued to shareholders		Short-term	Discount
Warrants	Attached to a new issue	Long-term	Premium

# American Depository Receipts (ADR)

A receipt for foreign securities held in a U.S. bank located in the foreign country

ADRs facilitate the trading of foreign securities in the U.S.

- The receipts trade in U.S. markets like common shares
- Priced in dollars
- Dividends in dollars
- · Communication in English

### Global Depository Receipts (GDR)

- · Receipts trade in more than one country
- Denominated in investor's home currency

# **Preferred Stock**

Designed to provide returns comparable to bonds. Par value is normally \$100, with dividends stated as a percentage of par.

### Types:

- Callable: Issuer has the ability to repurchase its stock, typically at a premium
- Participating: Investor may receive additional dividends based on profits of company
- Convertible: Investor may convert into a predetermined number of common shares
  - <u>Example:</u> An investor owns a 6% preferred stock which is convertible at \$20. What is his conversion ratio?

Par

Conversion Price

# Types of Preferred Stock

### Cumulative

 Entitled to unpaid dividends (those "in arrears") before common is paid

ABC Co. intends	ABC Co. intends to pay common stockholders a dividend in Year 3		
Dividend paid to:	Year 1	Year 2	Year 3
8% non- cumulative	\$0	\$2	
6% cumulative	\$0	\$2	
Common			

# **Taxation of Dividends**

### Corporate Dividend Exclusion:

Based on ownership percentage, a corporation that receives dividends from the common or preferred stock it owns of another corporation may exclude a portion of the dividend from tax

If ownership is:	Percentage excluded:
Less than 20%	
20% or greater	

# Identifying Securities Sold

A taxpayer made the following XYZ stock purchases:

<u>Year</u>	<u>Shares</u>	<u>Price</u>
2001	1,000	\$5
2002	2,000	\$10
2003	2,000	\$8
2004	1,000	\$18

In the current year, the taxpayer sells 1,000 shares of XYZ at \$20 a share.

Taxpayer may use specific identification

- Must be identified at time of transaction
- If not identified, IRS assumes FIFO (first in-first out)

# Tax Swaps and Wash Sales

### Wash Sale

- If a loss is claimed on the sale of a security and, within 30 days of the sale, the investor repurchases substantially the same security, the loss will be disallowed by the IRS
- What is considered substantially the same?
  - · For common stock (in addition to the stock itself)
    - · Bonds convertible into the stock
    - · Preferred shares convertible into the stock
    - Call options exercisable into the stock
  - For bonds, those that have the same issuer, coupon, and maturity
  - · Note, common and preferred stock are not the same

# Basis - Special Cases

### Securities converted to stock

- Stock takes the basis of the converted security
- A tax-free exchange

### Inherited Securities

- . Beneficiary's basis is the market value at the time of death
- Estate taxes are paid based on that market value
- Holding period is always long-term

### Gifted Securities

- Recipient's basis is the donor's cost or market value, whichever is less
- The value, in excess of \$14,000, of any gift to a single recipient is subject to the "gift tax" (taxable to the donor)

# Sale and Repurchase of Stock

Lois Lane owns 1,000 shares of DEW with a basis of \$43 per share. The current market value is \$22, but Ms. Lane expects it to rise again.

Wishing to offset significant capital gains, she sells the stock on December 3 at \$22, recording a \$21,000 loss. Fearing an imminent rise in the stock's value, she repurchases 1,000 shares of DEW at \$24 on December 20.

Consequences?

Loss is disallowed and added to the basis of the new purchase. New basis  $$45 \ ($24 + 21)$ 

What if she bought DEW Jan 25 Calls or DEW convertible bonds?

Both would trigger the wash sale



New Issue Marketplace for Equities

# The Primary Market -Needs capital Issuer -Hires underwriter -Facilitates distribution **Underwriting Manager** -Assumes liability that varies with the type (Investment Banker) -Signs U/W Agreement with issuer -B/D's assisting in selling and sharing liability Syndicate Members -Signs Syndicate Agreement with manager -B/D's accepting no liability, assist in sales only Selling Group -Signs Selling Agreement with manager IPO versus Subsequent Offering

# Types of Underwriting

Type of Underwriting	Comments	Who is responsible for unsold shares?
Firm Commitment	Syndicate "takes down" the entire offering	
Best Efforts	Syndicate sells what it can	
Best Efforts All-or-None	Offering is cancelled if all shares are not sold	
Best Efforts Mini-Maxi	Offering is cancelled if a set minimum is not sold	
Stand-by	Syndicate agrees to buy any shares not purchased by the stockholders in a rights offering	

# The Underwriting Spread

Underwriter purchases from issuer at \$19, and sells at the POP of \$20

Manager's Fee	Member's/U/W Fee	Concession
\$.20	\$.30	\$.50

Example: 1,000 shares are sold to a customer at \$20 per share

	If Manager Sells	If Member Sells	If Selling Group Sells
Customer pays:			
Issuer receives:			
Manager:			
Member:			
Selling group:			

### Securities Act of 1933

Regulates the primary market and requires securities to be registered unless they are:

- Exempt from registration or
- Sold under an exemption

### Scope of the law:

- To provide for "full and fair disclosure"
- Prevention of fraud in the sale of new issues
- No ruling as to investment merit -- SEC "no approval clause" on prospectus cover

### Liability

- Unconditional for issuers regarding information to investors
- Conditional for the underwriters that are required to perform:
  - · Reasonable investigation
  - · "Due diligence"

# Restrictions on Research After Effective Date

Investment Banking clients may not be the subject of a research report during the *quiet period* 

- For an IPO:
  - 10 calendar days from the offering for manager or co-manager
  - 10 calendar days from the offering for all other participants

### Exception for all offerings:

Significant news or events; the hot news exception

# Full Registration Timeline

- 1) Pre-registration Period
  - Document preparation
  - No communication with the public
- 2) File Registration Statement; begin 20-day cooling-off period
  - No sales or money accepted
  - ❖ Issuer distributes preliminary prospectus (Red Herring)
    - · All information except exact price and date
    - · Non-binding indications of interest
  - "Blue Sky" the issue (register at the state level)
    - · Registration of B/Ds, RRs and securities
    - · Notification (Filing), Coordination, Qualification
  - Final due diligence meeting held prior to effective date
- 3) Post-registration Period (Effective date)
  - Sales confirmed and final prospectus delivered
  - Publish Tombstone Ad

# New Issue Regulations

### Shelf Registration (Rule 415)

 Allows the flexibility of selling on delayed or continuous basis for up to years

### "Green Shoe Clause"

- Over-allotment provision
- Allows for expansion of issue by a maximum of

### Stabilization

- Intervention in the secondary market in order to keep the market price of a new issue from falling
- Syndicate manager places one bid (unqualified) to buy the securities at a price not higher than the POP
- Only form of price manipulation allowed by SEC
- Disclosed in prospectus

# **Exempt Securities**

The following securities are exempt from registration:

- U.S. Government and Agency securities
- Municipal securities
- Securities issued by banks
- Securities issued by non-profit organizations
- Short-term corporate debt; not exceeding days
- Securities issued by Small Business Investment Companies

All remain subject to antifraud provisions of the Act

# **Exempt Transactions**

Regulation D - Private Placement

- A sale of securities directly to "accredited" investors (and to a limited number of non-accredited investors)
- No limit on number of accredited investors
  - · Officer / Director of Issuer
  - · Institutions
  - · Individuals who have met a financial test
    - · Net Worth of:

or

· Annual Income of:

# **Exempt Transactions**

Rule 147 – Intrastate Exemption: Permits the sale of securities to residents of a single state if:

- The corporation is organized and has its principal place of business in the state and meets any one of the following four requirements:
  - 80% of the assets located
  - · 80% of the revenues generated
  - · 80% of the proceeds used, and
  - A majority of issuer's employees are based in the state
- No resale to non-residents for

from the last sale

### Regulation A and Regulation A+: Small Issue Exemption

- Maximum offerings within a 12-month period:
  - Reg. A: \$5 million/\$1.5 million from existing shareholders
  - Reg. A+ Tier 1: \$20 million/\$6 million from existing shareholders
- Reg. A+ Tier 2: \$50 million/\$15 million from existing shareholders
- "Offering Circular" (disclosure document) must be delivered

Sales from shareholders cannot exceed 30% of the total offering

# Regulation D (continued)

No more than Non-accredited Investors

- Offering Memorandum
- Purchaser's Representative appointed by investor

Purchasers sign an "Investment Letter"

- Indicates purchase is for investment purposes, not for immediate resale
- Restricted stock; stop transfer instructions
  - May only be sold to the public if <u>registered</u> or <u>sold in</u> accordance with Rule 144

# **Rule 144**

Rule 144 - Permits the sale of restricted and control stock

- Restricted stock (unregistered)
- Control stock (Affiliated) registered stock owned by officers, directors, or greater than 10% shareholders
  - No required minimum holding period

# Rule 144: Maximum Sale Allowed

ABC Inc. has 5,700,000 shares outstanding with recent trading volume as indicated:

Week Ended:	Volume Traded:			
2/28	62,000			
2/21	60,000			
2/14	56,000			
2/7	58,000			
1/31	58,000			

Multiple Choices:

- 1. 57,000
- 2. 58,000
- 3. 58,800
- 4. 59,000

# **Rule 144**

To sell restricted or control stock:

- SEC must be notified by filing Form 144 at the time the sell order is placed
- ❖ A person then has 90 days to sell the specified securities

Maximum amount that may be sold by an affiliate:

 Greater of of outstanding shares or the average weekly trading volume over the

Exception to notifying the SEC:

If selling 5,000 or fewer shares and worth \$50,000 or less

# Rule 144A

Permits sales of certain unregistered securities to "Qualified Institutional Buyers" (QIBs)

- No limitations on amounts or frequency of transactions
- Qualified Institutional Buyers
  - · Only institutions
  - · Minimum \$100 million under management

# New Issue Rule

Prohibits member firms from selling <u>equity IPOs</u> to accounts in which a **restricted person** has a beneficial interest (more than 10%)

Restricted persons include:

- Member firms and any member firm employees
- Immediate family members of member firm employees if:
  - · There is material support or sharing a household or
  - Purchasing from family member's firm
- Other persons materially supported by the employee

Exemption is provided for issuer-directed sales if:

The associated person or a member of the associated person's immediate family is an employee or director of the issuer

Firms must have written verification as to eligibility of purchasers (updated annually)



# **Equity Trading Markets**

# Types of Orders

### Market order:

- ❖ Customer wants to buy or sell
- Order is immediately executed at the best price available
- Customer specifies the security and size of the order only
- Execution is

### Limit order:

- Customer <u>only wants</u> to buy or sell at a set price or better
- Order is only executed if the price can be met
  - · Buy limits -- at set price or lower
  - · Sell limits -- at set price or higher
- Customer specifies the security, size, and price
- Execution is

# **Stop Orders**

Used to limit a loss or to protect a gain on a stock position

Investors would rather not have execution

### Long Stock Position

Hope:

Fear:

Need:

### **Short Stock Position**

Hope:

Fear:

Need:

# **Stop Orders**

Both stop and stop limit orders are "triggered" (activated) by market trading at, or through, the stop price

- Sell Stop will activate at stop price or lower
- . Buy Stop will activate at stop price or higher
  - · Once activated:
    - · Stop orders become:
    - · Stop-limit orders become:

# Example: Sell Stop / Sell Stop Limit

An investor owns 1,000 shares of DEF bought at \$82

- ❖ Today's transactions: 82.....81.50.....81.12.....80.50
- ❖ Afraid of a large loss, she enters an order: Sell 1,000 DEF at 75 stop
- Later transactions: 76.12 75.62 75.00 74.37

Trigger Price? Execution Price?

- ❖ If placed as a stop-limit: Sell 1,000 DEF at 75 stop-limit
- ❖ Later transactions: 76.12 75.62 75.00 74.37 74.87 75.00

Trigger Price? Execution Price?

# Example: Buy Stop / Buy Stop Limit

Three weeks ago, Homer sold short 1,000 shares of ABC at \$105

- ❖ Today's transactions: 92.....92.12.....92.50.....92.87
- In order to protect some profits, he enters the following order: Buy 1,000 ABC at 95 stop

❖ Later transactions: 94.62 94.75 95.10 95.12 95.25 95.50

\* Later transactions. 94.02 94.75 95.10 95.12 95.25

Trigger Price? Execution Price?

- ❖ If placed as a stop-limit: Buy 1,000 ABC at 95 stop-limit
- ❖ Later transactions: 94.62 94.75 95.10 95.12 95.25 95.50

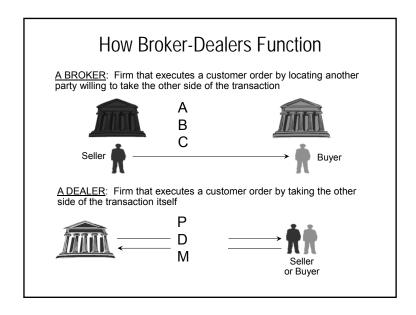
Trigger Price? Execution Price?

# Orders Reduced on Ex-Dividend

All orders that have been entered below the market will be reduced by the DMM by enough to cover the full dividend

- ❖ Buy Limit
- Sell Stop
- Sell Stop Limit

\_Mkt.



# Role of the DMM on the NYSE

Each security on the New York Stock Exchange is assigned to one or another DMM that will:

Maintain a fair and orderly market

- Create liquidity
- Act in a principal capacity when necessary

### Keep the Book

- Accepts orders entered "away from the market" (stops and limits) and will act in an agency capacity
- Can accept GTC (Good 'Til Canceled) and Day Orders
- Cannot accept Not Held orders (time and price discretion)

# Nasdaq and OTC Equities

### Details:

- Non-physical, phone and computer network
- Negotiated market
- Unlimited number of "market makers" continuously willing to buy or sell at their quoted price

### Nasdaq Issues:

- Global Market
- Capital Market

Nasdag Market Center

Execution System

### Non-Exchange Issues (OTC Equities)

- Often low priced, thinly traded
- Real-time quotations
- OTC Pink Markets
  - May be non-reporting companies
- OTCBB (Bulletin Board)
  - · Must be reporting companies

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# Nasdaq Levels

ABCO			
	Bid	<u>Asked</u>	<u>Size</u>
Inside:	22.75	23.00	10 x 30
MM1	22.50	23.12	50 x 50
MM2	22.75	23.25	10 x 40
ммз	22.50	23.00	20 x 30

### Level 1:

 Inside market only (Highest bid – Lowest asked/ offer) without identifying the market maker

### Level II:

Quotes of <u>all</u> market makers that deal in the security

Level III: (same information as Level II)

Allows market makers the ability to change their quote

# Other Secondary Market Terms

### Third Market

- Listed securities traded OTC
- · Facilitated by Consolidated Quotation System (CQS)
- Trades included in NYSE volume totals

### Fourth Market

- Transactions between institutions
- Most true fourth market trades are internal crosses set up by money managers

# Electronic Communication Network (ECN)

- An electronic system, operated by a B/D or registered as an exchange, that executes/displays orders from buyers and sellers
- When order is received, the system is instantaneously scanned to determine if there is a matching order; if so, the order is executed (if not, it will be displayed)
- May allow for trading outside of normal market hours
  - Risks include greater spreads, less liquidity, and increased volatility

# Securities Exchange Act of 1934

### Secondary Market Regulation

- Creation of SEC
  - · Utilizes various Self Regulating Organizations (SROs)
- Reporting requirement for publicly-traded companies
- Empowered the Federal Reserve to regulate the extension of credit where securities are the collateral (Regulation T)

# Securities Exchange Act of 1934

### Anti-Manipulation Rules

- Front-running trading ahead of client orders
- Painting the Tape creating a misleading appearance of trading
- Pegging manipulative activity used to keep a price from falling
- Capping manipulative activity used to keep a price from rising

### **Tender Offers**

- Offer to purchase a security at a stated price, usually at a premium, by a corporate suitor, to gain control of a target corporation
- May only tender shares when long the common stock or its equivalent such as convertibles, warrants, and rights

# **Insider Regulation**

### According to the Act of '34

- Any officer or director of issuer or greater than 10% owner:
  - Must register with SEC within days
  - Report purchases and sales by the end of the day following the transaction
  - · Cannot sell short
  - Cannot keep "short swing" profits; held less than months

business

### According to Insider Trading Act of 1988

- Anyone who possesses material, non-public information cannot use it to make a profit or to avoid a loss
- Penalties for violations:
  - Criminal \$5 million fine or 20 years imprisonment or both
  - Civil SEC may sue for three times the damage ("treble damages")

# Regulation FD

If inside information is disclosed to an individual who does not have a fiduciary relationship with the company, the information must be disseminated to the public

- If the disclosure was accidental, the information must be released within 24 hours
- If the disclosure is intentional (e.g. a conference call), the information must be released simultaneously

# **Industry Rules**

### Quotations

- Quotations are firm unless qualified (informational)
- Firms may be sanctioned for not executing based upon a firm quote
  - · Referred to as "Backing away"

### Interpositioning

- The insertion of a third party between customer and best market
  - · Specifically prohibited when it is to customer's detriment
  - Prohibition does not apply if the customer receives a better price due to interpositioning



Fundamentals of Debt Securities

# Terminology

Bonds are a kind of "fixed income investment"

### Elements:

- Par Value
- Maturity or Due Date
- Interest Rate

# For example:

percentages of par

❖ 1% or 1 point for a bond:

 $An \frac{1}{8}$  of a point for a bond:

Ms. Jones owns a 5% bond, which means she receives per year in interest. She paid a price of 92 1/2 for the bond, or

**Bond Calculations** 

Interest payments and bond prices are stated as

# **Discounts and Premiums**

When market interest rates change, the market price of a bond changes in the opposite direction

Inverse relationship

<u>Example:</u> At time of issue, ABC sets their coupon at the current market rate and the bond's price is par

Over time as interest rates change the bond will trade at a discount or premium to par

	Market Rate	Coupon on ABC's bond	Market price of ABC bond
At issuance:	7%	7%	
Later:	9%	7%	
Still later:	5%	7%	

# **Credit Ratings**

Who pays for a bond to be rated?

What's the concern?

	S & P / Fitch	Moody's
	AAA	Aaa
	AA	Aa
	Α	Α
	BBB	Baa
	BB	Ва
	В	В
Further differentiation:	+ or -	1, 2, 3

# **Bond Yields**

### Nominal Yield:

Same as coupon; fixed

### Current Yield:

❖ Annual Interest ÷ Current Market Price

### Yield-to-Maturity or Basis:

- Investor's total overall yield
- Measured to bond's maturity

When quoting yield, 1% represents 100 basis points

# **Current Yield Calculation**

Annual Interest ÷ Current Market Price

Nominal Yield	Bond Price	Calculation	Current Yield
8%	\$1,000		
9%	\$1,125		
6 1/2%	\$812.50		

# Yield Relationships

Par

# Price versus Yield Example

Example 1		Mul	tiple choices
Y.T.M.:	7.75%	1.	8.00%
Price:	102	2.	7.65%
Coupon:	?	3.	7.75%
		1	

# Price versus Yield Example

Example 2		Mul	tiple choices
Current Yield:	8.45%	1.	100
Y.T.M:	8.25%	2.	103 <sup>7</sup> / <sub>8</sub>
Price:	?	3.	98 ¹/₂ ຶ
			_

# Price versus Yield Example

Example 3		Multiple choices	
Coupon:	6%	1.	5.85%
Price:	95¹/₂	2.	6.00%
Y.T.M:	? -	3.	6.47%
		4.	6.25%

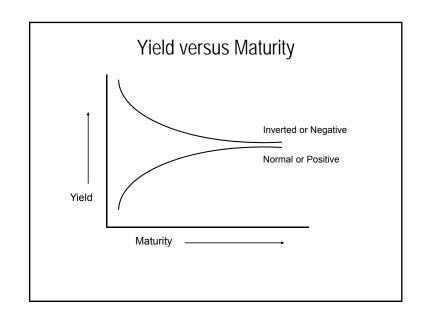
# Largest Price Fluctuation

When interest rates change, which bonds have the largest price change?

Maturity? Longest or Shortest
Coupon rate? Highest or Lowest
Duration? Longest or Shortest

Duration: The measure, expressed in years, of a fixed-income security's price sensitivity to changes in interest rates

The greater the duration, the greater percentage volatility



# Retirement of Debt

### **Put Features**

 Allows <u>bondholder</u> to redeem (put) bond back to issuer on a date prior to stated maturity

### **Open Market Purchases**

- Bonds likely trading at a discount
- Issuer has available funds with no better use

### Call Features

Allows <u>issuer</u> to redeem bonds prior to maturity

# Pre-refunding

### Hypothetical:

An issuer floated 20-year 10% bonds five years ago. The bonds had seven years of call protection. Today, rates are at 6%, but are expected to rise. What may the issuer do?

Escrow account established for new bond proceeds

- Managed by trustee
- Amount deposited is sufficient to pay debt service

### Advantages to issuer:

- Captures lower interest rate
- Pre-refunded bond are no longer issuer's liability
- Defeasance elimination of restrictive covenants

Pre-refunded bonds continue to trade until the call date

Considered AAA rated

# Call Feature

Factors which make callable bonds marketable to investors:

- Higher yield lower price
- Call protection length of time during which a security cannot be redeemed by issuer
- Call premium amount over par the issuer must pay an investor for redeeming the security early

From where does the money come?

- Sinking fund
- "Refunding" issue
  - · Sale of a new bond to redeem an old bond
  - · Done when interest rates have declined

# Yield-to-Call

An investor's yield if a bond is called at par

Par

For Callable Bonds, always quote <u>the lower</u> of yield-to-call or yield-to-maturity

- . Bonds selling at a discount use:
- . Bonds selling at a premium use:
- Pre-refunded bonds always use:



# Corporate Debt Securities and Money Market Instruments

# **Corporate Bond Overview**

- Securities Act of 1933
- Trust Indenture Act of 1939 (applies to corporate debt only)
  - Trustee
    - · Appointed by issuer to act in bondholder's best interest
  - · Indenture written contract containing covenants (promises)
    - Open-End alllows new bonds to be issued using same collateral at same priority, or
    - Closed-End
- Interest received is fully taxable

# Two Types of Corporate Bonds

### Secured

- . Backed by physical assets or collateral owned by issuer
  - · Mortgage Bond
    - Backed by real property; land or buildings
  - · Equipment Trust Bond
    - Backed by heavy machinery or rolling stock
  - · Collateral Trust Bond
    - Backed by

### Unsecured (Debentures)

. Backed by issuer's full faith and credit

# Liquidation Rights

Rank	Item
1.	Wages
2.	Taxes
3.	Secured Creditors (including Secured Bonds)
4.	General Creditors (including Debentures)
5.	Subordinated Creditors (including Subordinated Debentures)
6.	Preferred Stockholders
7.	Common Stockholders

# Convertible Debentures

Provides investors with safety of principal and potential stock growth

- Conversion price set at a premium at issuance
- Lower coupon rate
- Bond price is influenced by stock price

Bond holders may convert the par value of the bond into common shares at a given conversion price

What is the conversion ratio?

XYZ Corporation 6% Debenture
Market Price \$1,100 and Convertible at \$20

Par

Co

Conversion Price

# Conversion Parity

### Example 2)

Given: Bond convertible at \$25 and the bond is priced at 120

Find: Parity price of stock

· First, find conversion ratio:

 Knowing the value of all shares, now find the value of each share:

An arbitrage opportunity exists if the stock is selling at a to parity

# **Conversion Parity**

Parity means equivalent market values

Price of Convertible Bond

Aggregate Market Value of Common Stock

### Example 1)

Given: Bond is convertible at \$50 and the market price of the common stock is \$60 per share

Find: Parity price of bond

· First, find conversion ratio:

· Then, find the value of those shares:

An arbitrage opportunity exists if the bond is available at a to parity

# **Anti-Dilutive Feature**

If an issuer of convertible securities ever splits its stock or issues a stock dividend, a covenant in the indenture would require the issuer to adjust the terms of the convertibles

Adjustment of Conversion Prices and Ratios

Stock Split

Conv. Price Conv. Ratio Price x Ratio

Original: \$100

After 2:1 Split:

# Anti-Dilutive Feature - Example

### Stock Dividend

A corporation has issued debentures convertible at \$50. The stock pays a 10% stock dividend. According to the non-dilutive feature of the bond indenture, the new conversion price would be:

- 1. \$19.23
- 2. \$20.83
- 3. \$45.00
- 4. \$45.45

# Income (Adjustment) Bond

Generally, issued by corporations after reorganization

- . Issuer promises principal at maturity
- No promise of interest payment unless income is sufficient
- . Generally sold at deep discount
- Trade flat (without accrued interest)

# Euro, Eurodollar, and Yankee Bonds

### Eurodollars:

U.S. dollar denominated deposits in foreign banks

### Eurodollar Bond:

- . Bond issued outside the U.S.
- Pays interest and principal in U.S. dollars
- Exempt from SEC registration
- ❖ May trade in the U.S. in the secondary market after 40 days

### Yankee Bond:

- Foreign bonds issued in the U.S.
- Pays interest and principal in U.S. dollars
- Must be SEC registered
- May trade in the U.S. market immediately

### Reverse Convertible

A type of structured product issued as a short-term, high yield note often linked to a single underlying stock

- Investor believes underlying asset will remain stable or rise slightly, while issuer believes the price will fall
- Best case scenario asset remains stable or rises slightly:
  - Investor receives the higher coupon and, at maturity, receives 100% return of principal (forgoing appreciation on underlying asset)
- Worst case scenario asset falls below knock-in level (e.g., 70 to 80% of original price):
  - The investor will receive shares of stock from the issuer which will be worth less than his original investment
- Suitability analysis must be performed for each recommendation

# **Accrued Interest**

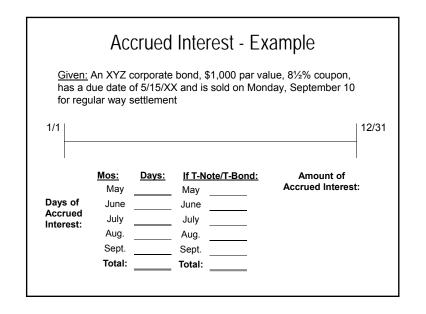
Interest due on a bond since the last interest payment was made

The buyer pays the seller the market price of the bond plus the accrued interest

To perform the calculation:

- Start counting at:
- And count up to:

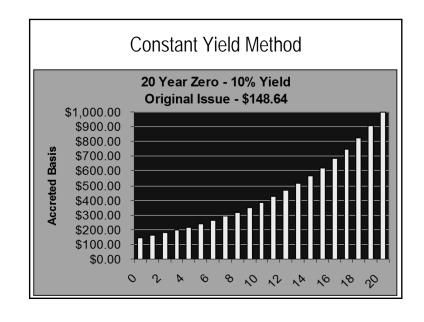
Corporates, Municipals and Government Agencies			U.S. Government T-Notes and T-Bonds
days in month and days in year		days in month and days in year	
Calculation:	Annual Interest \$	X	# of accrued days 360 or 365



# Zero Coupon Bond

Pays no periodic interest

- Issued at deep discount, but matures at face value (par)
- Taxes paid on earnings reported, but not received ("phantom interest")
- Investor's carrying value (cost basis) must be <u>accreted</u> yearly
- Trades flat (without accrued interest)
- Has no reinvestment risk
- Attractive for those planning for a specific investment goal (e.g. college funding or retirement), but not for those who desire current cash flow



# Money Market Instruments

### Characteristics:

- Short-term debt instruments (one year or less to maturity)
- Safety of principal and liquidity
- Provide investors with a stable alternative pending an investment decision

### Principal Types:

- ❖ T-Bills
- Banker's Acceptances Facilitate foreign trade (import / export)
- . Commercial Paper Unsecured corporate debt
- Negotiable Certificates of Deposit (CDs) Unsecured bank debt (\$100,000 minimum)
- Repurchase Agreements (Repos) A dealer selling securities to another dealer with the agreement to repurchase

# Long-Term CDs

Long-Term CDs or Brokered CDs are not money market instruments

- Maturities range from 2 to 20 years
- May be callable
- FDIC insurance may not apply
- Investors may experience a loss of principal if sold prior to maturity
- May have limited liquidity



U.S. Government and Agency Debt Securities

# Overview of U.S. Treasuries

### Characteristics:

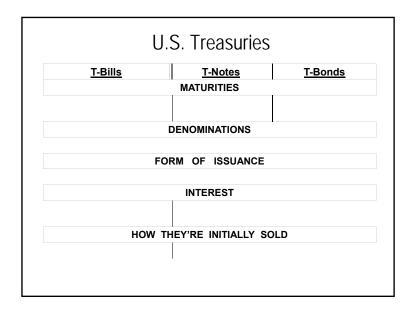
- No credit risk
- . Highly liquid

### Exempt from:

- ❖ Both state (Blue Sky) and federal ('33 Act) registration
- Trust Indenture Act of 1939
- Federal Reserve's Reg. T

### Interest received:

- Exempt from both:
- . But subject to:



# Bidding at the Auction

### Two Types of Bids:

- Competitive Bids (placed by large financial institutions)
  - · Indicate both quantity and price
- Non-competitive Bids (placed by the public)
  - · Indicate quantity only
  - · Bidder agrees to pay:
  - · Filled first

# Auction Example

\$100 million U.S. Government Bond Auction Due 06/01/XX Coupon 7.5%			
Bidder	Bid	Fill	
Jerry and Others	\$20 million NC		
Big Bank	\$40 million at 99		
Foreign Country	\$40 million at 98		
Government Dealer	\$40 million at 97		

Known as single price or "Dutch" auction

# Pricing of Government Securities

T-Notes, T-Bonds and Agency Securities:

❖ Quoted as a percentage of par and fraction – <sup>1</sup>/<sub>32</sub>

	Quotation	Rewritten	Decimal	Dollar Price
Assume \$100	87.24			
Assume \$1,000	106-04			

### T-Bills:

- Quoted on a discount yield basis, not dollar
- In a T-bill dealer's quotation, the bid's <u>higher yield</u> represents a <u>lower price</u>, while the asked's <u>lower yield</u> is a <u>higher price</u>

Bid	Asked
2.94	2.90

# **TIPS**

### TIPS (Treasury Inflation Protected Securities)

- Stated coupon
- Principal is adjusted for inflation, based on the CPI
- Principal adjustments are taxed as ordinary income in the year the adjustments are made
- Adjusted principal paid at maturity

<u>Principal</u>	<u>Coupon</u>	<u>Payment</u>
\$1,000	4%	\$40.00
	CPI increases by 1%	
\$1,010	4%	\$40.40

# **STRIPS**

### T-Strips and Receipts

- Coupon payments and principal are sold separately as zero coupon securities (each discounted)
- T-Notes and T-Bonds can be stripped (not T-Bills)
- Provides a wide range of maturities to choose from when shopping for a zero coupon
- Trade flat (without accrued interest)

# Non-Marketable Government Securities

### Series EE Savings Bonds

- May only be bought from and sold back to the U.S. Government
- No secondary market (non-marketable, non-negotiable)
- No price fluctuation

# Government Agencies and Enterprises

Securities issued by U.S. Government Agencies and Government Sponsored Enterprises (GSEs)

- Created to reduce borrowing costs for certain sectors of the economy
  - Mortgage Backed
    - Government National Mortgage Assoc. (GNMA)
    - Federal National Mortgage Assoc. (FNMA)
    - Federal Home Loan Mortgage Corp. (FHLMC)
  - Others
    - Federal Home Loan Bank (FHLB)
    - · Federal Farm Credit Bank (FFCB)

### Characteristics

- \* Registration:
- Quote:
- Accrued Interest:

# GNMA, FNMA, FHLMC Pass-Throughs

Represents an interest in a pool of mortgages

- Monthly payments consist of interest and principal
- Interest portion is fully taxable

Subject to pre-payment risk

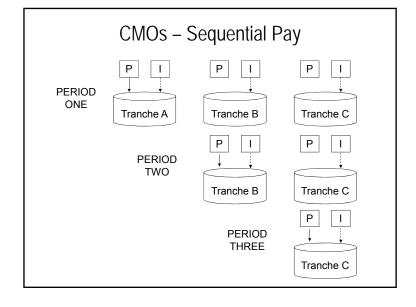
GNMA pass-throughs are U.S. Government guaranteed, while FNMA and FHLMC are not

# Collateralized Mortgage Obligations CMOs A mortgage-backed bond created by dividing mortgage

- pools (GNMA, FNMA, FHLMC, not SLMA) into various bond classes (tranches)
  - Interest is generally paid monthly (fully taxable), with principal paid sequentially
  - · Issued in \$1,000 denominations

· Helps to manage pre-payment risk

- Retail Communications:
  - · Must offer educational material
  - · No comparison to any other investment
  - Preapproved by a principal and filed with FINRA within 10 business days of first use



# Other CMO Tranches

Planned Amortization Class or PAC Tranche

Provides the most predictable cash flow and maturity

Support or Companion Tranche

Provides the least predictable cash flow and maturity

### Z-Tranche

Last tranche to receive payments



Municipal Debt Securities

– Bond Types and Tax Treatment

# Municipal - Overview

### Issuers:

- States and their political subdivisions
  - Cities
  - Counties
  - · School districts
- · Public agencies and authorities
- Territories and possessions
  - · Puerto Rico, U.S.V.I, Guam, American Samoa

# Two Types of Municipals General Obligation Revenue Source for Payment of Debt Service:

Two Types of Municipals			
	General Obligation	Revenue	
Risk?			
Yield?			
Voter approval?			
Subject to debt limitations?			
		l	

# **Analyzing Municipal Bonds**

<u>G.O. Bond analysis</u> is based on the municipality's tax revenues and liabilities outstanding

- Factors analyzed:
  - · Property values
  - Current debt, including overlapping\* (coterminous) debt
  - · Tax delinquencies
  - · Unfunded pension liabilities
  - · Per capita income
  - · Population growth
- Overlapping debt: situation where multiple authorities in a given geographic area have the ability to tax the same residents

Revenue Bond analysis will examine revenue, operating costs, and competition from similar projects

# Types of Revenue Bonds

Type:	Source of Debt Service:		
Transportation	Tolls, user fees		
Special Tax	Excise taxes on purchases such as gasoline, tobacco, and liquor		
Special Assessment	Assessments on the benefited properties used for sidewalks, sewers, etc.		
Double Barreled	Two sources: Project Revenue Tax Dollars (G.O.)		

# Types of Revenue Bonds

Type:	Source of Debt Service:
Moral Obligation	If project revenue is insufficient, state legislature is morally, but not, obligated for shortfall
Private Activity Bonds	More than 10% of the proceeds benefits a private entity (e.g., a pro sports team)  • May be subject to the AMT
Industrial Development Revenue (IDR)	Lease agreements (payments) with a corporate user of the facility  The credit rating is only as good as the May be subject to the AMT

# Covenants from Issuer (Revenue)

Rate: Pledge to maintain user fees at a level

sufficient to meet debt service and other

obligations

Maintenance Pledge to maintain project in good

and Operation: working order and to contribute to a fund

for that purpose

Insurance: Pledge to carry insurance on the property

Catastrophe Call: Allows issuer the ability to call a bond due

to the destruction of the revenue source

backing the bond

## Covenants from Issuer (Revenue)

Additional Issue: Open versus closed-end indenture

Non- Pledge to not grant special rates to any one

**Discrimination:** person or group

Flow (Allocation) Establishes the priority for payment of debt

of Funds: service

- Identifies whether debt service will be paid by:
  - · Net Revenue (always assumed), or
  - · Gross Revenue

## Net versus Gross Revenue

### Net Revenue Pledge Bond

From: Gross Revenue

First comes: Maintenance and Operation

Leaving: Net Revenue

From which we pay: Debt Service

#### **Gross Revenue Pledge Bond**

From: Gross Revenue

First comes: Debt Service

From what's left we pay: Maintenance and Operation

<u>Debt Service Coverage Ratio</u> is calculated by taking the amount *available* for debt service and dividing by the amount *needed for debt service* 

## Municipal Notes

Tax-Free Anticipation Notes used for:

- Short-term, interim financing
- Getting a project started
- Managing cash flows
  - Tax Anticipation Notes (TAN)
  - Revenue Anticipation Notes (RAN)
  - Bond Anticipation Notes (BAN)
  - · Grant Anticipation Notes (GAN)

				_	Moody's
Specia	l Ratings:	S&P	Moody's	MIG =	Investment
	•	SP 1	MIG 1	-	<u>G</u> rade
		SP 2	MIG 2		
Speci	ulative Grade	→ SP 3	MIG 3		
			sg ←	Speculativ	ve Grade

## Other Types of Securities

Variable Rate Demand Obligations (VRDOs):

- Debt securities that offer a variable rate of interest that is adjusted at specified intervals (e.g., daily, weekly, or monthly)
- Holders can redeem for par plus accrued interest at any time that rates are reset

#### Auction Rate Securities:

- Long-term bonds (municipal or corporate) with a variable interest rate that is periodically set through a "Dutch Auction"
- The auction sets the lowest interest rate at which all the securities being offered for sale will clear the market ("net clearing rate")
- ❖ Interest rate reset periods range from 7, 28, or 35 days

## Tax Considerations

## Municipal bond interest:

- Interest received is exempt from Federal tax, however, interest may be subject to State and Local tax
- For bonds issued by U.S. Territories and Possessions, interest is triple tax exempt

Note: Capital gains are taxable

## **Yield Calculations**

Ms. Jones is earning 4.55% on a tax-free municipal and is in the 35% tax bracket. What must a taxable bond yield to be equivalent?

Taxable Equivalent Yield Formula: Tax-Free Yield (100% - Tax Bracket %)

Ann Investor purchased a 7.5% corporate bond and is in the 35% tax bracket. What amount will Ann be able to keep after taxes have been paid?

**Net Yield Formula:** Taxable Yield x (100% - Tax Bracket %)

## Municipal Discounts and Premiums

Original Issue Discount (OID)	Premium
	Basis must be <b>amortized</b> at a rate that will bring basis to par at maturity

- Tax result if OID or premium bond is held to maturity:
- · A sale prior to maturity could produce:

## **Secondary Market Discount**

-When the bond is sold or redeemed, the accreted market discount is taxed as:

## Discount and Premium Examples

An investor purchased a municipal bond at a discount. If the investor holds the bond to maturity, any gain will be considered:

- I. Tax-free interest if the bond is an OID
- II. A capital gain if the bond is an OID
- III. Ordinary income if the bond is not an OID
- IV. Tax-free income if the bond is not an OID
- 1) I and III only
- 2) I and IV only
- 3) II and III only
- 4) II and IV only

## Discount and Premium Examples

A municipal bond was issued at par and later purchased in the secondary market at a price of 90. What would be the tax consequence if the bond was held to maturity?

1) \$100 capital gain

\$100 tax-free interest

2) \$100 capital loss

4) \$100 ordinary income

An investor purchases a \$100m face value municipal bond with a 5-year maturity at 105. After two years, the bond is sold at 95. For tax purposes, the investor has a:

1) \$ 2,000 loss

3) \$8,000 loss

2) \$ 4,000 loss

\$10,000 loss



# The Issuance of Municipal Securities and MSRB Rules

## Municipal Exemptions

Municipal debt issues are exempt from:

- Federal registration (Securities Act of 1933)
  - · Remember, they remain subject to anti-fraud provisions
- State registration (Blue Sky Laws)
- Trust Indenture Act of 1939
- ❖ Federal Reserve's Reg. T

## Municipal Documents and EMMA

#### Official Statement

- Used by issuers as a disclosure document
- Preparation is NOT required, since the MSRB has no control over issuers
- ❖ If prepared, MSRB requires B/Ds to distribute it

## Legal Opinion prepared by Bond Counsel

- The counsel renders opinions as to:
  - Issuer's legal, valid, and enforceable obligation
  - Tax exempt status of the issue
- "Unqualified" opinion is better than a "qualified" opinion

## Electronic Municipal Market Access (EMMA)

- MSRB dataport used by issuers and underwriters
- Provides access to document submissions and updates
- · Provides secondary market trade data

# Selecting an Underwriter – Notice of Sale

## With a Negotiated Sale

- Issuer appoints its underwriter
- ❖ Both issuer and underwriter "negotiate" terms of the deal
- Usually used for Revenue Bonds

## With a Competitive Sale

- Notice of Sale is published in the Bond Buyer
  - · The Notice is prepared by the issuer
  - · Contains relevant details about the issue
- Issuer is inviting underwriters to submit sealed bids
- Usually used for General Obligation Bonds

# Syndicate Practice

## Formation of Syndicate

- Manager invites other B/Ds to participate and share liability
- Manager sends prospective firms a <u>Syndicate Letter</u> to provide information about the issue (also referred to as <u>Agreement Among Underwriters</u>)
- Some items addressed in the Syndicate Letter:
  - · Size and type of offering
  - · Percentage required to participate
  - Type of syndicate

# Syndicate Liability for Unsold Bonds

### Undivided Syndicate (Eastern Account)

 Each member takes some of the unsold bonds (same percentage as original allocation)

## Divided Syndicate (Western Account)

Members only responsible for their individual allocation

## Syndicate Liability for Unsold Bonds 25% A three-member Α syndicate 50% С 25% \$100,000,000 Issue Reallocation of: Member Sales Divided Acct. **Undivided Acct** \$50 million Α В \$5 million \$ 25 million

# Components of the Spread

The manager of an underwriting syndicate receives  $^{1}/_{4}$  point per bond. The syndicate member's compensation is  $^{3}/_{4}$  point for each bond they sell, and a selling group's concession is  $^{1}/_{2}$  point for each bond they sell. (Hint: the total spread for the example is 1%)

Manager's Additional Concession

# Secondary Market

After issuance, municipal bonds trade in the over-thecounter market

## Market Participants:

- Dealers and Traders
  - · May act as market makers
  - May trade for their own account (i.e., position traders)
- Broker's Brokers
  - · Work with other firms, not with customers
  - · Provide a central location for discovering interest
  - · Provide anonymity

# Components of the Spread

	Total Takedown <sup>3</sup> / <sub>4</sub>		
Mgr. Fee	Add'l Takedown Concession		
<sup>1</sup> / <sub>4</sub> or \$2.50	<sup>1</sup> / <sub>4</sub> or \$2.50	<sup>1</sup> / <sub>2</sub> or \$5.00	

Example: A customer buys \$10,000 worth of bonds, how is the spread distributed?

	Manager sells	Member sells	Selling Group sells
Manager			
Member			
Sell. Group			

## Municipal Information

For the Primary Market: Bond Buyer

#### Indexes:

20 Bond: - G.O.s with year maturities

- Average rating AA or Aa2

11 Bond: - 11 of the above 20

- Average rating AA+ or Aa1

25 Revenue: - Revenues with year maturities

- Average rating A+ or A1

## **Bond Buyer Information**

#### **Statistics**

- Visible Supply
  - Total par value of both negotiated and competitive issues expected to reach the market within next days
  - · Compiled daily
- Placement Ratio
  - Par value sold (placed) versus total par value that was available for sale
  - · Compiled weekly

2012	No. New Accounts	Total Amt. New Accts. (\$000s)	Sales from New Accts. (\$000s)	Placement Ratio (%)
6/15	20	1,729,781	1,588,601	91.8
6/8	17	476,595	432,585	90.8
6/1	23	952,278	843,508	88.6

# Financial Advisory Relationship

Relationship exists when a B/D gives, or enters into an agreement with an issuer to give, fee-based financial advisory or consultant services regarding the issuance of municipal securities

- ❖ A written agreement must exist between the issuer and B/D
- If a financial advisory relationship exists, the B/D is prohibited from acting as an underwriter with respect to the same issuer of municipal securities (applies to both negotiated and competitive underwritings)

However, a B/D may provide advice to an issuer relating to the issuance of municipal securities when acting *solely in* the capacity of an underwriter

## Municipal Securities Rulemaking Board

- The MSRB formulates and interprets rules
- MSRB rules regulate:
  - Broker-dealers and salespersons engaged in municipal business, and
  - Municipal advertising
- MSRB rules do not apply to municipal issuers
- Since the MSRB has <u>no enforcement power</u>, its rules are enforced by a separate regulatory agency

For broker-dealers:	For bank dealers:
- SEC	- Comptroller of the Currency - FRB or - FDIC

## Control Relationship

A broker-dealer employs (controls) a person who has influence as to an issuer's debt service

If the broker-dealer wishes to trade that issuer's bonds for or with a customer the broker-dealer must:

- Disclose relationship, at least orally, before the trade
- Disclose relationship in writing at or prior to settlement
- And if for a discretionary account, obtain the customer's specific, written permission

## **Political Contributions**

Contributions made by municipal finance professionals (MFP) to candidates or a PAC could potentially aid in attaining business; therefore, a conflict exists

- A violation would occur if an MFP:
  - Makes a political contribution in excess of (per election) to a candidate for whom she may vote, or
  - Makes <u>any</u> contribution to a candidate for whom she may not vote
- If a violation occurs, there is a two year ban on underwriting business with the issuer (no negotiated deals, however, competitive deals are not prohibited)



Equity Options – Fundamentals and Basic Strategies

# Options - Overview

A contract between two parties

The Owner
Buyer, Holder, Long

The Writer Seller, Short

- Pays the Premium (creates debit)
- Receives the Premium (creates credit)
- · Acquires a right / control
- Assumes an obligation

# Two Types of Contracts

	The Buyer's Right	The Seller's Obligation
CALL		
PUT		

## Standardized Elements

## IBM Feb 90 Call at 3

An option to?

What stock?

How many shares?

At what price?

Aggregate contract price?

Good 'til when?

Premium?

Aggregate premium?

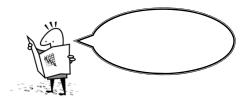
# "In, At, or Out-of-the-Money"

Option and Premium	Market Price	"In, At, or Out-of-the-Money"
STC Jun 35 Call at 3	36	
ELG Apr 60 Put at 7	54	
CJM Jul 35 Put at 1.50	35	
XYZ Aug 110 Call at 2	109	

# "In-the-Money"

The relationship between the market price of the underlying security and the option strike price

- Calls are in-the-money when the market is UP above the strike price
- Puts are in-the-money when the market is DOWN below the strike price



# In-the-Money versus Out-of-the-Money

Buyers want options to be:

Sellers want options to be:

#### Case 1:

Susan owns 1 XYZ Jun 90 Call for which she paid a premium of 3 and XYZ is trading at \$112 a share

- Consider the option:
- Consider Susan:

#### Case 2

Jerry wrote the XYZ Jun 90 Call for which he received a premium of 3 and XYZ is still trading at \$112 a share

- Consider the option:
- Consider Jerry:

# The Option's Premium

Premium = Intrinsic Value + Time Value

A contract has intrinsic value if it is in-the-money

- Its intrinsic value equals its in-the-money amount
- It has <u>zero</u> intrinsic value if it is out-of-the-money or atthe-money

Time Value is based upon:

- Time left until expiration
  - More time = more time value
- Market volatility
  - · Increased market volatility causes premiums to rise

# The Option's Premium

Option and Premium	Market Price	In, At, or Out- of-the-Money	Intrinsic Value	Time Value
STC Jun 35 Call at 3	36	IN		
ELG Apr 60 Put at 7	54	IN		
CJM Jul 35 Put at 1.50	35	AT		
XYZ Aug 110 Call at 2	109	OUT		

# The Life of an Option

- 1) Expire worthless
  - Standard option life is 9 months
  - LEAPS® (Long-term equity options) have lives up to 39 months
- 2) Exercised at owner's discretion:
  - American Style:
    - · May be exercised at any time up until expiration
  - European Style:
    - · May only be exercised on the day of expiration
- 3) Close-out, Trade, Liquidate, or Offset
  - Investor executes an opposite transaction on the same series of option

# Closing a Position

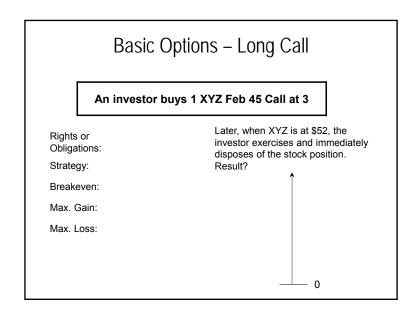
Marking the option order ticket for a close-out:

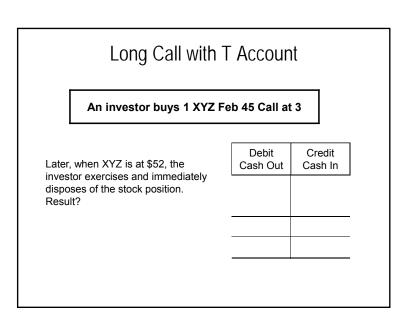
Opening Transaction:	Closing Transaction?
Opening Purchase	
Opening Sale	

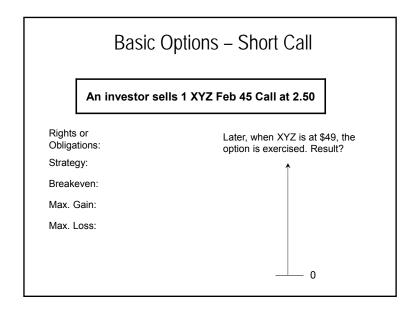
Profit or loss is determined by the difference between price paid for option and price received from sale

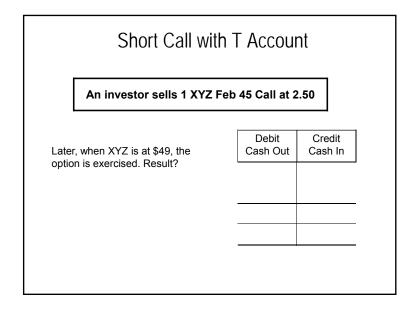
# An investor is long 1 ABC Dec 65 Call at 3. Later, ABC increases to 72 and the Dec 65 Calls are trading at 8. What could the investor do? If exercised and stock sold: Debit Credit Cash Out Cash In Debit Credit Cash Out Cash In

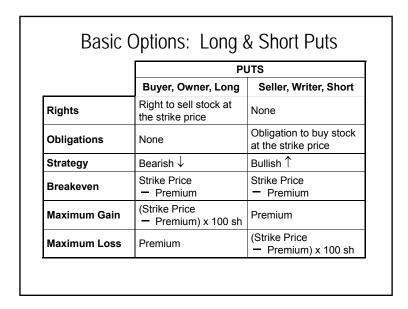


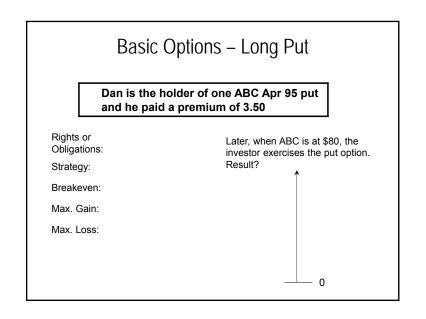




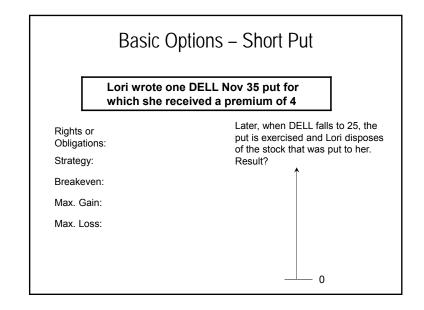


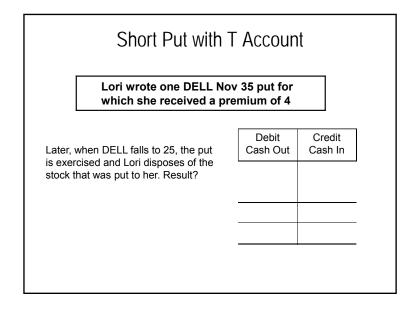






# Long Put with T Account Dan is the holder of one ABC Apr 95 put and he paid a premium of 3.50 Later, when ABC is at \$80, the investor exercises the put option. Result?







# Stock and Option Positions

Recognized when investor simultaneously has a stock position (long or short) and a related option position

- Do not use Call-Up and Put-Down
- For gains and losses, "follow the stock"

To protect stock in a volatile market ...

When long stock: Buy a PutWhen short stock: Buy a Call

To add income in a stable market ...

When long stock: Sell a Call (Covered)
 When short stock: Sell a Put (Covered)

# Long Hedge or Protective Put

Buy 100 shares IBM at 96 and Buy 1 IBM Jun 90 Put for 3

In order to breakeven, IBM must be trading at:

1) 87 2) 93 3) 99

Debit Credit
Cash Out Cash In

Later, IBM falls to 71, the put is exercised and the stock is sold. Result?

1) \$2,800 loss 2) \$900 loss 3) \$2,800 gain

Debit Cash Out	Credit Cash In

# Short Hedge or Protective Call

Sell short 100 shares DEF at 92 and Buy 1 DEF Dec 95 Call for 2

In order to breakeven, DEF must be trading at:

1) 87 2) 93 3) 90

Later, DEF rises to 102, the call is exercised and the short position is covered. Result?

1) \$1,200 loss 2) \$500 loss 3) \$500 gain

Debit Credit
Cash Out Cash In

Credit Cash In

# **Covered Call Writing**

Buy 100 shares XYZ at 42 and Sell 1 XYZ Jun 45 Call for 2

In order to breakeven, XYZ must be trading at:

1) 40 2) 47 3) 44

Debit Credit
Cash Out Cash In

Later, XYZ rises to 67, the call writer is exercised against. Result?

1) \$2,700 gain 2) \$500 loss 3) \$500 gain

Debit Cash Out	Credit Cash In

## **Covered Put Writing** Sell Short 100 shares ABC at 37 and Sell 1 ABC Mar 30 Put for 2 In order to breakeven, ABC Later, ABC falls to 22, the put writer is must be trading at: exercised against. Result? 1) 28 2) 39 3) 35 1) \$900 gain 2) \$1,500 loss 3) \$1,700 gain Debit Credit Debit Credit Cash Out Cash In Cash Out Cash In

# Straddles and Combinations

Created by either: Buying both a call and a put or Selling both a call and a put

Both options have the same underlying interest

Long Straddle or Combination: Buy both; seeking

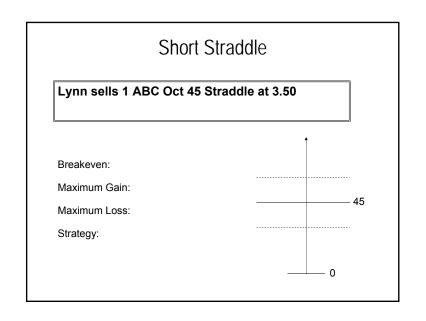
Short Straddle or Combination: Sell both; expecting

## **Straddle**

#### Combination

- Same expiration months and
- and
  ❖ Same strike prices
- Different expiration months and / or
- Different strike prices

# Breakeven: Maximum Gain: Maximum Loss: Strategy: Maximum Loss:



# Long Combination

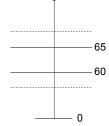
Buy 1 DEF Aug 60 Put at 1 Buy 1 DEF Aug 65 Call at 2

Breakeven:

Maximum Gain:

Maximum Loss:

Strategy:



# Spreads

Positions which allow an investor to limit losses in exchange for limiting the gains

- Spreads are created with the <u>sale and purchase</u> of two options of the same "class" and different "series"
  - Class consists of the same underlying stock with the same type of option
  - Series consists of options of the same class with same expirations and strike prices
- Spreads may be bullish or bearish

# Types of Spreads

Buy 1 ABC Jun 40 Call and Sell 1 ABC Jun 50 Call

Buy 1 STC Dec 40 Call and Sell 1 STC Sep 40 Call

Buy 1 STC Sep 40 Put Sell 1 STC Mar 30 Put and

# Vertical Spread

Buy 1 XYZ Feb 80 Call at 3 Sell 1 XYZ Feb 90 Call at 1

Net Premium:

Buyer or Seller:

Debit or Credit:

Widen or Narrow:

Breakeven:

Bull or Bear:

Maximum Gain:

Maximum Loss:

# Vertical Spread

Sell 1 XYZ Feb 40 Put at 1 Buy 1 XYZ Feb 50 Put at 4

Net Premium: Buyer or Seller:

Debit or Credit:

Widen or Narrow:

Breakeven: Bull or Bear:

Maximum Gain:

Mandania | |

Maximum Loss:

# Vertical Spread

Sell 1 IBM Nov 95 Put at 8 Buy 1 IBM Nov 80 Put at 1

Net Premium:

Buyer or Seller:

Debit or Credit:

Widen or Narrow:

Breakeven:

Bull or Bear:

Maximum Gain:

Maximum Loss:

# Working with Vertical Spreads

Identify the "dominant leg" – the option with the larger premium

- ❖ For <u>Calls</u>, this will be the <u>lower strike price</u>
- . For Puts, this will be the higher strike price
- The dominant leg determines whether the investor is a buyer or seller and also his strategy

Calculate the net premium – the larger less the smaller

- For a buyer, this is the investor's maximum loss
- For a seller, this is the investor's maximum gain

Determine the breakeven point

- From the dominant leg's strike price, move an amount equal to the net premium
- Call-Up or Put-Down

# Is it a Debit/Credit, Bull/Bear Spread?

Buy an XYZ Nov 90 Call and Sell an XYZ Nov 80 Call

Write an ABC Mar 35 Put and Buy an ABC Mar 40 Put

Short a JMK Oct 75 Call and Long JMK Dec 75 Call

Generally not referred to as bull/bear due to different expiration months



# Non-Equity Options

# **Index Options**

Provide the opportunity to <u>speculate</u> on, or <u>hedge</u> against, the movement of the market, rather than movement of a specific stock

Comparison	Equity	Index
Underlying Interest	Stock	Value or average of an index
Multiplier	100 shares	\$100
Exercise	Receive or deliver stock	Receive or deliver cash
Settlement	Two business days	Next business day

Broad-based Index: reflects performance of the entire market

❖ E.g. S&P 100 (OEX) or S&P 500 (SPX)

Narrow-based Index: reflects performance of a particular sector

E.g. Pharmaceuticals or Computer-Technology

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## Volatility Index (VIX) Options

The VIX is a barometer of investor sentiment and expected market volatility based on the premiums for S&P 500 Index options over the next 30 days

- ❖ VIX options are cash settled, with each point equal to \$100
- European exercise

When does volatility tend to increase?

If it does, an investor may:

# Foreign Currency Options

Provides the opportunity to <u>speculate</u> on, or <u>hedge</u> against, the movement of exchange rates on foreign currencies compared to the U.S. dollar

- Interbank Market:
  - · Market in which currency spot prices are established
  - Unlimited trading hours
  - Unregulated
  - Decentralized
- Currency options trade on the Philadelphia Stock Exchange
- When assessing foreign currency movement compared to the U.S. dollar, it is an inverse relationship
- There are no options on the U.S. dollar issued on U.S. exchanges

# Foreign Currency Options

Currencies are selected by the PHLX

Expiration:	The third Friday of the expiration month	
Exercise:	U.S. dollar-settled, European style exercise	
Contract Size:	10,000 units, except Yen which is 1 million	
Point Value:	1 point = \$100 (e.g. 2.25 = \$225)	

# Foreign Currency Option Strategies

Van de Lay Industries, a U.S. corporation, is importing latex from Europe. It has agreed to a pay 2.5 million euros on delivery in November.

Which two of the following would increase the importer's cost?

- Rising value for euro
- II. Rising value for U.S. dollar
- III. Falling value for euro
- IV. Falling value for U.S. dollar

How may Van de Lay hedge its exchange rate risk?

# Foreign Currency Options

## Contract specifications:

- Option strikes and premiums are generally quoted in cents per unit (\$0.01)
  - Except Japanese yen which are in 100ths of cents (\$0.0001)

For example: A speculator believes the euro will rally and, therefore, buys 1 Euro June 160 call at 3.35 (10,000 unit contract size)

- The cost is \$335, as each point equals \$100 (3.35 equals \$.0335 x 10,000 = \$335)
- If euro is 166 cents (\$1.66) at expiration, the call is worth \$600 (160 call with the euro at 166 is 6 points in-the-money x \$100)

# **Yield-Based Options**

Provide the opportunity to <u>speculate</u> on, or <u>hedge</u> against, the movement of interest rates

- Based on the yield of a Treasury security, not its price
- Exercise causes delivery of cash (like index options)

If investors believe:	They should:
Yields will decline	- Buy yield-based puts or - Sell yield-based calls
Yields will increase	- Buy yield-based calls or - Sell yield-based puts



Options Account Opening Procedures, Taxation, and Trading Markets

## **Option Account Rules**

- 1) Gather client information through Option Account Agreement
  - · Financial status, objectives, experience
  - Data need not be verified, but copy sent to client for her eventual signature
  - Send the OCC's options disclosure document (ODD)
- ?) Registered Options Principal (ROP) Approval
  - · ROP must determine that account is suitable
    - Client must understand strategies, be able to calculate profit and loss potential, and have ability to assume risk
  - ROP approves the account to a certain level of trading based on the client's profile
- 3) Allow "Opening" Transaction (only after approval)
- after the ROP's approval, client must sign and return Options Account Agreement
  - · If not, only closing transactions would be permitted

## **Deadlines for Equity Options**

**Expiration:** : PM ET (Eastern Time) on the third

of the expiration month

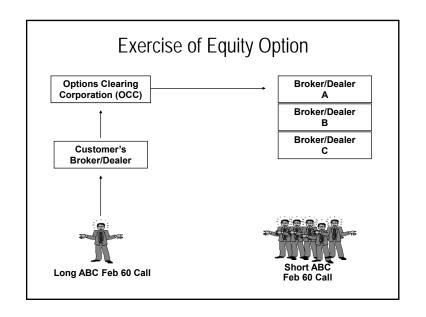
**Trading:** : PM ET on the day of expiration (Fri.)

Submission of exercise notice to broker:

PM ET on the day of expiration (Fri.)

Note: At expiration, the OCC will automatically exercise all options that are in-the-money by

at least \$.01



# Adjustment of Terms

Start: 1 ABC Feb 60 Call			Aggregate C Value: \$6,00	
Adjust for:	Number of Contracts	Shares per contract	Strike Price	Aggregate Value

Even Splits	Increase	Unchanged	Decrease	Aggregate
2 for 1				
-				
Odd Splits/ Stock Dividends	Unchanged	Increase	Decrease	Aggregate

# Adjustment of Terms

ISTART: 1 BBA War 5 UU Call		Aggregate Contract Value: \$500		
Adjust for:	Number of Contracts	Shares per Contract	Strike Price	Aggregate Value

Reverse Splits	Unchanged	Decrease	Increase	Aggregate
1:10				

Cash Dividends: strike price is not adjusted on ex-dividend date

# **Option Taxation**

## **Expire Worthless**

 Short-term capital gain or loss for listed equity options, recognized in the year the contract expires (may be long-term for purchasers of LEAPS)

### Is Closed-out

 Short-term capital gain or loss for listed equity options (may be long-term for purchasers of LEAPS)

### Is Exercised

- The option premium itself will not generate a gain or loss
- The premium will be added to the strike price for calls, or subtracted from the strike price for puts, to establish the cost basis or sale proceeds for tax purposes
  - · Calculated in the same manner as breakeven

# **Taxation of Exercised Option**

An investor is long one ABC Jun 90 Call at 4. If the option is later exercised, the investor will have:

- 1. A basis of \$9,200
- 2. A basis of \$8,800
- 3. A basis of \$8,600
- 4. A basis of \$9,400

Paige Turner owns 100 shares of XYZ at \$42 a share and she sells 1 XYZ Dec 40 Call for \$300. If the call is exercised, what are Paige's sales proceeds for tax purposes on exercise?

- 1. \$3,700
- 2. \$3,900
- 3. \$4,300
- 4. \$4,500

# Stock Holding Periods and Puts

## **Holding Periods:**

- ❖ If a stock's long-term holding period is not yet established:
  - The purchase of a put terminates the holding period for the stock
  - · The holding period begins anew only after the put is lifted
- If a stock's long-term holding period is already established, a put purchase would not change it (it remains long-term)

## Married Put:

- ❖ A put purchased on the <u>same day</u> that stock is purchased
  - · The holding period for the stock starts
  - The premium paid becomes part of the stock's basis, even after expiration

# **Option Strategy Review**

If investors are:	They should:
Bullish	Buy Calls (limited risk) Sell Puts (large risk)
Bearish	Buy Puts (limited risk) Sell Calls (unlimited risk)
Long stock and want protection	Buy Puts
Long stock and want income	Sell Covered Calls
Short stock and want protection	Buy Calls

# **Option Strategy Review**

If investors are:	They should:
Long portfolio of stock and want protection	Buy broad/narrow-based index puts
Long portfolio of stock and want income	Sell broad/narrow-based index calls
Expecting volatility	Buy straddles or combinations
Expecting stability	Sell straddles or combinations
Mildly bullish, want limited risk, and willing to accept limited gain	Establish Call Debit Spread or Put Credit Spread
Mildly bearish, want limited risk, and willing to accept limited gain	Establish Call Credit Spread or Put Debit Spread



Direct Participation Programs (DPPs)

## **DPPs** - Introduction

#### Definition:

- A business venture designed to pass through both income and losses to investors
- Examples: Limited Partnerships, General Partnerships, Subchapter S Corporations, and Joint Ventures

## Limited partnerships:

- Formed by filing a Certificate of Limited Partnership with the state
- Owned by partners (general and limited)

## Disadvantages

Lack of liquidity

General partner's approval may be required to sell

Limited voting power

Effects of tax law changes

Increased tax complexity:

- Multi-state filings
- Subject to audits
- Subject to Alternative Minimum Tax (AMT)
  - · Certain tax preference items are added back, such as:
    - · Excess intangible drilling costs
    - Accelerated depreciation (higher deductions taken in early years)

## Advantages

Flow-through of income and expenses

Limited liability

Various tax benefits:

- \* Tax Credits dollar-for-dollar reduction of tax due
  - · Construction of low income housing
  - · Rehabilitation of certified historic sites
- Tax Deductions reduces gross income to arrive at taxable income (tax savings is based upon tax rate)
  - Depreciation
  - · Depletion
  - Intangible drilling costs; such as site prep, labor, and testing

## Subscription Agreement

Suitability determination is accomplished via this document and will state the following:

- Purchaser has read the prospectus (or offering memorandum) and understands the risks
- Purchaser has met the net worth, income, and suitability requirements
- To whom the check is made payable

Limited Partners are not accepted until the General Partner signs

## General and Limited Partners

General Partner	Limited Partner
<ul> <li>Day-to-day manager with unlimited personal liability</li> </ul>	<ul> <li>Passive investor with limited liability</li> </ul>
<ul> <li>Must have at least a 1%</li> </ul>	<ul> <li>Contributors of capital</li> </ul>
interest Fiduciary toward limited partner Last at liquidation: Secured Lender General Creditor Limited General	<ul> <li>Have certain rights:         <ul> <li>Lend to the partnership, inspect books, and compete</li> </ul> </li> <li>Ways to endanger "limited" status:         <ul> <li>Negotiate contracts, hire/fire employees, or lend name</li> </ul> </li> </ul>

# Offering Practices

If a sponsor (GP) conducts a public offering of securities:

- \* Registration is required under the Securities Act of 1933
- Note: the maximum underwriting compensation is 10% of the gross dollar amount of securities sold

If a sponsor (GP) conducts a private placement of securities:

- Securities then qualify for an exemption from registration
- Reg. D offering to an unlimited number of accredited, but not more than non-accredited

## Adjustments to Limited Partner's Basis

The LP's basis is his amount "at risk"

Basis will increase for the following reasons:

- Contributions
- Income reported
- Recourse loan—a loan to the partnership for which the limited partner is responsible

Basis will decrease for the following reasons:

- Cash (or property) distributed
  - · Not taxable; a return of investment
- Losses reported -- "passive losses"
  - · Aggregate losses cannot exceed, but could equal, the basis
  - · Passive losses may only offset other passive income
  - · Unused losses are "carried forward"

## Real Estate Programs

Category	<u>Details</u>	
Raw Land	Speculation on land appreciation; no positive cash flow or depreciation	
New Construction	Risks of overbuilding, cost overruns, long duration, etc	
Existing	Creates cash flow; but potential problematic tenant issues (e.g. long-term leases)	
Low Income (Government Assisted)	Beneficial potential tax credits; little chance of appreciation and high maintenance costs	

# Oil and Gas Programs

<u>Category</u>	<u>Details</u>	<u>Risk</u>
Exploratory	High risk with high potential reward	
Developmental	Drilling near an existing field	
Balanced	Combination of exploratory and developmental	
Income	Purchase of existing wells; creates immediate cash flow	

# DPPs - Suitability Issues

Those considering DPPs as a potential investment should:

- Have liquidity in other investments
  - There may be an extended time required to reach the crossover point (i.e., the beginning of positive cash flow)
- Have a need for both present and future tax benefits
- . Be aware of the risks involved
- . Be able to tie up funds for a long period of time

Due to complexity of these programs, RRs are not permitted to exercise discretion involving client investments in DPPs

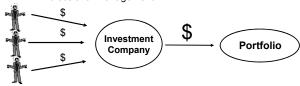


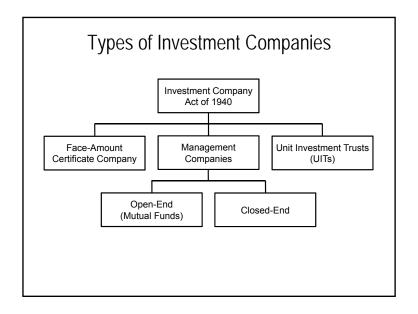
Investment Companies and Other Packaged Products

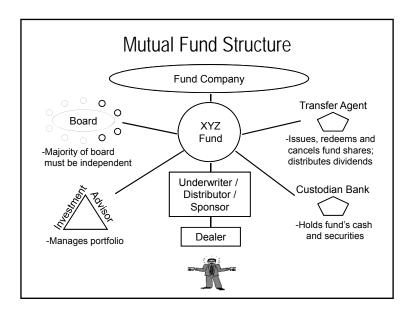
# Investment Companies - Overview

A corporation (sometimes a trust) that invests the pooled funds of investors; typically into a diversified portfolio of securities

- Allows investors to have ownership interest in a greater number of securities which are professionally selected and managed
- Main advantages:
  - Diversification
  - · Professional Management







## Mutual Fund Features

Daily determination of net asset value (NAV)

#### Liquidity

\* Redemption at NAV within 7 calendar days

Reinvestment of earnings at NAV (taxable event)

### Switching / Exchange

- Permitted within family without sales charge
- IRS will tax any resulting gains
- RR may be required to justify such recommendation

#### Dollar cost averaging

- Same dollar amount invested regardless of share price
- Usually results in average cost being less than the average price

# Sales Charges

Amount deducted from the investor's purchase

- . Benefits the selling brokers
- Used to cover the costs of promotion and sales literature
  - Industry rules prohibit assessing charges in excess of of the Public Offering Price (POP)

Distributors use three methods to collect sales charge:

- Front-end Load:
  - · Total investment, less the sales charge, goes into the portfolio
- Deferred Sales Charge (Back-end Load)
  - · Assessed at time the investor redeems
- ❖ 12b-1 Fee
  - Annual fee levied against the fund's assets

## Other Fees

Redemption Fee (not a sales charge)

- . Does not go to underwriter or dealer
- . Remains behind, in the fund, benefiting other owners

## No load funds

- ❖ NAV = POP
- ❖ A fund may be described as a "no load" only if it has:
  - · No front-end sales charge
  - · No deferred sales charge, and
  - No 12b-1 charges exceeding .25% per year
- May have a redemption fee

# Sales Charge Calculation

Remember, sales charge is expressed as a percentage of the POP

Sales Charge % =

<u>Fund</u>	NAV	POP	<u>Sales</u> Charge %
Vanity 500	15.20	16.00	
Equity Tech	51.24	56.00	
Alger Capital	23.17	23.17	

# Mutual Fund Expense Ratio

Defined as "the percentage of a fund's assets paid for operating expenses and management fees, including 12b-1 and administrative fees, and all other asset-based costs incurred by the fund"

- Shows the actual amount a fund takes out of its assets each year to cover its expenses
- Management fee (largest fund expense)
  - · Usually a percentage of assets under management
- Does not include sales charges

# Methods to Decrease Sales Charge

## Breakpoints

Dollar levels at which sales charge is reduced

#### Example:

Invested Amount	Sales Charge
Less than \$50,000	5.75%
\$50,000, but less than \$100,000	4.50%
\$100,000, but less than \$250,000	3.50%
\$250,000, but less than \$500,000	2.50%
\$500,000, but less than \$1 million	2.00%
\$1 million or more	None

# Methods to Decrease Sales Charge

### Letter of Intent (LOI)

- Optional provision allowing investors to qualify for a breakpoint without initially depositing the entire amount required
  - month time period
  - May be back dated days
  - If backdated, the fund will recompute sales charges on previous purchases
  - Non-binding on customer; a portion of shares held in escrow in case of non-performance

# Methods to Decrease Sales Charge

## Rights of Accumulation

- Right to add up all purchases made from same family of funds
  - When a breakpoint is crossed, current and future purchases will have a lower sales charge

If an Investment Company does not offer breakpoints and rights of accumulation, the maximum sales charge it can assess is lowered using a set schedule

## Calculating Public Offering Price

When given the NAV and sales charge percentage, use the following procedure to calculate the offering price:

Sales Charge	NAV	NAV (100 – Sales Charge %)	Simplify	=Resulting POP
5.00%	\$69.80			
8 ½%	\$45.95			

## Sales Practice Violations

#### Prohibited Actions:

- "Breakpoint sales"
  - · Solicited sales at amounts just below a breakpoint
- "Selling dividends"
  - Inducing a client to purchase shares because of an impending dividend
  - Since prices will be adjusted downward on the exdividend date, there is no monetary benefit
    - Note: Ex-dividend date is determined by mutual fund's sponsor

## Distribution and Taxation

To qualify as a "<u>Regulated Investment Company</u>", a fund must distribute at least % of net investment income to investors

(net investment income = dividends + interest - expenses)

- If it qualifies, fund is only taxed on undistributed portion
- Burden for paying taxes ultimately falls on shareholders
- The fund may also distribute realized capital gains annually

Income and gains are taxable to investors and reported on Form 1099-DIV

- ❖ Taxed in the year distributed whether received or reinvested
- Both able to be reinvested at NAV without sales charges

## Investor's Cost Basis

Represents the invested amounts and reinvested earnings

### Example:

Jun. 2010: Invest \$10,000 into HighRise Growth
 Dec. 2010: 1099 Reports \$600 of income
 Dec. 2011: 1099 Reports \$700 of income
 Feb. 2012: Redeem shares for \$14,500

❖ Taxable gain?

Proceeds:

Basis:

Taxable Amount:

# Types of Funds

Growth Invests in common stocks for long-term investors seeking capital appreciation			
Income  Primarily invests in bonds (possibly some dividend paying stocks) for investors who desire current income  Specialized (Sector)  Invests in one industry or geographic area investors willing to assume more risk for a higher potential return  Invests in cash equivalents (money market instruments) for short-term investors seeki liquidity and safety			
		Balanced	Invests in both equity and debt instruments

# Other Types of Investment Companies

Face Amount Certificate Company

- Issues debt certificates
- Issuer promises face value at maturity or surrender value if presented prior to maturity

Unit Investment Trust Company

- Supervised, not managed (no management fee)
- Portfolio generally remains fixed for life of the trust

# ETFs Compared to Index Funds

Exchange Traded Funds (ETF)	Index Funds
Portfolio consists of a basket of securities which mirror an index (Low expenses)	Portfolio consists of a basket of securities which mirror an index (Low expenses)
Shares trade in the secondary market; may be sold short	Shares are redeemed by the fund; cannot be sold short
Commission is paid on trade	Usually have no sales load
Intra-day pricing	Forward priced; once daily
There are leveraged (and inverse) ETFs	Do not allow leverage

# Closed-End Compared to Open-End

Open-End (Mutual Fund)
Continuously issues new shares -Common shares only -Sold by prospectus
Sold at NAV + sales charge (if any)
Sponsor stands ready to redeem shares at the next calculated NAV (forward pricing)
Shares stay in the primary market
Shares cannot be sold short

# **Exchange-Traded Notes (ETNs)**

Like ETFs, ETNs trade daily on exchanges, have low fees, and provide access to challenging areas of the market

However, they are actually structured products that are issued as unsecured debt

#### Characteristics:

- Backed by the full faith and credit of the issuer (credit risk)
- Not principal protected; return is linked to performance of a stock, index, currency, or commodity
- May be purchased on margin and sold short (similar to ETFs)
- Since they make no annual distributions, investor's tax liability is deferred until sale, redemption, or maturity

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# Closed-End Compared to Open-End

Which TWO of the following investment companies are NOT open-end?

	NAV	Asked Price
Fund A	\$8.00	\$7.00
Fund B	\$9.20	\$10.00
Fund C	\$7.00	\$7.00
Fund D	\$8.00	\$10.00

## **Business Development Companies (BDCs)**

Structured like closed-end investment companies and invest in both the equity and debt of:

- Small and developing companies
- Financially troubled companies
- Private companies

## Most trade on exchanges

Since they are able to invest in nonpublic companies, owning a BDC is similar to investing in a publicly traded private equity firm

# Real Estate Investment Trust (REIT)

A company that manages a portfolio of real estate investments (property, mortgages, or both) to earn profits for shareholders, but is not an investment company

- Tax Benefit: No taxation on income if % is distributed
  - Note: Unlike Limited Partnerships (DPPs), no flow-through of losses

#### Characteristics:

- Subject to registration requirements of the Act of 1933
- Shares trade in the secondary market and are marginable
- Dividends not eligible for 20% tax treatment and do not qualify for the corporate dividend exclusion rule
- Offer limited liability to shareholders
- Attractive to investors seeking current income

## Hedge Funds

## Hedge Funds:

- Investment fund generally for wealthy investors
- Not considered a registered investment company
- Use exotic strategies involving derivatives, leverage, and selling short
- May place restrictions on investors withdrawing money (lack of liquidity)
- Not required to publish NAV daily

## Fund of Hedge Funds:

- Fund which allocates money to hedge fund managers
- Generally suitable for wealthy investors
- May also have some restrictions on withdrawing money



Retirement and Education Savings Accounts

## **ERISA**

Created standards for private sector employee pension plans

- Addresses both defined benefit and defined contribution plans
- Determines qualified status
  - Both employer and employee contributions are tax deductible
- No discrimination
- Open to all who:
  - · Are 21 or older
  - Have one year of full-time service (1,000 hours)
- Vesting provisions
  - Specify the amount of money to which an employee is entitled when withdrawing from the plan
  - · Applies to contributions made by employer

## Other Retirement Plans

Tax-Sheltered or Tax-Deferred Annuities (TSA/TDA)

403(b) Plans	457 Plans
For public school employees and non-profit organizations	For employees of state and local governments

- Contributions excluded from current income
- Contribution amount is limited

for failure to take distribution)
Withdrawals subject to tax

- All income and gains are tax-deferred
- Payouts entirely taxed as ordinary income

## Keogh and SEP Plans

Keogh (HR-10) and Simplified Employee Pension (SEPs) - for the self-employed

- Similarities:
  - · Based on self-employment income
  - Employer must contribute an equal percentage for employees
  - For the self-employed, the maximum contribution is 20% of income up to a certain dollar amount
- Differences:
  - Keogh plans allow employees to make non-deductible contributions; SEPs do not
  - Keogh plans may follow a vesting schedule, while SEPs require immediate vesting

#### Traditional Roth 100% of earned income up to 100% of earned income up to maximum of \$5,500 maximum of \$5.500 Spousal option: extra \$5,500 Spousal option: extra \$5,500 Age 50 or older: extra \$1,000 Age 50 or older: extra \$1,000 May be a deductible contribution Contribution is NEVER deductible Higher income individuals may not Contribution always allowed contribute Required Minimum Distribution (RMD) by Apr. 1 following year the No withdrawal requirement owner reaches 70 1/2 (50% penalty

Withdrawals are tax-free

Traditional and Roth IRAs

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## Traditional and Roth IRAs

#### For both Traditional and Roth:

- Early withdrawal penalty:
  - Before age 59 1/2 and 10% of taxable amount
  - Except in case of death, disability, qualified higher education expenses, or qualified first-time homebuyer distributions (\$10,000 lifetime)
- Rollovers and Transfers (no penalty)
  - Rollover:
    - · Owner receives proceeds
    - · Once per year (rolling 12 months)
    - · Must be completed within 60 days
  - · Trustee-to-Trustee Transfer:
    - · Owner does not have access to the funds
    - · May be more than one per year

## **Coverdell Education Savings Account**

#### **Education IRA**

- Maximum contribution: \$2,000 annually per child up to age 18
- Contribution is non-deductible, but earnings are tax-free if used for qualified education expenses
- Funds must be used by the child's 30th birthday or transferred to another relative's Education IRA

## 529 Plan (Municipal Fund Security)

## State-sponsored, college savings plan

- One child per account; but the child is not the owner
- Investment cannot be "self-directed," but owners may change their portfolio selection twice per year (change of plan allowed once per year)
- States determine the specific plan rules such as allowable contributions, investment options, and contribution deductibility for state tax purposes

#### Gift and Estate Taxes

- Contribution up to the annual gift limit (\$14,000) may be made per year without gift tax (contribution excluded from estate of the donor)
- Individuals may contribute up to \$70,000 at once and apply the amount to the next five years (amounts double for married couples)

## 529 Plans

#### Distributions

- Withdrawals used for qualified higher education expenses will be tax-free at the federal level
- If withdrawal is not used for qualified education expenses, earnings are subject to ordinary income taxes plus a 10% penalty
- If not used for one child's education, funds may be transferred to a relative without tax penalty



## **Annuities and Variable Products**

## **Annuities**

Products sponsored by insurance companies in which investment income grows tax-deferred

Qualified	Non-Qualified	
Offered to employees of tax- exempt organizations or public schools (403(b) plans) or employees of state or local governments (457 plans)	Available to anyone through either an insurance company or broker-dealer	
Deductible (pre-tax) contributions	Non-deductible (after-tax) contributions	
Contribution amount is limited	No limit on the contribution amount	
Subject to required minimum distribution (RMD) rules	Not subject to withdrawal requirement	

# Annuities May Be Fixed or Variable

	Fixed	Variable
Investment risk:		
Is it a security?		
Account:		
Portfolio:		
Hedge against inflation:		

# Receiving Benefits - Withdrawals

During the Pay-In or Accumulation Phase:

- Account is valued in terms of "accumulation units"
- Units are purchased after-tax, no deduction
- Investment income is tax-deferred until withdrawn

While still in the accumulation phase, annuitants may choose to take withdrawals from their annuity

- Annuitants control the timing and amount of their withdrawals
- Only the earnings portion is taxable

# Receiving Benefits - Withdrawals

### Premature Withdrawals:

- If withdrawn before age
- ❖ A penalty is assessed: % of investment income

#### On death of annuitant:

- The death benefit is the greater of cost basis or accumulated value
- Proceeds above basis are taxable to beneficiary as ordinary income

# Receiving Benefits - Annuitization

## Annuitization of a Variable Annuity

- Accumulation units are exchanged for a fixed number of annuity units
- Payout established by multiplying <u>fixed number of annuity units</u> by the unit value
- <u>Unit value will fluctuate</u> based on separate account performance
- May be scheduled to pay for life

During the Annuity Phase, payments are broken down proportionately:

- Percentage being a return of contributions (tax-free)
- Percentage being receipt of investment income (taxable)

# **Payout Options**

Straight Life Annuity	Annuitant receives payments for life - Highest possible payout with highest risk	
Life Annuity with Period Certain	Payments are made to annuitant for life or to beneficiary (in the case of annuitant's death) for specified minimum number of years	
Joint and Last Survivor Annuity	Payments are made for life so long as one annuitant is living	
Unit Refund Life Annuity	Annuitant receives an amount at least equal to his original investment  - At death, any remaining amount is paid to a beneficiary	

## Assumed Interest Rate (AIR)

## AIR is:

- A hypothetical return on investment
- A fixed percentage
- Not a guaranteed or minimum rate

Cause	Effect
If account performance is:	Annuity payment will:

## **Qualified versus Non-Qualified**

A 62-year old retired individual had contributed \$10,000 into an annuity. This year, she received a lump-sum payment from the annuity of \$16,000. How is the distribution taxed?

Contributions:

Earnings:

Basis:

Taxable:

If Qualified	In Non-Qualified
\$10,000	\$10,000
\$6,000	\$6,000

# 1035 Exchange

Provision in the tax code permitting the direct transfer of one annuity contract for another without creating a taxable event

- No check issued to client
- Charges from insurance company may be levied

#### Justifications:

- Circumstances or investment goals change
- Dissatisfied with insurance company

Allowable Exchanges	Prohibited Exchanges
Life Insurance to Annuity	Annuity to Life Insurance
Life Insurance to Life Insurance	
Annuity to Annuity	

## **Annuity Suitability Issues**

## Target Audience:

- Generally for investors age 30 to 55
- Looking to offset inflation and for tax-deferred growth
- Has maximized qualified plan contributions

#### Not appropriate for:

- Senior citizens
- Those looking for immediate tax benefits

## Concerns with 1035 Exchanges:

- Consumer must benefit from new annuity
- Any benefits the individual may have lost in the exchange
- Whether an exchange or purchase has been made within the last 36 months
- Whether the RR recommending the exchange has signed off and the application was approved by principal



Margin

## Marginable Securities

Only specific securities are deemed marginable according to the Federal Reserve Board

Listed securities: NYSE or Nasdag securities

Regulation T sets the margin requirement on these securities

- at % of the transaction amount
  - Deposit cash (equal to the Reg. T Call)
     Deposit stock (equal to two times the Reg. T Call)

#### Not marginable:

- Options
- Unlisted non-Nasdag securities
- New issues: IPOs and mutual fund shares
  - These shares do have loan value after days
  - The loan value is 50% of the current market value

## Regulation T Payment Date

According to the Federal Reserve, Regulation T payment must be obtained for purchases in <u>cash or margin accounts</u> within two business days of settlement (S + 2 or T + 4)

Extension may be granted by firm's SRO

If no payment made and no extension granted, the position is closed-out (securities sold) at-the-opening (ATO) of the next business day

- ❖ Account is frozen for 90 days
- While frozen, all transactions must be paid in advance

Clients may not use the proceeds of a liquidation to meet Reg T on the same securities (no free-riding)

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### Margin Account Documents

**New Account Form** 

#### Credit Agreement

- Terms of the loan
- Discloses interest amount, how computed, when charged

Loan Consent (not mandatory)

❖ B/D may lend the customer's securities to others

#### Hypothecation (Pledge) Agreement

- Customer hypothecates securities to B/D as collateral
- ❖ B/D borrows money from a bank to replace loan to customer

## Hypothecation

Broker/Dealer

Bank

Customer buys \$100,000 of stock on margin

DEBIT

Cash B/D will borrow from bank

Stock pledged by B/D to bank

# Long Margin Account

An investor borrows the portion of the purchase price of securities not made up of the Reg. T Margin Call from the B/D

The broker-dealer monitors the account using three balances:

Long Market Value - Debit Balance = Equity

**Long Market** Value (LMV): Current market value of securities held in account

**Debit Balance:** Loan amount by B/D to customer, secured by LMV

**Equity:** Customer's ownership interest in the account

# Long Margin Account

Inve	stor purchase	s \$100,000 of	XYZ
<u>Activity</u>	<u>LMV</u>	<u>Debit</u>	<u>Equity</u>
New purchase			
Market value increases by \$10,000			

#### **Excess Equity**

- Equity greater than 50% of the current LMV
- . Creates a line of credit for the customer; recorded in the Special Memorandum Account (SMA)

# Using SMA

Special Memorandum Account (SMA) can be used for:

Loan advances (a.k.a "Withdrawing SMA")

Note: Using SMA increases the debit balance

	LMV	Debit	Equity	SMA
Initial:	100,000	50,000	50,000	0
LMV ↑ by 10%	110,000	50,000	60,000	5,000

How much cash can the investor withdraw?

Withdraw		
\$5,000		

# Using SMA

Special Memorandum Account (SMA) can also be used for:

- Meeting margin call on new purchase
  - The "buying power" is two times its value Again note: Using SMA increases the debit balance

	LMV	Debit	Equity	SMA
Initial:	100,000	50,000	50,000	0
LMV ↑ by 10%	110,000	50,000	60,000	5,000

How much buying power does the investor have?

<b>5</b>		
Buy stock, no		
1 1 1 1 1		
cash deposit		

### **Restricted Accounts**

<u>Activity</u>	<u>LMV</u>	<u>Debit</u>	<u>Equity</u>	<u>SMA</u>
Existing Account:	110,000	50,000	60,000	
MV falls to \$90,000				

Subsequent market declines DO NOT reduce SMA

The only way to LOSE SMA is to USE SMA

Equity is below initial Reg. T of 50% of LMV

- ❖ Account is called "restricted", but does not have to be remedied
- Reg. T is a transaction requirement; NOT a maintenance requirement

### Minimum Maintenance Requirement

<u>Activity</u>	<u>LMV</u>	<u>Debit</u>	<u>Equity</u>	<u>SMA</u>
Continued from previous slide:	90,000	50,000	40,000	
MV falls to \$60,000				

Minimum maintenance equity requirement is 25% of current LMV

- If below, prompt maintenance is required!
- ❖ A Maintenance Call of \$5,000 is received which can be met by:
  - Depositing Cash
  - · Depositing fully paid marginable securities
  - · Selling all or part of the position

### Increasing SMA

Appreciation, excess equity

Voluntary cash and dividend deposits

100 % reduces debit, and 100% recorded in SMA

Sales of stock from the account

❖ 100% reduces debit, and 50% recorded in SMA

<u>Activity</u>	<u>LMV</u>	<u>Debit</u>	<u>Equity</u>	<u>SMA</u>
Existing account:	90,000	50,000	40,000	
\$10,000 of s	tock is sold	from the rest	ricted accou	ınt
Sell \$10,000				

## **Short Margin Account**

Investor borrows securities from B/D in anticipation of decline, with the B/D holding customer cash as collateral for the borrowed stock

Credit Balance - Short Market Value = Equity

Credit Balance:

Customer's cash that is held by B/D as collateral

- ❖ Total short sale proceeds <u>plus</u> Reg. T on sale
  - Customer must deposit an amount equal to 50% of short sale proceeds

Short Market Value (SMV):

Current market value of the securities sold short

**Equity:** 

Customer's ownership interest in the account

# **Short Margin Account**

Activity	Credit	<u>SMV</u>	<u>Equity</u>
Sell short 1,000 shares DEF at \$40 and make Reg. T deposit			
DEF falls to \$32 per share			
DEF rises to \$48 per share			

Minimum Maintenance Equity Requirement is 30% of SMV \$48,000 x 30% = \$14,400

A maintenance call of \$2,400 would be received (\$14,400 - \$12,000)

# Minimum Initial Equity

Long Position

The lesser of \$2,000 or 100% of the market value

Purchase:	Deposit:
Below \$2,000	100% of purchase
Between \$2,000 and \$4,000	\$2,000
Above \$4,000	50% (Reg. T)

Short Position \$2,000

 Short Sale:
 Deposit:

 Below \$4,000
 \$2,000

 Above \$4,000
 50% (Reg. T)

Buy \$1,500 of ABC Short \$1,500 of XYZ

Buy \$3,000 of ABC Short \$3,000 of XYZ

Buy \$5,000 of ABC Short \$5,000 of XYZ

# Margin Requirements on Options

Buy an Option: Deposit 100% of the premium

Sell a Covered Option: No required deposit on the option

Sell an Uncovered Option: Margin required (not calculated)

On margin, buy 100 shares RFQ at \$90 and buy 1 RFQ Dec 85 Put at 2.	1) \$4,600 2) \$4,700
What is the margin requirement?	3) \$9,200

How much cash must the customer deposit?



**Industry Rules** 

## **Industry Rules**

5% Policy for Commissions and Mark-ups

A guideline, not a rule

Applies to transactions effected on an agency or principal basis – including proceeds transactions

On principal trades, mark-up is based on current market

 not dealer's cost

#### Exemptions:

- Municipals
- New Issues and mutual fund shares
  - · Securities sold under prospectus

### **Definitions of Communications**

Correspondence (reviewed and supervised)

- Material that a member firm distributes or makes available to 25 or fewer retail investors within any 30-calendar-day period
  - · A retail investor may be an existing or prospective investor

Retail Communication (often preapproved and filed)

Material a member firm distributes or makes available to more than 25 retail investors within any 30-calendar-day period

Institutional Communication (reviewed and supervised)

- Material that is distributed or made available only to institutional investors – excluding internal communications
  - Material may NOT be made available to any retail investor
- Institutional investors include banks, insurance or investment companies, investment advisers, natural persons or entities with total assets of at least \$50 million, employee benefit plans (not participants), FINRA members and their registered persons

### Communication With the Public

#### The following retail communications must be filed with FINRA: At least 10 business days prior to use Within 10 business of first use Investment company Investment company communications with NO selfcommunications that include selfcreated rankings created rankings 2. Security futures communications | 2. Direct participation program (DPP) Bond mutual fund communications communications that incorporate 3. Collateralized mortgage obligation volatility ratings (CMO) communications 4. Derivative communications, such as exchange-traded notes (ETNs)

#### For the following communications, NO principal approval is required

- 1. Retail communications
- Material that makes NO financial or investment recommendation and does NOT promote a product or service of the member firm
- Market letters that make NO financial or investment recommendation
- 2. Correspondence
- 3. Institutional communications

### **Account Rules**

<u>Telephone Consumer Protection Act</u> – establishes cold calling rules to govern the rights of those receiving phone solicitations

- Acceptable call time frame:
- "Do Not Call" list maintained indefinitely
- Excludes customers with existing business relationship:
  - · One who has made any unsolicited inquiry or
  - Engaged in a transaction with the firm within the last 18 months

<u>Penny Stock Regulations</u> - apply to <u>solicited sales</u> of OTC equities (non-exchange listed) priced below \$5 per share

- Firms have special suitability, approval, and disclosure procedures
- Established customers are exempt from these requirements:
  - · With the firm for more than a year, or
  - · Made three separate purchases of different penny stocks

## Research Analysts and Reports

Investment banking and research department control issues:

- Investment banking cannot exercise control over research
- Communication between the departments must be routed through or occur in the presence of legal or compliance

Research report disclosures of potential conflicts of interest:

- Whether the analyst or firm has a financial interest in the subject company
- Whether firm received compensation for investment banking services within last 12 months or expects to within next three

For Public Appearances (delivered to 15 or more persons):

- Disclosures (similar to above) must be provided
- If RRs present investment seminars, they must make record of date, topic, and sponsor

### Code of Procedure

Process used to discipline members who violate industry rules

- A determination is made by a Hearing Panel which could result in a fine, censure, suspension / revocation of registration, barring from association
- Decisions can be appealed first to the National Adjudicatory Council, then the SEC and finally Federal Court
- If a fine exceeds \$2,500, disciplinary action is reported to CRD, which is available to the public through the BrokerCheck system

### Code of Arbitration

System where monetary disputes are resolved by impartial panel

- Decisions are in writing, are binding, and cannot be appealed
- Six year statute of limitations

For disputes between members, arbitration is mandatory

An exception exists for cases of harassment or discrimination

For disputes with public customers, arbitration is voluntary

- Pre-dispute arbitration agreements are allowed; do not limit awards
- If accepted, a majority of arbitration panel will consist of those not associated with securities industry

For disputes not exceeding \$50,000, Simplified Arbitration is offered

- No hearing held, document submission only
- One single arbitrator



# **Fundamental Analysis**

Balance Sheet/Income Statement

# Technical Analysis

Charts, Trends, Patterns, Theories

Current Assets     Current Liabilities       - Cash     - Accounts Payable       - Marketable Securities     - Dividends Payable       - Accounts Receivable     - Interest Payable       - Inventory     - Interest Payable       Fixed Assets     Long-Term Liabilities       - Land     - Notes       - Buildings     - Bonds       - Equipment     Shareholder's Equity       - Preferred / Common     - Retained Earnings       - Paid-In Capital	Balance Sheet			
- Marketable Securities - Accounts Receivable - Inventory  Fixed Assets - Land - Buildings - Equipment  Intangibles - Goodwill - Marketable Securities - Dividends Payable - Interest Payable - Notes - Bonds - Bonds - Bonds - Preferred / Common - Retained Earnings	Current Assets	Current Liabilities		
- Land - Notes - Buildings - Bonds - Equipment  Intangibles Shareholder's Equity - Goodwill - Preferred / Common - Retained Earnings	<ul><li>Marketable Securities</li><li>Accounts Receivable</li></ul>	- Dividends Payable		
- Buildings - Equipment  Intangibles - Goodwill  - Goodwill  - Preferred / Common - Retained Earnings	Fixed Assets	Long-Term Liabilities		
- Goodwill - Preferred / Common - Retained Earnings	- Buildings			
- Retained Earnings	Intangibles	Shareholder's Equity		
	- Goodwill	- Retained Earnings		

# Key Formulas

Working Capital: Current Assets - Current Liabilities

Current Ratio:  $\frac{\text{Current Assets}}{\text{Current Liabilities}}$ 

Current Yield:

Annual Dividend
Current Market Price

Earnings Per Net Income – Preferred Dividend
Share (EPS): Common Shares Outstanding

Price / Earnings Market Price
Ratio: Earnings Per Share

# Finding Earnings Per Share (EPS)

ABC Corporation has \$15,000,000 in capitalization which is composed as follows:

- ❖ \$5,000,000 of 10% bonds due June 1, 2025
- ❖ \$2,000,000 of 5% preferred stock (\$100 par)
- \$8,000,000 of common stock, \$10 par value (800,000 shares outstanding)

The corporation has earnings before interest and taxes of \$5,000,000 and is in the 34% tax bracket.

With the above numbers, calculate the EPS.

### **EPS Calculation**

Earnings Before Interest and Taxes (EBIT):

Less Bond Interest:

Earnings Before Taxes:

Less Taxes:

Net Income:

Less Preferred Dividend:

Available to Shareholders:

### 

# **Technical Analysis**

Uses various theories and pattern analysis to predict the direction of the overall market or specific stocks

Short Interest Amount of a company's common stock and Theory: Sold short, but not yet covered

Large short interest is a

Odd Lot Theory: Small public investors are always

Advance / Measure of the number of stocks that have Decline Figures: increased versus number of issues that have

decreased (breadth of the market)

# **Technical Analysis**

#### Support

Price level at which stock tends to stop falling

#### Resistance

Price level at which stock tends to stop rising

#### Breakout

- When a stock breaks through an area of support or resistance
  - · Breakout of an level of support is a bearish indicator
  - · Breakout of an level of resistance is a bullish indicator

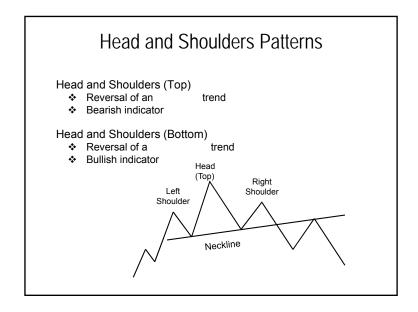
# **Technical Analysis**

#### Breakout

- In order to profit on a breakout, one could:
  - Enter sell stop orders below a support level (or buy puts), or
  - Enter buy stop orders above a resistance level (or buy calls)

81.50 ----- Resistance

79.70 ------ Support



# Types of Risk

#### Beta

- Measures an asset's volatility relative to the entire market
  - · Market risk also called systematic or non-diversifiable risk
- A stock's beta is often compared to the beta of the S&P 500, which is always 1.00
  - When asset's beta is more than 1:
    - Asset outperforms when market is up, but underperforms when market is down (growth stock)
  - When asset's beta is less than 1:
    - Asset under-performs when market is up, but outperforms when market is down (defensive stock)



**Economics and Suitability Summary** 

# Key Economic Terms

Gross Domestic Product (GDP)	Measurement of the output of goods and services produced within the U.S. without regard to origin of producer	
Consumer Price Index (CPI)	Measures the prices of a fixed basket of goods bought by typical consumers	
Inflation	Rise in the level of prices	
Disinflation	Reduction in the rate of inflation	
Deflation	Decline in the level of prices	

# Keynesian versus Monetary Theory

	Keynesian	Monetary
Utilizes what to accomplish goals		
Type of Policy		
Responsible for Implementation		

### Tools of the Fed

The following "tools" are listed from least to most used

**Regulation T:** Extension of credit by broker-dealers

**Discount Rate:** The only rate directly controlled by Fed

 Provides a back-up source of liquidity to depository institutions on a short-term basis

Reserve Requirement: Amount of money a bank must maintain based on a percentage of deposits

### Tools of the Fed

Federal Open Market Committee (FOMC):

Trades U.S. Treasuries through "primary government dealers"

#### Action of the FOMC:

1) To increase money supply and ease credit:

Deposits and reserves:

2) To decrease money supply and tighten credit:

Deposits and reserves:

## Suitability Issues

#### **Customer Situations:**

- Tax Bracket:
  - If high, then municipal debt is appropriate
  - · If low, then corporate debt is appropriate
- Time Horizon:
  - If long, then more equity is appropriate
  - If short, then less equity is appropriate
  - (100 age = percent in equities, while age = percent in debt)
- Inflation:
  - If fearing high inflation, appropriate actions would be increasing equity ownership, reducing debt, and investing in variable (not fixed) annuities and TIPS

### Scenario 1

A customer in his late twenties wants capital appreciation and is willing to take a moderate degree of risk in his initial investment. The customer is also concerned about the inflationary risk to his portfolio. Which of the following investments is MOST suitable?

- 1. Equities
- 2. Corporate debt
- 3. Municipal debt
- 4. Variable annuities

### Scenario 3

A customer who is in his late twenties wants capital appreciation and tax-deferred growth. He is willing to take a moderate degree of risk in his initial investment. The customer is also concerned about the inflationary risk to his portfolio. Which of the following investments is MOST suitable?

- 1. Equities
- 2. Corporate debt
- 3. Municipal debt
- 4. Variable annuities

### Scenario 2

A customer asks an RR for a recommendation as to how to invest a \$150,000 inheritance. The customer needs to preserve the capital since he wants to use the funds to start a new business within the next year. Which of the following funds is the LEAST suitable recommendation for this customer?

- 1. A taxable money-market fund
- 2. A tax-exempt money-market fund
- 3. A short-term Treasury fund
- 4. A balanced fund

### Scenario 4

A married couple has a three-year-old child and would like to purchase an investment that will be suitable to help pay for the child's college education. Which TWO of the following choices are the most suitable investments?

- I. A CMO tranche scheduled to mature in 15 years
- II. A STRIP scheduled to mature in 15 years
- III. An ETF based on the S&P 500 Index
- IV. A money-market fund
- 1. I and III
- I and IV
- 3. II and III
- 4. II and IV

### Scenario 5

One of your clients is an active options trader and has been following a stock that she feels is poised to make a significant bullish move. She asks your advice as to how she may best take advantage of this situation. Which of the following option positions would you consider most suitable in light of these expectations?

- 1. Long call
- 2. Long straddle
- 3. Debit call spread
- 4. Short put

## Scenario Explanations

- (Choice 1) Since the investor is concerned about inflationary risk, and is willing to accept a moderate degree of risk to his initial investment, equities would be the most appropriate investment. If the investor wanted a tax-deferred investment with the same investment objectives, variable annuities would be the most suitable choice.
- (Choice 4) Though each of these funds are somewhat conservative, the balanced fund will contain some equity investments and long-term bonds which will expose the customer to market risk. Given the customer's short-time horizon and objective of preservation of capital, the balanced fund would be the least suitable choice.
- (Choice 4) Since the investor is concerned about inflationary risk, wants tax-deferred growth, and is willing to accept a moderate degree of risk to his initial investment, variable annuities are the most appropriate investment. If the investor did not want a tax-deferred investment with the same objectives, equities would be the most suitable choice.

### Scenario 6

A customer is in her late 40s and is currently in the 15% tax bracket. She recently inherited \$6,000,000 and informs you that she considers herself a conservative investor and wants your advice concerning investing the inheritance. Which of the following choices would be the BEST method of investing the funds?

- 1. 20% in equities, 30% in Treasury bonds, and 50% in tax anticipation notes
- 40% in equities, a 30% mixture of in-state and out-of-state municipal bonds, 15% in Treasury bonds, 15% in revenue anticipation notes
- 30% in-state municipal bonds, 30% in out-of-state municipal bonds, 30% in Treasury bonds, 10% in revenue anticipation notes
- 4. 25% in-state municipal bonds, 25% in out-of-state municipal bonds, 25% in corporate bonds, and 25% in Treasury bonds

## Scenario Explanations

- 4. (Choice 3) Since the child will attend college in approximately 15 years and there is no need for current income, a STRIP (zero-coupon bond) would be suitable. An exchange-traded fund (ETF) that tracks the S&P 500 may be suitable since the funds are not required for 15 years and the value of this security offers the investor a hedge against the rising price of college tuition. Since the CMO pays monthly income and may offer a return of principal much earlier than 15 years due to its prepayment risk, it is not suitable. With this time horizon, a money-market is not suitable since it will not keep pace with inflation.
- 5. (Choice 1) Though each of the positions are bullish, a long call offers the greatest opportunity to take advantage of this anticipated move. A long call offers the potential for unlimited gain with the risk of losing the entire premium. The long straddle also offers the potential for an unlimited gain, but the cost is greater considering the additional put purchase. A debit call spread limits the gain, while also limiting the loss. The short put would is also a bullish position, but limits the gain to the premiums received. In addition, if the stock falls, the loss on the position could be substantial.

## Scenario Explanations

6. (Choice 2) Although this investor is in her late 40s and considers herself a conservative investor, equities should be a part of her asset allocation. Many strategists recommend that 100% minus the investor's age is a good a guide to the percentage of the investor's portfolio to allocate to equities. A 40% allocation in equities is reasonable with the remainder in various fixed-income securities and cash. Prior to inheriting the funds, she would not have been a suitable candidate for tax-exempt or municipal securities due to her low tax rate. After investing in these funds, since the income, dividends, and potential capital gains would increase her tax rate, municipal bonds would be an attractive investment. In-state municipals would offer a higher after-tax return to this investor. Due to the potential of credit risk with municipal bonds, investing a portion of the funds in Treasuries would be a good recommendation. Also, the investor should invest some funds in cash or cash alternatives such as short-term municipal securities (e.g., tax or revenue anticipation notes). Choice (a) has only a 20% allocation in equities and a 50% allocation of funds in tax anticipation notes which offers no growth potential. Having 100% of the funds in fixed-income investments does not offer the customer a balanced approach and, therefore, the other choices would not be the best method of investing the funds.



Thank you for your kind attention

Best Wishes & Good Luck
- from all of us at STC

### **Final Preparations**

- Complete Final Exams, reading explanations
- Review your notes
- Call 800-782-3926 if you have questions or need assistance
- Make sure you have all of your proper identification to enter the exam (Be sure your driver's license or passport has not expired !!)
- Check www.stcusa.com for possible course updates