# Defending, Debunking, Demystifying Diluted EPS: A Plain-English Explanation

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May 24, 2011

## Webcast Materials

http://www.sos-team.com/PDFS/diluted.pdf

URL is case-sensitive.

2

## Agenda

Earnings Per Share – ASC Topic 260 (formerly FAS 128)
Common Stock / Potential Common Stock
Treasury Stock Method – Explained
Treasury Stock Method – An Example
Other Considerations & Complications

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## Earnings Per Share

Calculating earnings per share

- Basic EPS
  - Does not include potential common shares
  - Net Earnings divided by Common Stock
- Diluted EPS
  - Includes common shares & other potential common shares (warrants, convertible debt, employee equity awards, etc.)
  - Net Earnings divided by Common Stock and potential common shares
  - Treasury Stock Method
  - If-Converted method
  - Contingently issuable shares

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## Earnings Per Share

Basic Earnings Per Share ("EPS") =
- Net Earnings[1] / Common Stock

Measurement of company's success
- Higher Earnings = Higher EPS
- Higher EPS = greater return on investment

Example:
- Net Earnings: $100,000,000
- Common Stock: 50,000,000
- EPS: $100,000,000 / 50,000,000 shares = $2.00

[1] Earnings attributable to common shareholders

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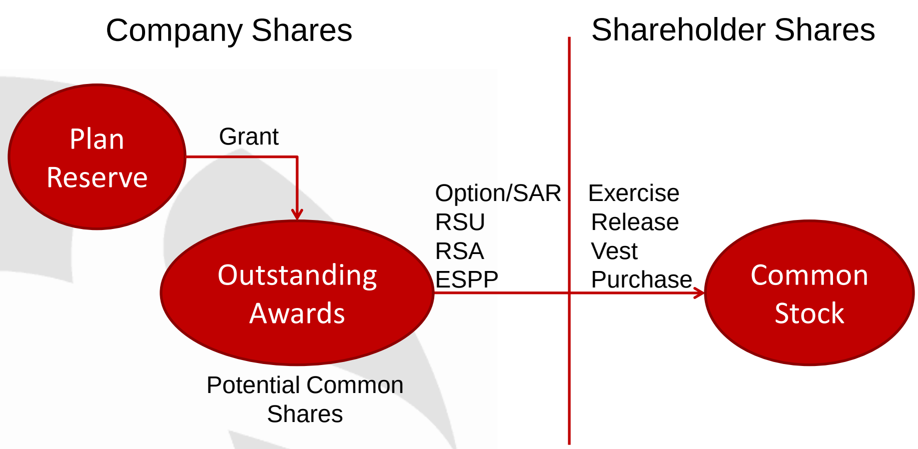
## Earnings Per Share

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## Earnings Per Share

To calculate basic & diluted EPS, determine:

- Net earnings
- Common stock issued and outstanding
- Potential common shares

Diluted EPS =

- Net Earnings / (Common Stock + Potential Common Shares)

Unissued Stock
Employee Equity Grants
Warrants
Convertible Debt, etc.



## Common Stock

Common Stock

- Weighted for length of time during reporting period that stock was issued and outstanding
- Common stock issued and outstanding for entire period is weighted at 100%
- Common stock issued during period is weighted at proportionately smaller percentage

# Common Stock – Weighting

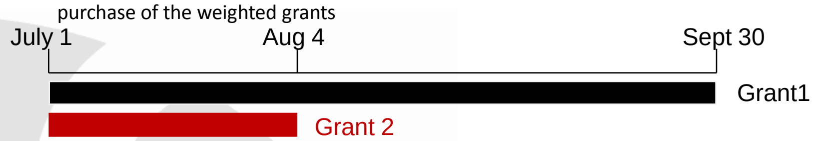
- Weighted for length of time stock was issued and outstanding
  - Common stock issued and outstanding for entire period weighted at 100%
  - Common stock issued during period weighted at proportionately smaller percentage


- Example:
  - Reporting period is 92 days (July 1 to Sept 30)
  - 1,000 shares exercised on August 4
  - Shares issued for 58 days (Aug 4 to Sept 30)
  - Shares not issued for entire period so are weighted at less than 100%
  - Shares are weighted at 63% (58 days / 92 days)
  - 1,000 shares exercised = 630 shares included as common stock



# Potential Common Shares – Weighting

- Potential common shares / Potential Equivalents
  - Weight equity for length of time grants are outstanding
  - Determine shares that would be issued and outstanding after exercise / release/ vest / purchase of the weighted grants




- Example: Grant 1
  - Reporting period is 92 days (July 1 to Sept 30)
  - Grant 1 outstanding for entire period and is included at 100%
- Example: Grant 2
  - Grant 2 is exercised on Aug 4
  - Grant 2 is outstanding for 34 days (July 1 to Aug 3)
  - Grant 2 weighted at 37% (34 days / 92 days)

## Treasury Stock Method – Explained

ASC 260-10-45-28A and 28B

- All options and nonvested shares assumed to be issued or exercised at the beginning of period (or time of grant if later)
- All "underwater" options are excluded from Treasury Stock Method (ASC 260-10-45-25)
- All Proceeds from hypothetical "exercise" are assumed to repurchase stock on open market at Average Market Value during period
  - "Buyback Shares"
  - Three components of "exercise proceeds" (more later)
- Shares "issued" minus "buyback shares" = incremental shares for diluted EPS calculation

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## Treasury Stock Method – Assumed Proceeds

ASC 260-10-45-29

- Exercise price of options (restricted stock is $0), plus
- Weighted average unrecognized compensation cost during the period, plus
- Excess tax benefits or minus certain tax benefit deficiencies

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## Treasury Stock Method Steps in 5 Easy (?) Steps – An Example

1. Exclude underwater options
2. Weight shares for time outstanding during period (WSO)
   – Can be complex if transactions occurred during the period
3. Calculate exercise proceeds & "buyback shares"
   – A. Exercise price: (Exercise Price * WSO)
   – B. Tax benefit: ((((MV-Price) – Fair Value) * Tax Rate) * WSO)
   – C. Avg unamortized expense: (((Beg. Unamortized Expense + Ending Unamortized Expense) / 2) * (WSO / Total Shares))
   – D. Sum 3 components/Avg Market Value = total "buyback shares"
4. If buyback shares > WSO (anti-dilutive), exclude grant
5. Weighted shares minus buyback shares = dilutive shares to include in diluted EPS calc in addition to common stock

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## Treasury Stock Method – An Example

Net Earnings = $6,000,000
Common Stock Outstanding = 3,000,000
Diluted EPS = $2.00/share
– $6,000,000/3,000,000

Price = $20 per share
Average Market Value = $50 per share
Tax Rate = 40%
Grant-date Fair Value = $6 per share

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## Treasury Stock Method – An Example Exercise Proceeds

Before Buyback Shares

- 200,000 WSO + 3,000,000 Common Stock
- Diluted EPS = 1.88 ($6M / 3,200,000 shares)

After Buyback Shares…

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## Treasury Stock Method – An Example Exercise Proceeds

Exercise Price Buyback Shares:

- Number of shares the company can repurchase using the exercise price proceeds from weighted shares outstanding
- Calculation of Exercise Price Buyback Shares
  - Proceeds = $20 x 200,000 weighed shares = $4,000,000
  - Buyback shares = Proceeds / MV
    - $4,000,000 / $50 = 80,000 shares
  - =$6,000,000 / 3,120,000 = $1.92 Diluted EPS

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## Treasury Stock Method – An Example
## Tax Benefit Proceeds

Calculation of Tax Benefit Buyback Shares

- Excess Tax Benefit = ((MV less Price) less Fair Value) multiplied by weighted shares
  - ( ($50 - $20) - $6) x 200,000 weighted shares = $4,800,000
  - Company Tax Benefit = Gain multiplied by corporate tax rate
    - $4,800,000 x 40% = $1,920,000
  - Buyback shares = Company Tax Benefit / MV
  - $1,920,000 / $50 = 38,400 shares
- =$6,000,000 / 3,081,600 = $1.95 Diluted EPS

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## Treasury Stock Method – An Example
## Average Unamortized Expense

Calculation of Unamortized Expense Buyback Shares

- Beginning Unamortized Expense:
  - ($6 x 200,000 shrs) * 13/16th of vesting incomplete = $975,000
- Ending Unamortized Expense:
  - ($6 x 200,000 shrs) * 12/16th of vesting incomplete = $900,000
- Avg Unamortized Expense: ($975,000+ $900,000) / 2 = $937,500
- WSO / Total Shares (i.e., Weighted Ratio) * Avg Unamortized Expense

Buyback shares = Wgt Avg Unamortized Expense / Avg Market Value

- $937,500 / $50 = 18,750 shares

=$6,000,000 / 3,062,850 = $1.96 Diluted EPS

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# Treasury Stock Method

Effect of forfeitures on diluted EPS

- Options forfeited during the reporting period should be weighted for the portion of the year they are outstanding
- Based on actual forfeitures not estimated forfeitures
  - FAS 123(R), paragraph 66 / Topic 718-10-45-1

> **Earnings per Share**

**45-1** Topic 260 requires that **employee** equity share options, **nonvested shares**, and similar equity instruments granted to employees be treated as potential common shares in computing diluted earnings per share (EPS). Diluted EPS shall be based on the actual number of options or shares granted and not yet forfeited, unless doing so would be antidilutive. If **vesting** in or the ability to exercise (or retain) an **award** is contingent on a performance or **market condition**, such as the level of future earnings, the shares or share options shall be treated as contingently issuable shares in accordance with paragraphs 260-10-45-48 through 45-57. If equity share options or other equity instruments are outstanding for only part of a period, the shares issuable shall be weighted to reflect the portion of the period during which the equity instruments are outstanding.

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# Treasury Stock Method - Summary

Calculation of Potential Common Shares Calculation:

Weighted Shares Outstanding

Less:

- Exercise Price Buyback Shares
- Tax Benefit Buyback Shares
  (only for grants with an expected tax deduction)
- Avg Unamortized Expense Buyback Shares

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= Total Buyback Shares

= Dilutive Shares
(if this is negative, exclude grant from calculation)

Calculation should be performed grant-by-grant

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# Treasury Stock Method - Summary

| Element | Result | Diluted EPS |
|---|---|---|
| Weighted Common Stock Outstanding | 3,000,000 | |
| Weighted Shares Outstanding (Potential) | 200,000 | $1.88 |
| Exercise Proceed Shares | - 80,000 | $1.92 |
| Tax Benefit Proceed Shares | - 38,400 | $1.95 |
| Average Unamortized Expense Proceed Shares | - 18,750 | $1.96 |
| Buyback Shares | -137,150 | |
| Dilutive Shares | 62,850 | |
| Shares to Include for Diluted EPS | 3,062,850 | |
| Net Earnings | $6,000,000 | $1.96 |

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# Treasury Stock Method – Underwater Options

Calculation of Buyback Shares

- Proceeds = $20 x 200,000 shares = $4,000,000
- Buyback shares = Proceeds / Avg MV
  - $4,000,000 / $15 = 266,667 shares
- Buyback shares (266,667) exceed weighted option shares outstanding (200,000)
- Anti-dilutive and excluded from the calculation
- Could be “dilutive” even if not “in-the-money” because of impact of tax benefit deficiency; however, Resource Group concluded options not “in-the-money” should be excluded from EPS.

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## Other Grant Types

Restricted Stock/Units
- Same calculation as options, but with $0 exercise price

ESPP
- Calculations similar as for options
- No tax benefit calculation (no DTA booked)
- Practice/guidance varies



## Other Considerations

In-the-money Grants can be Anti-dilutive

Reduction of Assumed Proceeds for Tax Benefit Deficiency
- Run it through the APIC Pool before including

"Shortcut" Method (FSP FAS 123(R)-3) of Calculating FAS 123 APIC Pool

Performance shares
- Performance/market conditions

Two Class Method for Participating Securities

Potential Changes to EPS

## Other Considerations: In-the-Money Grants can be Anti-Dilutive

When buyback shares exceed weighted shares outstanding, transaction would increase (rather than decrease) EPS – must be excluded

Comparison of buyback shares to weighted shares outstanding must be done on grant-by-grant basis

More common early in life of grant

- Higher unamortized expense
- Shares only outstanding for a portion of reporting period

Example:

- NQ for 1,000 shares granted on 9/15/11
- Vesting over 4 years
- Grant Date Market Value = $10
- Price = $10
- Expense per Share = $7
- Average Market Value during the period = $12
- Reporting Period from 7/1/11 to 9/30/11

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## Other Considerations: In-the-Money Grants can be Anti-Dilutive

Treasury Stock Method:

- Not underwater, so included in analysis
- Weighted Shares Outstanding (WSO) = 163 (Outstanding for 16.3% of the reporting period – 15 days / 92 Days) – 4 yr vesting
- Assumed proceeds
  - Exercise Price Buyback Shares = 136
    (Exercise Price * WSO) / Avg MV ($10 * 163) / $12
  - Tax Benefit Buyback Shares = -27
    ((((MV – Exercise Price)- Exp Per Share) *WSO) *Tax Rate)/Avg MV
    (((($12 - $10) - $7) * 163) * .40) / $12
  - Unamortized Expense Shares = 95
    ((((Total Expense * Beg Vest Period Remaining) + (Total Expense + End Vest Period Remaining)) / 2) / Avg MV) * (WSO / Total Shares)
    ((($7,000 * 100%) + ($7,000* 99%)) /2) / $12) * 16.3%
  - Total Buyback Shares = 204
- Weighted Shares (163) are less than Buyback Shares (204), therefore exclude this grant from diluted EPS calculation

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## Other Considerations: Reduction of Assumed Proceeds for Tax Benefit Deficiency

When expense per share exceeds "hypothetical gain" at exercise

- Tax Benefit Buyback Shares can be negative
- A "reduction to assumed proceeds" if sufficient Topic 718 APIC pool to offset
- Text from Topic 260:
  - "Paragraph 718-740-35-5 states that the amount deductible on an employer's tax return may be less than the cumulative compensation cost recognized for financial reporting purposes. ***If the deferred tax asset related to that resulting difference would be deducted from additional paid-in capital*** (or its equivalent) pursuant to that paragraph assuming exercise of the options, that amount ***shall be treated as a reduction of assumed proceeds***." [emphasis added]

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## Other Considerations: "Shortcut" Method of Calculating Topic 718 APIC Pool

If Shortcut method (FSP FAS 123(R)-3)[1] used to calculate beginning balance of Topic 718 APIC Pool

- For any NQ shares fully vested before Topic 718 effective date, tax benefit calculation changes
- Fair value already subtracted from beginning balance as part of shortcut method
- Do not subtract expense per share from "hypothetical gain" – consider entire gain instead

[1]Missing from codified standards, but still relevant if "short-cut method" was used when standard was adopted. See comment letter from E&Y on FASB Codification on January 14, 2009.

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## Other Considerations: Performance Shares (Performance or Market Conditions)

Considered contingency for purposes of applying EPS guidance in ASC 260

**Determine if shares are contingently issuable**

- Measure performance at end of reporting period and determine how many shares would be issued if performance period ended
- If condition met (or partially met), include shares as of beginning of reporting period or grant date if later
- Apply Treasury Stock Method to shares considered issuable (ASC 260-10-45-55)

**If performance/market condition not satisfied by end of period**

- Shares are not considered issuable for diluted EPS, exclude them from calculation
- However, compensation cost related to those awards included in earnings if it is probable that performance condition will ultimately be satisfied

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## Other Considerations: Market Condition Example

Target Awards: 5.0M (weighted average during period)
Assumed percentage: 150% (at the end of reporting period)
Remaining expense: $10.0M (weighted average outstanding during period)
Average stock price: $6 (simple average during period)
Fair Value: $8 (original grant date FV)
Corporate Tax Rate: 40%

Potentially diluted awards: 5.0M x 150% = 7.5M shares
Proceeds to buy-back shares:
$10.0M expense + ($6 x 150% - $8 FV) x 5.0M shares x 40% = $12.0M
Shares repurchased: 12.0M / $6 = 2.0M shares
Dilutive shares: 5.0M x 150% - 2.0M = 5.5M shares

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## Other Considerations: Performance Conditions

The number of shares contingently issuable is often different than number assumed to vest for expense accrual purposes

- Companies accrue expense based on number of awards expected to vest at the end of performance period
- Contingently issuable shares based on actual performance through the of reporting period

A company may record expense during performance period without recognizing any shares in the denominator of diluted EPS until they are issued



## Other Considerations: Participating Securities

Fully vested stock-based compensation that contain a right to receive dividends declared on the common stock of the issuer are subject to the guidance in ASC 260-10-45-61

Unvested share-based payment awards that contain non-forfeitable rights to dividends or dividend equivalents are participating securities and shall be included in the computation of basic and diluted EPS pursuant to the two-class method

Two-Class Method

- An earnings allocation formula that determines EPS for each class of common stock and participating security according to dividends declared and participation rights in undistributed earnings

## Changes Under Proposed Regulations?

Average market price for the period will now just be the closing stock price

Year-to-Date calculations will be done similar to Quarter-to-Date calculations

- Will require year-to-date awards outstanding to be calculated under the treasury stock method using the price at the end of the period
- Currently, the year-to-date dilutive common equivalents is the simple average of each quarterly calculation

Other Changes

- Awards with variable accounting – don't include incremental shares in DCE since the fair value changes are reflected in earnings (also for participating securities under the two-class method)
- Diluted EPS under the Two-Class Method – possible change

Currently, no known effective date for proposed regulations



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# APPENDIX

35

## Other Considerations: Cash Settlement

Cash-Settled Awards

- Not included in denominator of EPS if cash settlement is required
- Settlement choice of cash or stock by entity or employee
  - Presumed to be settled in stock for dilutive EPS, if more dilutive
  - If policy or experience indicates cash settlement, then that may overcome the presumption of stock settlement
  - Awards are included in denominator of diluted EPS using treasury stock method

36

## Other Considerations: Stock-settled SARs

Treasury Stock Method still applies

Differences

- No "exercise price"
- Only shares to be paid out (based on average market value) should be included
- The above "cancel each other out" so that the exact same calculation is appropriate for stock-settled SARs as for options

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## Other Considerations: RSUs with Share Withholding

Treasury Stock Method still applies

Differences

- Company must pay tax liability for participant (reducing "assumed proceeds")
  - Even though this is not called out in the standard, it is an obvious cost of the release when shares are withheld
- Only shares to be paid out (based on average market value) should be included – reduces dilutive impact
- The above "cancel each other out" so that the exact same calculation is appropriate for RSUs with Share withholding as for other RSUs

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## Other Considerations: RSUs with Share Withholding

Example

- Wtd Shares Outstanding = 100
- Avg Market Value = $7
- Fair Value = $3
- Avg Unamortized Expense = $175
- Corporate Tax Rate = 40%
- Individual Tax Rate = 30%



## Other Considerations: RSUs with Share Withholding

Without Share Withholding

- Tax Benefit Proceeds = $160
  - ($7-$4)*40% *100 shares
- Avg Unamortized Expense Proceeds = $175
- Total Proceeds = $335
- Total Buyback Shares = 48
  - $335/$7
- Dilutive Shares = 52
  - 100- 48

With Share Withholding

- Tax Benefit Proceeds = $160
  - ($7-$4)*40% *100 shares
- Avg Unamortized Expense Proceeds = $175
- Assumed Proceeds for Taxes = $210
  - $7 * 100 * 30%
- Total Proceeds = $ 125
- Total Buyback Shares = 18
  - $125/$7
- Shares withheld = 30
  - ($7*100*30%)/$7
- Dilutive Shares = 52
  - 70- 18