**Cheat Sheet Explained**

**Bond Pricing**

- **Term = Dollar = % of Par**
  
  - every bond has the same "term" — the same interest rate and the same maturity, and thus, would have the same dollar price

- **Serial = Yield = Basis**
  
  - all the bonds are issued on the same date, but mature on differing dates
  
  - differing dates require different yields

**Bond Pricing (cont.)**

- **Corp - % of par in 1/8ths**
  
  - i.e. 5%, $1,000 par at 95 ½
  
  - 95 ½ = 95.5% X 1,000 = $955

- **Gov’t - % of par in 1/32nds**
  
  - i.e. 5%, $1,000 par at 95:16
  
  - 95 16/32 = 95.5% X 1,000 = $955

- **Municipal = most are quoted in Basis**
  
  - i.e. 1 BP = .01% = 10 cents
  
  - 101.02
  
  - 101.01
  
  - 1 BP difference for a $1,000 par bond w/ a 1 year maturity;
    
    - 101.02 = 1010.20
    
    - 101.01 = 1010.10

**Current/Dividend Yield**

- **Current Yield = Annual Income / Market Price**

**Conversion Ratio**

- **$1,000 Par = Conversion Ratio / Conversion Price**
  
  - i.e. Bond is convertible INTO 40 shares; $1000 = 40
    
    - C.R. = 40:1; C.P. = $25
  
  - i.e. Bond is convertible AT $40; $1000 = 25
    
    - C.P. = $40; C.R. = 25:1

  - **Bond’s Parity Price = Conversion Ratio / Stock’s Parity Price**

**CONVERTIBLE CORPORATE DEBT (cont.)**

- **Find C.R.**
  
  - Conversion Ratio = $1000 / Par Value / Conversion Price

- **Conversion Ratio = Bond’s Market / Parity Price / Stock’s Market / Parity Price**
CONVERTIBLE CORPORATE DEBT (cont.)

• EXAMPLE: A 10%, $1,000 Par Convertible Bond Is Issued When The Market Price Of The Common Stock Is $40 Per Share. The Conversion Price Per Share Is Set At $50 Per Share. The Conversion Ratio Is:

\[
\frac{1,000}{C.P.} = \frac{1,000}{C.P.} = \frac{1,000}{C.P.} = 20:1
\]

\[
\text{C.P.} = \frac{1,000}{50} = 20:1
\]

Series 7 Debt 8

CONVERTIBLE CORPORATE DEBT (cont.)

• EXAMPLE: A 10%, $1,000 Par Convertible Bond Is Issued When The Market Price Of The Common Stock Is $40 Per Share. The Conversion Price Per Share Is Set At $50 Per Share. Currently The Market Price Of The Stock Is $60 Per Share. The Parity Price Of The Bond Is:

\[
X = \frac{1,200}{60} = 20
\]

Series 7 Debt 9

A customer bought a $1,000 par convertible subordinated debenture at par, convertible into common at $25 per share. If the bond's market price increases by 20%, the parity price of the stock will be:

A. 25
B. 30
C. 40
D. 48

\[
1,000 = \text{C.R.} \quad ; \quad X = \frac{1,200}{60} = 20
\]

Series 7 Debt 10

A convertible debenture is convertible into common at $40 per share. If the market price of the bond rises to a 10 point premium over par, which statements are true?

I. The conversion ratio is 20:1
II. The conversion ratio is 25:1
III. The parity price of the stock is $44
IV. The parity price of the stock is $50

A. I and III
B. I and IV
C. II and III
D. II and IV

A corporation has issued 10%, $1,000 par convertible debentures, convertible at $40. The common stock is currently trading at $45. If the bond and the common are trading at parity, a customer purchasing 5M of the bonds will pay:

A. $4,950
B. $5,000
C. $5,625
D. $6,550

\[
\text{Bond's Price} = \frac{1,000}{40} = 25 \quad \text{; Bond's Price = } \frac{1,000}{45} = 25 \times 45
\]

Series 7 Debt 12
Cheat Sheet Explained

Series #7 Debt 14
Discount $800
$1,000 Par, 10%, w/ 10 years to maturity
Interest rates going up

Series #7 Debt 15
Discount $800
$1,000 Par, 10%, w/ 10 years to maturity
Interest rates going up

Series #7 Debt 16
Discount $800
$1,000 Par, 10%, w/ 10 years to maturity
Interest rates going up

Series #7 Debt 17
Discount $800
$1,000 Par, 10%, w/ 10 years to maturity
Interest rates going up

Series #7 Debt 18
Discount $800
$1,000 Par, 10%, w/ 10 years to maturity
Interest rates going up

Discount $800
Yield to Call = 15.5%
Yield to Maturity = 13.3% ← Bond must be priced here
Current Yield = 12.5%
$1,000 Par, 10%, w/ 10 years to maturity
YTC > YTM > CY > Coupon for a discount bond
Interest rates going up
Interest rates going down

YTC < YTM < CY < Coupon for a premium bond

$1,000 Par, 10 %, w/ 10 years to maturity

Current Yield = 8.3%
Yield to Maturity = 7.27%
Yield to Call = 5.5%← Bond must be priced here

Premium $1,200

Bull & Bear Training Co., Inc. - Peter A. Gibowicz
Cheat Sheet Explained

Series #7 Debt 25

Series #7 Debt 26

Series #7 Debt 27

Series #7 Debt 28

Series #7 Debt 29

Series #7 Debt 30

A corporation has issued 10% AA rated sinking fund debentures at par. Three years later, similar issues are being offered in the primary market at 12%. Which are true statements about the outstanding 10% issue?

I. The current yield will be higher than the nominal yield
II. The current yield will be lower than the nominal yield
III. The dollar price of the bond will be at a premium to par
IV. The dollar price of the bond will be at a discount to par

A. I and III
B. I and IV
C. II and III
D. II and IV

YTC > YTM > CY > NY

Discount

Yield to Call
Yield to Maturity
Current Yield

Yield to Call = 5.5% ← Bond must be priced here

Yield to Maturity = 7.27%

Current Yield = 8.3%
When the price of a bond increases, which of the following statements regarding yields are true?

I. Current yield increases  
II. Current yield decreases  
III. Yield to maturity increases  
IV. Yield to maturity decreases  

A. I and III  
B. I and IV  
C. II and III  
D. II and IV

A customer buys 5 GMAC 10% debentures, M'30. The interest payment dates are Feb 1 and Aug 1. The bonds are callable as of 2020 at 103. The current yield on the bonds is 11.76%. The bond is trading:

A. at a premium  
B. at a discount  
C. at par  
D. in the money

A customer buys 5 GMAC 10% debentures, M'30 at 150. The interest payment dates are Feb 1 and Aug 1. The bonds are callable as of 2020 at 103. The current yield on the bonds is:

A. 6.7%  
B. 8.7%  
C. 10%  
D. 11.4%

A premium bond must be quoted to a customer based on the bond’s:

A. Nominal Yield  
B. Current Yield  
C. Yield to Maturity  
D. Yield to Call

A discount bond must be quoted to a customer based on the bond’s:

A. Nominal Yield  
B. Current Yield  
C. Yield to Maturity  
D. Yield to Call

Which bond, having the following yields, must be priced "Yield to Call"?

A. nominal yield = 6%; current yield = 7%  
B. nominal yield = 6%; current yield = 6%  
C. nominal yield = 6%; current yield = 5.5%  
D. nominal yield = 6%; current yield = 6.5%
A customer buys a 10% G.O. bond at par. The issue is callable in 5 years at par and matures in 10 years. Which statement is true?

A. The yield to call is higher than the yield to maturity
B. The yield to call is lower than the yield to maturity
C. The yield to call is the same as the yield to maturity
D. The nominal yield is higher than either the yield to call or yield to maturity

A municipality issues a 30-year zero-coupon bond at deep discount. The bond is callable at 103. The bond is called in Year 10 when its current accreted value is $500. The bondholder will receive:

A. $500
B. $515
C. $1,000
D. $1,030

A customer buys an 8% $1,000 par bond with 15 years to maturity at 101. What is the yield to maturity?

A. 7.89%
B. 8%
C. 8.32%
D. 8.69%

Approximating the Price of a Long Term Bond

- by using the current yield formula, one can get an approximate price of a long term bond issue
- note, that Current Yield = Annual Income Market Price
- thus, to solve for Market Price = Annual Income (Current) Yield
- approximating a 4%, $1,000 par bond trading on a 5% basis $1,000 \times \frac{4}{5} = \frac{800}{.05} = 800$
- approximating a 6%, $1,000 par bond trading on a 5% basis $1,000 \times \frac{6}{5} = \frac{60}{.05} = 1200$

The following revenue bonds have the same maturity. Which of the following will cost the greatest amount?

A. 5% bond quoted on a 5.25 basis
B. 5 ¼% bond quoted on a 5.00 basis
C. 5 ½% bond quoted on a 5.50 basis
D. 5 ¼% bond quoted on a 5.50 basis

Bond Price Volatility

Which bond is more volatile?

- Low Coupon Short Maturity
- High Coupon Long Maturity
- Discount Small Discount
- Premium Large Discount
- Small Premium $100 \times \frac{1}{200} = \frac{1}{200} \times 100 = \frac{1}{200} \times 100 = 1/2$
- Large Premium $100 \times \frac{1}{100} = \frac{1}{100} \times 100 = \frac{1}{100} \times 100 = 1/2$
MACAULAY DURATION

- a measure of bond price volatility
- duration is the weighted average term-to-maturity of a security’s cash flows

Regarding bond price volatility and interest rate movements, which of the following are true?

I. the shorter the maturity, the greater the bond’s price volatility
II. the longer the maturity, the greater the bond’s price volatility
III. the lower the coupon rate, the greater the bond’s price volatility
IV. the higher the coupon rate, the greater the bond’s price volatility

A. I and III
B. I and IV
C. II and III
D. II and IV

SETTLEMENT

- Regular Way trades for:
  - Gov’ts and Options = T + 1
- Regular Way trades for:
  - Corps, Munis, and Options Exercise = T + 2
- Cash Settlement trades = T

COMPARATIVE YIELD CURVES

- used to compare yield curves for issuers in different risk categories
- Yield Spread
  - difference between Gov’t and AAA-rated corporate yields
  - Widening Spread – flight to Quality (Sell Corp – Buy Gov’t) – recession expected
  - Narrowing Spread – invest in Corporates (Sell Gov’t – Buy Corp) – expansion expected

If an analysis of the yield curve indicates a coming expansion, which of the following would hold true?

I. investors would be selling government bonds
II. investors would be selling corporate bonds
III. investors would be buying government bonds
IV. investors would be buying corporate bonds

A. I and III
B. I and IV
C. II and III
D. II and IV

When it is expected that a recession will occur, which of the following statements are true?

I. investors sell corporate bonds
II. investors buy corporate bonds
III. investors sell government bonds
IV. investors buy government bonds

A. I and III
B. I and IV
C. II and III
D. II and IV
### EFFECT OF FEDERAL RESERVE ACTIONS ON YIELD CURVE SHAPE

- **4 TOOLS OF THE FEDERAL RESERVE ("DORM")**
  - 1. **Discount Rate**
    - rate Fed charges member banks
  - 2. **Open Market Operations**
    - repos and reverse repos
  - 3. **Reserve Requirements**
    - to be FDIC insured, banks must have so much on hand based on customer deposits
  - 4. **Margin**
    - Reg T (50%) on non-exempt securities

### MONEY RATES

- **Prime Rate**
  - the rate banks charge their best corporate clients for loans
- **Broker (Call) Loan Rate**
  - the rate banks charge brokerages for margin accounts
- **Discount Rate**
  - the rate the Fed charges member banks for overnight loans
- **Federal Funds Rate**
  - the rate banks charge other banks for overnight loans (for those other banks to meet reserve requirements)

### MONEY RATES

<table>
<thead>
<tr>
<th>Rate Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prime Rate</td>
<td>the rate banks charge their best corporate clients for loans</td>
</tr>
<tr>
<td>Broker Rate</td>
<td>the rate banks charge brokerages for margin accounts</td>
</tr>
<tr>
<td>Discount Rate</td>
<td>the rate the Fed charges member banks for overnight loans</td>
</tr>
<tr>
<td>Federal Funds Rate</td>
<td>the rate banks charge other banks for overnight loans</td>
</tr>
</tbody>
</table>

### OPEN MARKET OPERATIONS

- **Fed buys money market instruments**
  - REVERSE REPURCHASE AGREEMENT
    - used to inject cash in money supply
    - Fed buys securities injecting money into the money supply, loosening credit
    - interest RATES go DOWN as there is more money available to be borrowed
    - PRICES go UP
  - Fed sells money market instruments
    - REVERSE REPURCHASE AGREEMENT
    - used to take money out of the money supply
    - to tighten money supply
    - interest RATES go UP as there is less money available to be borrowed
    - PRICES go DOWN
  - only the “safest” securities are eligible for Fed trading

### YIELD CURVE SHAPES / COMPARISONS

- if the Fed tightens, it exerts its influence at the short end of the curve
- open market operations conducted daily will cause member banks to change their Federal Funds rate (overnight loans of reserves from member to member)
  - this will cause a shift in short term yields; long term yields are minimally affected by Fed actions

### YIELD CURVE SHAPES / COMPARISONS (cont.)

- **EXAMPLE:** If the Federal Reserve conducts Reverse Repurchase Agreements With the Primary Dealers, then this tightens credit And Short Term Interest Rates Will Rise And The Yield Curve Will Shift As Follows:

![Yield Curve Shift](image)
YIELD CURVE SHAPES / COMPARISONS (cont.)

• Yield Curve Flattens As Fed Tightening Raises Short Term Rates
• Long Term Rates Don't Move Much Since They Are Determined By Long Term Expectations Of Inflation And Economic Output

YIELD CURVE SHAPES / COMPARISONS (cont.)

• Example (Cont.): If the Federal Reserve keeps tightening, then short term rates will be pushed higher than long term rates and the yield curve inverts

YIELD CURVE SHAPES / COMPARISONS (cont.)

• The Expectations Theory Of The Yield Curve Shape Now Begins To Make Sense
  – When The Curve Is Inverted:
    • This Shows That The Fed Is Tightening To Slow Down The Economy (Maybe Sending It Into A Recession)
      From This Point, Things Can Only Get Better (Meaning Rates Will Drop As The Fed Starts To Loosen)
  – When The Curve Is Ascending:
    • This Shows That The Fed Is Pursuing A Loose Money Policy Done To Stimulate The Economy
      From This Point, Things Can Only Get Worse (Meaning Rates Will Rise As The Fed Starts To Tighten)

YIELDS VS PRICES

• Note, while long term bond prices are more volatile, short term yields are more volatile than long term yields
  – Long term bond prices are more volatile because bonds represent a series of cash-flows (interest payments) over time plus a final principal payment at maturity
  – Since long bonds have more interest payments over time AND a final principal payment at the end, there is a bigger change to the value of the bond when interest rates are changed
  – Short term yields are more volatile because the fed actions affect the “short end” of the yield curve more than the “long end” (to prevent things like inflation)

Which statements are true regarding interest rate movements?

I  Actions of the Federal Reserve tend to affect short-term rates more than long-term rates
II  Actions of the Federal Reserve tend to affect long-term rates more than short-term rates
III  Short-term rates are more volatile than long-term rates
IV  Long-term rates are more volatile than short-term rates

A. I and III
B. I and IV
C. II and III
D. II and IV

Option Chart

<table>
<thead>
<tr>
<th></th>
<th>Call</th>
<th>Put</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Buy</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rt. to Buy</td>
<td>+ S.P.</td>
<td>+ S.P.</td>
</tr>
<tr>
<td>Stock</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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<table>
<thead>
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<th></th>
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</thead>
<tbody>
<tr>
<td><strong>Sell</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Must Sell</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stock</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Series #7 Cheat Sheet www.bullbeartraining.com
Cheat Sheet Explained

**OPTIONS DOCUMENTS**

- **Options Disclosure Document**
  - sent at or prior to confirmation of sale; and also sent with delivered communications to customers

- **Options Agreement**
  - identifies strategies customer is performing
  - signed within 15 days after account is opened, if not, only closing transactions allowed

**Options - Using the T-Chart**

Do options in two steps:

1. Set up initial transactions
2. Determine if the contracts are exercised;
   - if they are, use the S.P. sign in the chart

**Buyer = Holder = Long = Pay Premium**

**Seller = Writer = Short = Receive Premium**

- calls are exercised if $MP > SP$
- puts are exercised if $MP < SP$

**Stock with Options Strategies**

- **Long Stock / Short Call**
- **Long Stock / Long Put**
- **Short Stock / Long Call**
- **Short Stock / Short Put**

**Stock with Options Strategies (cont.)**

Whenever you are:

- Long/Short Stock and SELL Option -> Income Strategy -> Market Sentiment is neutral

- Long/Short Stock and BUY Option -> Hedge Strategy -> Market Sentiment is same as stock sentiment

**Option Chart**

- **Call**
  - Buy
    - Rt. to Buy Stock - S.P.
  - Sell
    - Must Sell Stock + S.P.

- **Put**
  - Rt. to Sell Stock + S.P.
  - Must Buy Stock - S.P.

**Spreads**

- **Debit Calls are Bull**
- **Debit Puts are Bear**
  - Widen Exercise

- **Credit Puts are Bull**
- **Credit Calls are Bear**
  - Narrow Expire
Cheat Sheet Explained

Spreads (cont.)
To find the Break-Even for spreads, you CALL L.A. to PUT the kids in High School 
LOWER Strike ADD for Calls 
Higher Strike SUBTRACT for Puts

• Call Spreads
  * to find the B/E:
  Buy 1 ABC Jan 40 Call @ -6
  Sell 1 ABC Jan 50 Call @ +2

  $4 > B/E = 40 + 4 = 44

  Sell 1 ABC Jan +40 Call @ +6
  Buy 1 ABC Jan 50 Call @ -2

  $4 > B/E = 40 + 4 = 44

Spreads (cont.)
To find the Break-Even for spreads, you CALL L.A. to PUT the kids in High School 
LOWER Strike ADD for Calls 
Higher Strike SUBTRACT for Puts

• Put Spreads
  * to find the B/E:
  Buy 1 ABC Jan 40 Put @ -2
  Sell 1 ABC Jan -50 Put @ +6

  $4 > B/E = 50 - 4 = 46

  Sell 1 ABC Jan 40 Put @ +2
  Buy 1 ABC Jan +50 Put @ -6

  $4 > B/E = 50 - 4 = 46

A customer sells 1 ABC Jan 45 Call @ 1 and buys 1 ABC Jan 30 Call @ 9 when the market price of ABC is 32. The customer must deposit:
A. $700
B. $800
C. $900
D. $2000

+8 MPL = customer deposit

Sell +45 Call @ +1
Buy -30 Call @ -9

+7 MPG

ABC = 0 ABC = SIMM

Sell L.A. -> -30 + -8 = 38 B/E

-8

-7 MPL = customer deposit

+7 MPG

ABC = 0 ABC = SIMM

Buy +30 Call @ +9
Sell -30 Call @ -9

-15

-7 MPL = customer deposit

A customer buys 1 ABC Jan 45 Call @ 1 and sells 1 ABC Jan 30 Call @ 9 when the market price of ABC is 32. The customer must deposit:
A. $700
B. $800
C. $900
D. $2000

-8 MPL = customer deposit

Buy -45 Call @ -1
Sell +30 Call @ +9

-7 MPL = customer deposit

+7 MPG

ABC = 0 ABC = SIMM

Buy +30 Call @ +9
Sell -30 Call @ -9

-15

-7 MPL = customer deposit

A customer buys 1 ABC Jan 45 Put @ 9 and sells 1 ABC Jan 30 Put @ 1 when the market price of ABC is 42. The customer must deposit:
A. $800
B. $900
C. $2000
D. $4500

-8 MPL = customer deposit

Buy +45 Put @ -9
Sell -30 Put @ +1

+7 MPG

Put High School -> +45 + -8 = 37 B/E

-7 MPL = customer deposit

Buy +30 Put @ +1
Sell -30 Put @ -1

+8 MPG

Put High School -> +45 + +8 = 37 B/E

-7 MPL = customer deposit

Buy +30 Put @ +1
Sell -30 Put @ -1

+8 MPG

Put High School -> +45 + +8 = 37 B/E

Bull & Bear Training Co., Inc. - Peter A. Gibowicz
Cheat Sheet Explained

**Spreads (cont.)**

- **Vertical / Price Spread**
  - different strike prices
- **Horizontal / Calendar / Time Spread**
  - different expirations (HOROSCOPE)
- **Diagonal**
  - both different expirations AND strike prices

**Option Chart**

**Call**
- Buy RT to Stock
  - - S.P.
- Sell Must Buy Stock
  - + S.P.

**Put**
- Buy RT to Stock
  - + S.P.
- Sell Must Sell Stock
  - - S.P.

**Straddles & Combinations**

- **Straddles**
  - whenever you are:
    - Long a Call and Long a Put – Mkt. Sent. = volatility; or
    - Short a Call and Short a Put – Mkt. Sent. = neutral
  - with the same strike price and expiration
    - i.e. Buy 1 ABC Jan 50 Call and Buy 1 ABC Jan 50 Put
    - i.e. Sell 1 ABC Jan 50 Call and Sell 1 ABC Jan 50 Put
- **Combination**
  - same thing as a Straddle, except for different strike price and/or expiration
    - i.e. Buy 1 ABC Jan 50 Call and Buy 1 ABC Apr 55 Put
    - i.e. Sell 1 ABC Jan 50 Call and Sell 1 ABC Apr 55 Put
- **Strangle**
  - both contracts are Out The Money (costing less)

**Collar**

- A customer who bought stock would “collar” the stock within a price range, by:
  - Buy an out the $ Put; and Sell an out the $ Call
    - as if either are exercised, you are SELLING the stock that you already purchased
- A customer short stock would “collar” the stock within a price range, by:
  - Buy an out the $ Call; and Sell an out the $ Put
    - as if either are exercised, you are BUYING the stock that you already purchased

**Foreign Currency Options**

- Payment to be MADE in a currency (importer), BUY Call in that currency in which payment is to be MADE
- Payment to be RECEIVED in a currency (exporter), BUY Put in that currency in which payment is to be RECEIVED
- **EPIC** – Exporters buy Puts, Importers buy Calls

**TYPES OF ORDERS**

- **OSLOBS**
  - orders entered and elected above current market
  - Open Sell Limits Open Buy Stops
- **OBLOSS**
  - orders entered and elected below current market
  - Open Buy Limit Open Sell Stops
  - the only orders reduced on ex-date
Broker-Dealers

- every firm is a broker-dealer
- the firm cannot act as both a broker AND a dealer in the same trade
  - i.e. you can earn either a commission or a mark-up, not both
  
  - \( abc = \text{Agent} = \text{Broker} = \text{Commission} \)
  - \( \text{p-diddy-music} = \text{Principal} = \text{Dealer} = \text{Mark-up} \)

Long Account

<table>
<thead>
<tr>
<th>Long Account</th>
<th>Existing Reg. T (50%)</th>
<th>New Customer Deposit</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 @ $50</td>
<td>$2,500</td>
<td>$2,500</td>
</tr>
<tr>
<td>100 @ $40</td>
<td>$2,000</td>
<td>$2,000</td>
</tr>
<tr>
<td>100 @ $30</td>
<td>$1,500</td>
<td>$2,000</td>
</tr>
<tr>
<td>100 @ $20</td>
<td>$1,000</td>
<td>$2,000</td>
</tr>
<tr>
<td>100 @ $17</td>
<td>$850</td>
<td>$1,700*</td>
</tr>
</tbody>
</table>

LONG MARGIN ACCOUNTS

LONG MARGIN ACCOUNT FORMULA

Long Market Value - Debit = Equity

- initial margin is 50% for stocks OR $2,000 whichever is greater

EXCESS EQUITY

- created only if account rises above initial margin of 50%
- for every $1 increase in Market Value (for the long account), SMA increases by 50 cents
- can take out 100% of the SMA as Cash or purchase TWICE the amount in Stock

Long Market Value where account will be at 25% maintenance is found using this formula:

\[ \frac{\text{DEBIT BALANCE}}{.75} \]

- a maintenance call will not be sent if the amount is $1,000 or less

Short Account

<table>
<thead>
<tr>
<th>Short Account</th>
<th>Existing Reg. T (50%)</th>
<th>New Customer Deposit</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 @ $50</td>
<td>$2,500</td>
<td>$2,500</td>
</tr>
<tr>
<td>100 @ $40</td>
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</tr>
<tr>
<td>100 @ $17</td>
<td>$850</td>
<td>$2,000*</td>
</tr>
</tbody>
</table>
**SHORT MARGIN ACCOUNTS**

- **SHORT MARGIN ACCOUNT FORMULA**
  \[
  \text{Credit} - \text{Short Market Value} = \text{Equity}
  \]

- customer must deposit 50% or $2,000 whichever is greater

**SHORT MARGIN ACCOUNTS (cont.)**

- **EXCESS EQUITY**
  - as market value drops, equity rises and SMA is created
  - for every $1 decline in Market Value (for the short account), SMA increases by $1.50

**SHORT MARGIN ACCOUNTS (cont.)**

- Market Value where account will be at 30% maintenance is found using this formula:
  \[
  \text{CREDIT} / 1.3
  \]

**COMBINED LONG & SHORT ACCOUNTS**

- Long Account Equity = Long Market Value – Debit
- Short Account Equity = Credit – Short Market Value

- Combined Margin Account Equity = Long Market Value + Credit – Short Market Value – Debit

**MARGIN ON LONG OPTIONS**

- Reg. T requires that 100% of the premium be deposited for options with a maturity of 9 months or less
  - minimum maintenance margins don't apply since long positions are fully paid

- NOTE: options with a maturity of over 9 months requires a deposit and maintenance of 75% of the premium – once the option has 9 months to maturity, the deposit is 100%
SYNDICATE ACCOUNT TYPES

• Western
  – divided as to responsibility and liability
  – any sold shares extinguish the member’s responsibility - responsible for initial % interest

• Eastern
  – undivided as to selling responsibility and liability
  – responsible for the % interest X remaining unsold shares

A syndicate member in a Western account takes $500,000 out of a $5,000,000 underwriting. At the termination of the syndicate, $750,000 of the issue remains unsold while the member sold $400,000. For how much is the member responsible?
A. $100,000
B. $350,000
C. $400,000
D. $750,000

A syndicate member takes a 5% participation in a $10,000,000 issue set up as a Western account. At the termination of the syndicate, $2,000,000 remains unsold in the account. The syndicate member sold $500,000. The syndicate member's remaining liability is:
A. 0
B. $50,000
C. $100,000
D. $200,000

A syndicate member takes a 5% participation in a $10,000,000 issue set up as an Eastern account. At the termination of the syndicate, $2,000,000 remains unsold in the account. The syndicate member sold $375,000. The syndicate member's remaining liability is:
A. $25,000
B. $50,000
C. $100,000
D. $125,000

A syndicate member takes a 10% participation in a $15,000,000 issue set up as an Eastern account. At the termination of the syndicate, $2,000,000 remains unsold in the account. The syndicate member sold $1,450,000. The syndicate member's remaining liability is:
A. 0
B. $50,000
C. $100,000
D. $200,000

New Issue Municipals

• GO – CO – NO
  – GOs are Competitive Bid underwritings with NO spread disclosed

• Revenues are Negotiated underwritings and the spread IS disclosed
PRIORITY PROVISIONS FOR FILLING NEW MUNICIPAL ISSUE ORDERS

• Pro Golfer Don’t Miss
• Presale net, Group net, Designated net, Member takedown

Variable Annuities

• ACCUMULATION PHASE
  – instead of buying “shares”, holder purchases units
  – under a contractual plan, an investor decides to invest
    a FIXED dollar amount on a continued basis for a
    period of time; since the underlying value of the
    “mutual fund” will vary, the number of units purchased
    will VARY

• ANNUITIZATION PHASE
  – once the investor wants to withdraw from the plan (at
    age 59 ½ or later), the number of units from which he
    will be withdrawing is FIXED, but the underlying value
    of the “mutual fund” will VARY

CAPITAL GAINS TAXATION

• capital gains tax rates depend on the
  holding period:

<table>
<thead>
<tr>
<th>Holding</th>
<th>Tax Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 months or under</td>
<td>individual’s tax bracket</td>
</tr>
<tr>
<td></td>
<td>(maximum of 37%)</td>
</tr>
<tr>
<td>12 months + 1 day or over</td>
<td>20%</td>
</tr>
</tbody>
</table>

Tax Treatment of Corps/Gov’ts/For. Bonds

Corps/Gov’ts/For - MuMaMaMa

• New Issue:
  – MUST accrete discount
  – MAY amortize premium

• Secondary Issue:
  – MAY accrete discount
  – MAY amortize premium

Accretion of Discount

i.e. customer buys 10% $1,000 par 10 year corporate bond at $800
– since $200 is to be earned over 10 years, $20 of
  discount is accreted annually
– after holding for 1 year, $100 in interest and
  $20 of accreted interest income is on tax return
– the cost basis is adjusted up from $800 to $820

Tax Return

At Maturity, taxed on entire $200 discount

Annual Accretion of Bond Discount

Bull & Bear Training Co., Inc. - Peter A. Gibowicz
TAX TREATMENT OF CORPORATE, U.S. GOV’T, & FOREIGN GOV’T BONDS

AMORTIZATION OF PREMIUM

• i.e. customer buys 10% $1,000 par 10 year corporate bond at $1,200
  – premium is $200 to be amortized over 10 years
  – $20 of premium is amortized annually
  – after 1 year’s holding, investor receives $100 in interest income offset by amortization amount of $20
  – bond’s cost basis is adjusted from $1,200 to $1,180
  – no capital gain or loss if bond is held to maturity

10%, $1,000 Par 10 Yrs

<table>
<thead>
<tr>
<th>with Amortization</th>
<th>w/o Amortization</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,200</td>
<td>1,200</td>
</tr>
<tr>
<td>1,000</td>
<td>1,000</td>
</tr>
</tbody>
</table>

-200 / 10 Yrs = -$20 amortization

Tax Return
$100 – interest
- $20 – amortization
$80 – Taxed annually

Tax Return
$100 – Taxed annually

At Maturity, take entire $200 loss

TAX TREATMENT OF MUNICIPAL BONDS

MUNICIPAL - MuMuMaMu

• New Issue:
  – Mu Mu accrete discount (discount is NOT taxed)
  – Mu Mu amortize premium
• Secondary Issue:
  – Ma Ma accrete discount (discount IS taxed)
  – Mu Mu amortize premium

Taxation of Bond Interest / Accrued Interest Computation

• on Corporates / 30/360 basis:
  – fully taxable
• on Gov’ts / Actual Day Month/Actual Day Year:
  – subject to Federal, exempt from State and Local
• on Agencies / 30/360 basis:
  – Farmers
    • same as Gov’ts
  – Mortgages
    • fully taxable

Taxation of Bond Interest / Accrued Interest Computation (cont.)

• on Municipals / 30/360 basis:
  1) exempt from Federal tax; subject to state and local tax -- * the most important for the exam
  2) triple tax free -- * the most important for the investor
  3) fully taxable
    • for a non-essential use, private purpose facility

TAX TREATMENT OF EQUITY OPTIONS

• if CALL option is exercised:
  – i.e. customer buys 1 ABC Jan 50 Call @ $5
  – customer exercises contract buying the stock;
  COST BASIS for tax purposes is:
    • 50 + 5 = $55 with holding period counting from exercise date; no tax is paid until customer sells stock later
TAX TREATMENT OF EQUITY OPTIONS (cont.)
• if PUT option is exercised:
  – i.e. customer buys 1 ABC Jan 50 Put @ $5
  – customer exercises contract selling the stock short; SALES PROCEEDS for tax purposes is:
  • 50 - 5 = $45 and the customer doesn’t establish a holding period until the stock is purchased later on

A customer buys 1 ABC Jan 50 Call @ $5 when the market price of ABC = $49. ABC goes to $60 and the customer exercises the call. What is the tax consequence?
A. capital gain of $500  O  S
B. capital gain of $1,000       -5
C. cost basis of $5,000  +50
D. cost basis of $5,500

A customer has written 1 ABC Jan 40 Put @ 3. The contract is exercised when the market price is 32. The tax consequence to the writer is:
A. cost basis of $2,900  O  S
B. sales proceeds of $3,700       +3
C. cost basis of $3,700  -40
D. cost basis of $4,300

TAX TREATMENT OF EQUITY OPTIONS (cont.)
• Just remember:
  – Buy Call – Buy Stock – Cost Basis = B/E
  – Buy Put – Sell Stock – Sales Proceeds = B/E
  – Sell Put – Buy Stock – Cost Basis = B/E
  – Sell Call – Sell Stock – Sales Proceeds = B/E

A customer buys 1 ABC Jan 50 Put @ $5 when the market price of ABC = $52. ABC goes to $40 and the customer exercises the put. What is the tax consequence?
A. capital gain of $500  O  S
B. capital gain of $1,000       +60
C. capital loss of $500
D. capital loss of $1,000

A customer buys 1 ABC Jan 50 Call @ $5 when the market price of ABC = $49. ABC goes to $60 and the customer exercises the call selling the stock in the market. What is the tax consequence?
A. capital gain of $500  O  S
B. capital gain of $1,000       +10
C. capital loss of $500
D. capital loss of $1,000

$500 X 100 = +$5,000

Taxes
**TAX STATUS OF MUNICIPAL DEBT INTEREST**

- when we talk about muni bond interest, we look at the interest as being exempt from Fed. tax
- if you’re in the 20% tax bracket and you purchase an 10% corporate, what is the equivalent tax-free (municipal) yield?
  - tax is 20% or $200 tax
  - After tax return = $80; thus 8% Munis = 10% Corp. given a 20% T.B.

\[
\text{Equivalent Tax Free Yield} = \text{Taxable Yield} \times (100\% - \text{Tax Bracket})
\]

\[
\text{Equivalent Taxable Yield} = \frac{\text{Tax Free Yield}}{100\% - \text{Tax Bracket}}
\]

**EXEMPT FROM THE ACT OF 1933 (cont.)**

- **Private Placements (Reg. D)**
  - maximum of 35 non-accredited investors
  - can have an unlimited number of accredited investors
- **Intrastate Offerings (Rule 147)**
  - Fed. Gov’t has no authority if activity is confined within a state
  - 100% of issue sold to state residents
  - issuer must be a resident
  - 80% of issuer’s sales and assets and proceeds in that state
  - 6 month resale restriction
  - Form 147 must be filed with SEC at least 10 business days prior to sale
  - must still comply with blue sky laws

**CROWDFUNDING**

- allows start-ups to raise up to $1MM selling unregistered securities via FINRA-registered b-ds or FINRA-registered crowdfunding portals
- **Limits on the Amount Invested in a 12-month Period**
  - for investors with either annual income or net worth (excluding primary residence) under $100K:
    - greater of $2K or 5% of the investor’s annual income or net worth, whichever is less
  - for investors with both an annual income and net worth (excluding primary residence) equal to $100K or more:
    - 10% of annual income or net worth, whichever is less, but never more than $100K
- **Financial Disclosure Required for Offerings of:**
  - $100K or less:
    - financial statements certified by the company’s principal executive officer
  - $100K-$500K:
    - unaudited financial statements reviewed by an independent accountant with the accountant’s review report
  - more than $500K to $1MM:
    - audited financial statements certified by an independent accountant with the audit report (if this is the first time the issuer is taking capital, the financial statements can be REVIEWED instead of audited, thereafter they must be audited)
Rule 145
• certain corporate reorganizations will require the filing of a registration statement, like:
  – substitution of one security for another
  – merger or consolidation
  – transfer of assets from one person to another in consideration for the issuance of new securities
• exempts the following from the filing of a registration statement
  – stock dividend
  – stock split
  – change in par value

SECURITIES INVESTORS PROTECTION ACT OF 1970
• protects customers from broker/dealer failure
• SIPC
  – neither a gov't agency nor a regulatory authority, it is a non-profit member corporation funded by its member securities broker-dealers
  – covers $500,000 equity per customer, inclusive of $250,000 cash coverage
  – if a brokerage firm fails, trustee is appointed to oversee liquidation
  – the trustee distributes the assets as follows:
    • securities registered in customer name returned without dollar limitation (i.e. fully paid securities)
    • customer "street name" (margin) securities distributed on a pro rata basis up to $500,000 of equity
    • cash and margin account considered to be one account

SECURITIES INVESTORS PROTECTION ACT OF 1970 (cont.)
• partners are NOT covered
• each B/D is required to use the SIPC logo in its advertising
• NOTE: SIPC does NOT apply to investment companies registered under the 1940 Act
  – thus, mutual funds and variable annuities are NOT covered under SIPC
• finally, for SIPC purposes, the valuation date, for customer securities held in an account at a failed broker-dealer, is the date of the filing of the protective court decree
  – i.e. the date that SIPC asks a court to place the troubled broker-dealer in liquidation – called the "filing date"

Research Report
• any communication to at least 15 people that analyzes individual securities or companies and provides information sufficient upon which to base an investment decision

Research Report (cont.)
• a member may not issue research reports regarding an issuer for which the member acted as manager or co-manager of an initial public offering within 10 calendar days following the effective date of the offering
• for a secondary offering, the issuance of research reports cannot occur within 3 calendar days following the effective date of the offering

SECURITIES AND EXCHANGE ACT OF 1934
• Manipulation
• Insiders
• SEC created
• Short Sale Rule
• Proxy Rules
• Exchanges must register with the SEC
• Reports annual and quarterly financial reports
• Margin control over credit on securities given to Federal Reserve
• Stabilization
FINANCIAL STATEMENTS

- **Balance Sheet**
  - Shows Assets & Liabilities
  Net Worth (Stockholder's Equity) = Total Assets – Total Liabilities

- **Income Statement**
  - Shows Revenues & Expenses

- **Cash Flow Statement**
  - Statement of Changes in Retained Earnings

STATEMENT OF CHANGES IN RETAINED EARNINGS

- After Buttering The Popcorn (paying Bonds, Taxes, and Preferred stock, one can find the EARNINGS AVAILABLE FOR the COMMON)
  - EARNINGS PER COMMON SHARE =
    Earnings Available for Common
    Common Shares Outstanding
  - DIVIDEND PAYOUT RATIO =
    Common Dividends Paid
    Earnings Available for Common
  - low ratio = growth co.
  - high ratio = mature co., utility

Quick Ratio

- because sometimes a corporation's inventory is difficult to dispose of at "Fair Market Value", for a more stringent test of a corporation's liquidity, we take out Inventory (and any item below it) from Current Assets
  - Quick (Acid Test) Ratio = Current Assets – Inventory
    Current Liabilities

ANALYZING MUNICIPAL DEBT

G.O. BOND ANALYSIS

- Debt per Capita
- Debt to Assessed Valuation
- Collection Ratio

REVENUE BOND ANALYSIS

- Debt Service Coverage
- Pledged Revenues