EPS: IMPORTANCE

Who would likely be a user of EPS data?

Shareholder

Why?

Because a shareholder does not own 100% of the Company, consequently, 100% of the earnings is not as meaningful as the performance relative to their investment.

If you purchase stock of a company for $10/ share and it has net income of $10,000,000, does that seem like a good investment?

Who knows- you would need to know how many shares are outstanding- in other words you would want to know what the EPS is.

So if you purchased the shares for $10 and EPS for the year was $.5- how would you like that? What if it was $.10 per share?

NEW TERM: DILUTIVE

"Dilutive" means the ability to influence the EPS in a downward direction- i.e., the inclusion of the dilutive security in the calculation decreases the resultant EPS figure.

- For instance: options outstanding that could be converted to common stock. If you think of them as common stock, then they would increase the denominator of an EPS computation while the net income would be the same, therefore they would have a "dilutive" or decreasing impact on EPS if you consider them stock.

Another new term: "In the money":

If an option grants the holder the right to purchase common stock for $10/ share and the market value is $15/ share, then they are "In the money"- meaning that because the exercise price is less than the market value, they have non-subjective value today.

136A REFRESHER

EPS = Earnings * Weighted Average Shares Outstanding

* Less any preferred dividends

So if a Company has net income of $100,000 and their weighted average shares outstanding are 1,000, then their EPS is $100.

DILUTIVE SECURITIES AND EARNINGS PER SHARE
Earnings per Share (EPS)

Earnings Per Share (EPS) APB #15; FASB # 128

- Simple Structure--Only common stock; no potentially dilutive securities are present in the capital structure.

- Complex Structure--Potentially dilutive securities are present within the capital structure.

Required for public companies, NOT required for non-public companies.

- When required (public company) present on the face of the income statement. MINIMUM: FOR NET INCOME, SHARES USED FOR EPS AND DILUTED EPS

Earnings per Share (EPS)

Required EPS figures--EPS calculations must be performed for each of these figures:

- Income from continuing operations $312,000*
- +/- G/L Disposal of a Segment (36,000)*
- Net income before extraordinary items, etc. 276,000*
- +/- Extraordinary items (45,000)
- Net income $171,000*

*Required EPS for these figures. The other figures are normally derived so the reader may reconcile the numbers. (Disclosure)

EPS Income Statement Presentation

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income from continuing operations before taxes</td>
<td>$520,000</td>
</tr>
<tr>
<td>Income tax</td>
<td>208,000</td>
</tr>
<tr>
<td>Income from continuing operations</td>
<td>312,000</td>
</tr>
<tr>
<td>Discontinued operations</td>
<td></td>
</tr>
<tr>
<td>Income from operations, less $24,800 tax</td>
<td>54,000</td>
</tr>
<tr>
<td>Loss on disposal, less $41,000 tax</td>
<td>(91,000)</td>
</tr>
<tr>
<td>Total discontinued operations</td>
<td>(37,000)</td>
</tr>
<tr>
<td>Income before extraordinary item and cumulative effect of accounting change</td>
<td>276,000</td>
</tr>
<tr>
<td>Extraordinary item, less $23,000 tax</td>
<td>(45,000)</td>
</tr>
<tr>
<td>Cumulative effect of change, less $30,900 tax</td>
<td>(89,000)</td>
</tr>
<tr>
<td>Net income</td>
<td>171,000</td>
</tr>
</tbody>
</table>

EPS (100,000 shares outstanding)

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income from continuing operations</td>
<td>3.12</td>
</tr>
<tr>
<td>Income from continuing operations, less $24,800 tax</td>
<td>0.54</td>
</tr>
<tr>
<td>Loss on disposal, less $41,000 tax</td>
<td>(0.90)</td>
</tr>
<tr>
<td>Total discontinued operations</td>
<td>(0.36)</td>
</tr>
<tr>
<td>Income before extraordinary item and cumulative effect of accounting change</td>
<td>2.76</td>
</tr>
<tr>
<td>Extraordinary item, less $23,000 tax</td>
<td>(0.45)</td>
</tr>
<tr>
<td>Cumulative effect of change, less $30,900 tax</td>
<td>(0.82)</td>
</tr>
<tr>
<td>Net income</td>
<td>1.74</td>
</tr>
</tbody>
</table>

More Disclosure

On the income statement:

Weighted average shares for EPS and Diluted EPS

In the notes:

- Any required EPS not on the face of the income statement.
- Number of “potentially dilutive” shares
Earnings per Share (EPS)

Two possible EPS computations/ Presentation
- Basic EPS (BEPS)
- Diluted EPS (DEPS)

Denominator First

Weighted average number of shares outstanding
- "Real" or average ownership
- Want average C/S outstanding for the period. Must consider changes in ownership throughout the period.
- Mathematically, several approaches are possible
- Text uses the cumulative approach.
- The following is the same example using the incremental approach (Which is easier, in my opinion):

NOTE: SAME ANSWER EITHER WAY!!!

Earnings per Share (EPS)

Simple Structure--Single EPS only
- Basic Earning Per Share (BEPS)

\[
\text{Net income - P/S dividends} = \text{BEPS} \\
\text{Weighted average # shares outstanding}
\]

- P/S dividend is current year only (no arrearages).
- If net loss then P/S dividend increases the loss.

Earnings per Share (EPS)- INCREMENTAL APPROACH

<table>
<thead>
<tr>
<th>Incremental shares</th>
<th>Time O/ S</th>
<th>Weighted Shares</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start 90,000</td>
<td>12/12</td>
<td>90,000</td>
</tr>
<tr>
<td>New 30,000</td>
<td>9/12</td>
<td>22,500</td>
</tr>
<tr>
<td>T/S (39,000)</td>
<td>6/12</td>
<td>(19,500)</td>
</tr>
<tr>
<td>New 60,000</td>
<td>2/12</td>
<td>10,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>103,000 shares</strong></td>
</tr>
</tbody>
</table>
Earnings per Share (EPS) CUMULATIVE APPROACH

<table>
<thead>
<tr>
<th>Beginning shares o/s</th>
<th>January 1</th>
<th>90,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sold shares</td>
<td>March 31</td>
<td>30,000</td>
</tr>
<tr>
<td>Repurchased shares</td>
<td>June 30</td>
<td>(39,000)</td>
</tr>
<tr>
<td>Sold shares</td>
<td>November 1</td>
<td>60,000</td>
</tr>
</tbody>
</table>

CUM. O/S TIME APPLICABLE

| 90,000 | 3 | 12 | 22,500 |
| 120,000 | 3 | 12 | 30,000 |
| 91,000 | 4 | 12 | 27,500 |
| 141,000 | 2 | 12 | 23,500 |
| 12 | 103,000 |

Stock dividends, splits and reverse splits.
- Not "real change" in owner equity- NET ASSETS DON'T CHANGE
- Restate shares as if the dividend or split occurred at the beginning of the period.
- All shares must be the "same size".
- Calculation is done (prior formula) and the BEPS is presented for the required items.

Stock dividends, splits and reverse splits.
- Not "real change" in owner equity- NET ASSETS DON'T CHANGE
- Restate shares as if the dividend or split occurred at the beginning of the period.
- All shares must be the "same size".
- Calculation is done (prior formula) and the BEPS is presented for the required items.

Weighted Average Share Illust. 16-13

<table>
<thead>
<tr>
<th>DATE</th>
<th>SHARE CHANGES</th>
<th>SHARES O/S</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Jan</td>
<td>Beginning balance</td>
<td>100,000</td>
</tr>
<tr>
<td>1-Mar</td>
<td>Issued 20,000 shares for cash</td>
<td>120,000</td>
</tr>
<tr>
<td>1-Jun</td>
<td>50% stock dividend</td>
<td>60,000</td>
</tr>
<tr>
<td>1-Nov</td>
<td>Issued 30,000 shares for cash</td>
<td>210,000</td>
</tr>
<tr>
<td>31-Dec</td>
<td>Ending balance</td>
<td>210,000</td>
</tr>
</tbody>
</table>

FACTS

Dividend restate
- Year Fraction
- Wtd Shares

The above uses the incremental approach- see Ill. 16-12 for cumulative approach- remember use whichever you are most comfortable with- they produce the same result.

Dilution

What are potentially dilutive securities?
- Securities that could have a dilutive effect on EPS.
  - Stock options, warrants, and rights
  - Convertible securities
  - Convertible bonds
  - Convertible preferred stock

MECHANICS:
- Basically if they are "in the money" based on the AVERAGE share price for the period, then they are treated as if they were converted- using the Treasury Stock Method
- If anti-dilutive, ignore
TREASURY STOCK METHOD

The treasury stock method assumes that the cash which is received to exercise an option is used by the company to repurchase its stock (using average price for the period). Thus, it reduces the number of shares added to the denominator.

Makes sense?

Investor has 100 options exercisable at $10, the stock is trading at $25. You assume that the options are exercised, but the proceeds are used to repurchase stock by the company.

So Investor exercises and the number of shares increases by 100. BUT WAIT, the Company received $1,000 and can offset the impact by buying 40 shares. So the impact is 60 shares!

EPS with Options, Various Situations

Venezuela Company’s net income for 2001 is $50,000. The only potentially dilutive securities outstanding were 1,000 options issued during 2000, each exercisable for one share at $6. None has been exercised, and 10,000 shares of common were outstanding during 2001. The average market price of Venezuela’s stock during 2001 was $20.

Instructions

(a) Compute diluted earnings per share (round to nearest cent).
(b) Assume the same facts as those assumed for Part (a), except that the 1,000 options were issued on October 1, 2001 (rather than in 2000). The average market price during the last three months of 2001 was $20.

EPS with Options, Various Situations

Basic EPS Calculation -

Net income = $50,000
-----------------------------------------------
Weighted Avg. Shares = 10,000

Basic EPS = $5.00

How do we adjust Basic EPS for Options?

“Treasury Stock Method”
### Convertible Securities

**Convertible securities:**

- **NO impact on EPS, only DEPS as follows:**
  - Use the "as if converted" method-
    - Adjust the denominator "as if" they were converted to stock;
    - Adjust the numerator "as if" there was no interest incurred- if converted, then no interest
    - Don't forget to tax effects the interest (if there is no interest, then there is no tax benefit)
  - Assumes conversion at the beginning of the period (or date of issue if later)
  - If impact is anti-dilutive, then ignore!! (Can happen depending on the interest impact, can only determine mathematically by actually performing the computation)
**Convertible Bond EZ Example**

1,000 $1 convertible bonds o/s, bear interest at 10%, convertible into 2,000 shares. Company has a 40% tax rate.

- **Denominator:**
  - Increases by 2,000 shares

- **Numerator:**
  - Increases by avoided interest, net of tax which is $60 (1,000 $1 bonds 10% interest and multiplied by 60% for tax impacted number).

**DILUTIVE?**

Compare to the EPS before the computation to test, if EPS increases as a result, it is anti-dilutive and ignored.

---

**EPS with Convertible Bonds, Various Situations**

*In 2000 Bonaparte Enterprises issued, at par, 60, $1,000, 8% bonds, each convertible into 100 shares of common stock. Bonaparte had revenues of $17,500 and expenses other than interest and taxes of $8,400 for 2001 (assume that the tax rate is 40%). Throughout 2001, 2,000 shares of common stock were outstanding; none of the bonds were converted or redeemed.*

**Instructions**

(a) Compute diluted earnings per share for 2001.

(b) Assume the same facts as those assumed for Part (a), except that the 60 bonds were issued on September 1, 2001 (rather than in 2000), and none have been converted or redeemed.

(c) Assume the same facts as assumed for Part (a), except that 20 of the 60 bonds were actually converted on July 1, 2001.

---

**EPS with Convertible Bonds, Various Situations**

<table>
<thead>
<tr>
<th>Part (a)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenues</td>
</tr>
<tr>
<td>Expenses</td>
</tr>
<tr>
<td>Bond interest expense (60 x $1,000 x 8%)</td>
</tr>
<tr>
<td>Income before taxes</td>
</tr>
<tr>
<td>Income taxes (40%)</td>
</tr>
<tr>
<td>Net income</td>
</tr>
</tbody>
</table>

**Basic EPS Calculation**

- Net income = $2,580
- Weighted Avg. Shares = 2,000
- Basic EPS = $1.29

---
### Part (b)

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenues</td>
<td>$17,500</td>
</tr>
<tr>
<td>Expenses</td>
<td>(8,400)</td>
</tr>
<tr>
<td>Bond interest expense</td>
<td>(1,600)</td>
</tr>
<tr>
<td>Income before taxes</td>
<td>7,500</td>
</tr>
<tr>
<td>Income taxes (40%)</td>
<td>(3,000)</td>
</tr>
<tr>
<td>Net income</td>
<td>$ 4,500</td>
</tr>
</tbody>
</table>

### Basic EPS Calculation

Net income = $4,500

Weighted Avg. Shares = 2,000

Basic EPS = $2.25

### Diluted Calculation

\[
$2,580 + ($4,800 \times (1 - .40)) = 5,460
\]

\[
2,000 + 6,000 = 8,000
\]

Diluted EPS = $.68

### Diluted Calculation

\[
$4,500 + ($1,600 \times (1 - .40)) = 5,460
\]

\[
2,000 + (6,000 \times 4/12) = 4,000
\]

Diluted EPS = $1.36
### EPS with Convertible Bonds, Various Situations

**Part (c)**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenues</td>
<td>$17,500</td>
</tr>
<tr>
<td>Expenses</td>
<td>(8,400)</td>
</tr>
<tr>
<td>Bond interest expense</td>
<td></td>
</tr>
<tr>
<td>(60 x $1,000 x 8% x 1/2)</td>
<td>(2,400)</td>
</tr>
<tr>
<td>(40 x $1,000 x 8% x 1/2)</td>
<td>(1,600)</td>
</tr>
<tr>
<td>Income before taxes</td>
<td>5,100</td>
</tr>
<tr>
<td>Income taxes (40%)</td>
<td>(2,040)</td>
</tr>
<tr>
<td>Net income</td>
<td>$3,060</td>
</tr>
</tbody>
</table>

### EPS with Convertible Bonds, Various Situations

**Basic EPS Calculation**

- Net income = $3,060
- Weighted Avg. Shares = 2,000 + 1,000*  
  - Note: easiest way to compute denominator is to take the number of shares excluding bond activity and adjust for all conversion as of the beginning of the year. Just like in the numerator, we took out ALL interest, we must therefore fully factor the shares into the denominator.

- Basic EPS = $1.02

* 20 exercised, each converted into 100 shares = 2,000 shares. Exercised on July 1, so factor is 6/12 = 1,000

### EPS with Convertible Bonds, Various Situations

**Diluted Calculation**

- $3,060 + ($2,400 + $1,600) (1 - .40) = $5,460
- 2,000 + 6,000 = 8,000
- Diluted EPS = $.68

* Note: easiest way to compute denominator is to take the number of shares excluding bond activity and adjust for all conversion as of the beginning of the year. Just like in the numerator, we took out ALL interest, we must therefore fully factor the shares into the denominator.

### REAL QUICK

- If a simple capital structure, then no need to present Diluted EPS
- Remember that if you perform the computation and the result is anti-dilutive (you get a HIGHER EPS number than you did for the Basic EPS computation) then you exclude that item.
- Can happen, for instance with convertible bonds where the interest expense that you add back is greater than the impact of the additional shares added.
- Remember disclosure requirements
NO MORE EPS, ON TO DILUTIVE SECURITIES

Convertible Bonds
Why issue convertible bonds?
By having the conversion feature, an added benefit is provided to the bond purchaser which provides the company:
- Easier to sell
- Better rate

Because the bondholder gets the SECURITY of the bond interest with the ability to participate in the RISK associated with equity holdings

Convertible Bond Accounting
At Issuance: Just like any other bond
Upon Conversion: NO gain or loss... use the “book value method”
- Debit the bond for its book value
- Debit/ Credit any Premium or Discount for its book value
- Put on the “New”
  - Credit common stock for par value of number of shares issued
  - Credit APIC for the difference

Induced Conversion:
Any “sweetener” granted to effect a bond conversion by the company is an expense in the period it is paid.

Early Retirement:
Because issuance accounting is just like debt, retirement is just like debt. Any gain or loss from retirement of bonds is reported as income/ loss in the period of retirement.

Convertible Bond Example
Issue 100 bonds, face value $1,000 each, at an aggregate premium of $5,000. Each bond convertible into 10 shares of $1 par stock. Entry to record issuance:
Cash $105,000
Bond Payable $100,000
Prem. On BP $5,000

The bonds “convert” when the unam. Prem is $4,500:
Bond payable $100,000
Prem. On BP $4,500
Common stock $1,000
APIC $103,500
**Convertible Bond Example-Cont’d**

Company “induces conversion” by paying $5,000 when the unam. Prem is $4,500:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Debt conv. Exp.</td>
<td>$ 5,000</td>
</tr>
<tr>
<td>Cash</td>
<td>$5,000</td>
</tr>
<tr>
<td>Bond payable</td>
<td>$100,000</td>
</tr>
<tr>
<td>Prem. On BP</td>
<td>$ 4,500</td>
</tr>
<tr>
<td>Common stock</td>
<td>$ 1,000</td>
</tr>
<tr>
<td>APIC</td>
<td>$103,500</td>
</tr>
</tbody>
</table>

**Convertible Preferred Stock**

ALSO uses the “book value approach”: no change in net assets, consequently no gain or loss recorded upon conversion use APIC.

1,000 shares of $1 par convertible preferred stock, with associated APIC of $200 are converted into 1,000 shares of $1 par common stock:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Conv. Pref Stk</td>
<td>$1,000</td>
</tr>
<tr>
<td>APIC conv. pref. Stk</td>
<td>$ 200</td>
</tr>
<tr>
<td>Common Stock</td>
<td>$1,000</td>
</tr>
<tr>
<td>APIC</td>
<td>$ 200</td>
</tr>
</tbody>
</table>

- One strange exception: If the par value of the common stock is greater than the book value of the preferred stock converted debit retained earnings for the difference.
- Assume xyz, inc. issued 1,000 shares of $2 par common stock in exchange for 1,000 shares of $1 par preferred stock, original issued for a $200 premium

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Conv. Pref. Stk</td>
<td>$1,000</td>
</tr>
<tr>
<td>APIC conv. Pref. Stk</td>
<td>$ 200</td>
</tr>
<tr>
<td>Common Stock</td>
<td>$2,000</td>
</tr>
<tr>
<td>Retained Earnings</td>
<td>$ 800</td>
</tr>
</tbody>
</table>

**Stock Warrants**

- Stock warrants are certificates extending rights to acquire shares by an investor in an investee.
- May be issued with other securities to make the securities more attractive.
- Issued as evidence of the pre-emptive right.
- Issued as compensation to employees.
- Detachable stock warrants: Issued with other securities. Equity feature and debt feature accounted for separately.

**Account for separately: Two methods**

<table>
<thead>
<tr>
<th></th>
<th>FMV</th>
<th>Purchase cost</th>
<th>Carrying Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>C/S</td>
<td>$8,000</td>
<td>(8/11)</td>
<td>$7,273</td>
</tr>
<tr>
<td>Warrants</td>
<td>3,000</td>
<td>(3/11)</td>
<td>2,727</td>
</tr>
</tbody>
</table>

**Incremental method.** Used when only one security has a market value. Assume in this case only common is known ($8k assumed value).

- Received $10,000. Allocate $8,000 to common stock.
- Allocate the remainder $2,000 to warrants
- If neither has a FMV then Board of Directors will set a value.
Stock Warrants

Assume 1,000 bonds (with warrants attached) were sold at par ($1,000). Each warrant allows the holder to buy one share of common stock.

Proportional method: The bonds sold for 98 without the warrants soon after they were issued and the warrants had a market value of $25.

- FMV of bonds without warrants (1 mil x .98) $ 980,000
- FMV of warrants (1,000 x $25) 25,000
- Aggregate FMV $1,005,000

Allocate to bonds $980,000 / $1,005,000 x $1,000,000 = $975,124
Allocate to warrants $25,000 / $1,005,000 x $1,000,000 = 24,876
Total allocation $1,000,000

Stock Warrants

Assume 1,000 bonds with warrants attached were sold at par ($1,000). Each warrant allows the holder to buy one share of common stock.

Incremental method: The market price of the bonds without the warrants was $970,000, but the market value of the warrants was not determinable.

Lump sum receipt $1,000,000
Allocated to bonds (970,000)
Balance allocated to the warrants $30,000

Stock Rights

- Stock rights are evidence of the preemptive right.
- Tend to be short in duration
- Memo entry only
  - No journal entry required until exercise.
  - Issued to existing shareholders.

Stock Option Plans
WHAT’S STOCK COMPENSATION?

Stock compensation can generally be described as the portion of an employee's compensation which is derived from the company's stock and/or appreciation in the value of the company's stock.

EXAMPLE:
The BOD approves 100,000 shares to be issued for a new stock option plan. The plan enables employees to purchase stock for $10/share. The company is about to go public and that will be a LOT of work for the employees. It is expected that the company's stock will sell for $20/share after the IPO. So the options will motivate the employees to sacrifice their time and effort in return for stock which should be worth twice what they have to pay for it!

Why all the hooplah?

The primary objective of a company is to create value for the shareholder.

A goal of compensation packages should align compensation with the company's goals. How better to do that than to grant them the ability to earn compensation by increasing the stock price?

GAAP wants to match the cost of compensation to the period of benefit and is tricky business:
- How do you measure the value of a stock option?
- Does the VALUE of a stock option really reflect the "cost" to the company?
- Even if you can get comfortable with a determination of the amount of cost to recognize, how should that be reflected?

Compensatory Vs. Non-Compensatory

Compensatory plans require that the company compute the estimated fair value of the granted options on the date of the grant and record expense.

Non-compensatory plans do not require the recording of an expense on the date of grant. Therefore it delays the recording of an expense.

HOW TO TELL THE DIFFERENCE:
A plan is compensatory (non-qualified) unless it meets the following three criteria, in which case it is Non-compensatory (Incentive):

- a. Substantially all employees are included and stock offered equally to all employees.
- b. The discount from market price is small.
- c. The plan offers no substantive option feature.

Intrinsic Value

Old literature allowed for the recording of the expense at it’s “intrinsic value” with disclosure relative to the fair value. That’s over now, but you should be familiar with the term:

Intrinsic value =
(Mkt value* shares) - (Exercise price* shares)
Compensatory/ Non-Qualifying Plans-
Measurement Date

If we are going to book compensation expense, then we need to figure out how to compute the amount. It’s tricky you see because there is no way to really know what a stock will be worth in the future.

So the industry developed a few methods (models) to estimate the fair value of an option. The most-common model is the Black-Scholes model which includes statistical “volatility” and other measures in the complex computation. Such computations are generally performed by experts, and not included in this class.

The expense is recognized on a straight line basis over the period of expected benefit.

JOURNAL ENTRY:
Compensation expense $xx/ expected ben. pd.
Paid in capital- stock options $xx/ expected ben. Pd.
Where $xx is the fair value derived from an option pricing model.

NOTE: After the grant date, the total amount of the expense is done- subsequent changes in stock price have no impact.

Stock Option Plans- after measurement

When an option is exercised, we record the cash received, record the new stock, and flip the “paid in capital- stock options” to “paid in capital in excess of par” (APIC)

JOURNAL ENTRY:
Cash $xx
Paid in capital-stock options $yy
Common stock $zz
APIC plug

$xx= exercise price * number of options exercised
$yy= % of the total options exercised * the paid in capital-stock options originally recorded (the % of the APIC- stock options that flips)
$zz= par * number of options exercised

Expired options- the paid in capital-stock options remaining is debited (reduced to zero) and flips to the paid in capital from expired stock options:

Paid in capital-stock options $xx
Paid in capital-expired stock options $xx

$xx= any remaining paid in capital-stock options which remains (has not been flipped due to exercise) at expiration of the stock option plan.

SOPs - Allocating Compensation Expense

EXAMPLE:
To illustrate the accounting for a stock option plan, assume that on September 16, 2001, the stockholders of Jeslow Company approve a plan that grants the company’s three executives options to purchase 4,000 shares each of the company’s $1 par value common stock. The options are granted on January 1, 2001, and may be exercised at any time within the next five years. The option price per share is $30, and the market price of the stock at the date of grant is $40 per share. The expected period of benefit is 3 years from the grant date.
Using the intrinsic value method, the total compensation expense is computed below:

- Market value of 12,000 shares at the date of grant ($40) $480,000
- Option price of 12,000 shares at the date of grant ($30) 360,000
- Total intrinsic value $120,000

Using the fair value method, total compensation expense is computed by applying an acceptable fair value option pricing model. We will assume that the fair value option pricing model determines total compensation expense to be $180,000.

THE NEW RULES ALLOW ONLY THE FAIR VALUE METHOD! INTRINSIC COMPUTATION IS JUST FOR ILLUSTRATIVE PURPOSES.

Fair Value ($180,000 / 3)
- Compensation Expense 60,000
- Paid-in Capital--Stock Options 60,000

JOURNAL ENTRY REPEATS EACH YEAR FOR 3 YEARS

If 9,000 of the 12,000 options (75% of the total) are exercised on July 1, 2005, the journal entry is:

- Fair Value 270,000
- Cash (9,000 x $30) 270,000
- Paid-in Capital--Stock Options 135,000*
- Common Stock (9,000 x $1) 9,000
- Paid-in Capital in Excess of Par 396,000

* This is 75% of the total paid in capital- stock options as 75% of them are “flipping” to exercised.

If no more of the options are exercised, at the expiration of the plan, there remain 3,000 options which expire (25% of the total $180,000 initial PIC-stock options needs to flip):

- Fair Value 45,000*
- Paid-in Capital--Stock Options 45,000
- Paid-in Capital – expired options 45,000

* This is 25% of the total paid in capital- stock options (180,000) as 25% of them are “flipping” to expired.

NOTE: ALL of the Paid in Capital- stock options has flipped (180,000) to:
- APIC 135,000 from JE at exercise
- Paid in capital- expired options 45,000 from JE at expiration above
RESTRICTED STOCK PLANS

WHAT IS IT:
The Company issues stock for the people covered by the plan, but the company hangs onto it until the employees vest.

WHY/ADVANTAGES:
- Unlike an option, restricted stock will only become worthless if the company goes out of business during vesting.
- Because of the above, the company can generally issue less restricted stock than options and consequently less “dilution” to EPS
- Perfect alignment of employee compensation with long term corporate objectives.

Accounting:
1. Record issuance of the stock and APIC with the offsetting debit to “unearned compensation”, a contra equity account.
2. No net income effect upon issuance!
3. Each period of vesting, ratably charge the “unearned compensation” to Compensation expense.
4. If employee terminates before vesting, cancel the stock, undo any comp expense previously recorded (change in estimate) and undo the unamortized “unearned compensation”

RESTRICTED STOCK EXAMPLE

Grant 1,000 shares of $1 par stock that has $20 market price on grant date to one employee, vested in five years:

<table>
<thead>
<tr>
<th></th>
<th>Unearned compensation</th>
<th>Common stock</th>
<th>APIC</th>
</tr>
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<tbody>
<tr>
<td>Grant</td>
<td>20,000</td>
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<td>19,000</td>
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End of year one:

<table>
<thead>
<tr>
<th></th>
<th>Comp expense</th>
<th>Unearned compensation</th>
</tr>
</thead>
<tbody>
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<td>End of year one</td>
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</table>

End of year two:

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<tr>
<th></th>
<th>Comp expense</th>
<th>Unearned compensation</th>
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</thead>
<tbody>
<tr>
<td>Employees quits, plan terminates</td>
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<td>4,000</td>
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</tbody>
</table>

Employee Quits, plan terminates:

<table>
<thead>
<tr>
<th></th>
<th>Comp expense</th>
<th>Unearned compensation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common stock</td>
<td>1,000</td>
<td>19,000</td>
</tr>
<tr>
<td>APIC</td>
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<td>12,000</td>
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</table>

Contra-equity account