Restricted Stock Units and the Calculation of Basic and Diluted Earnings per Share

By Josef Rashty and John O’Shaughnessy

Earnings per share (EPS) is the most common and most complex performance measurement that a publicly held company presents in its quarterly and annual reports. The accounting guidance for the calculation and reporting of EPS can be found in Accounting Standards Codification (ASC) 260, Earnings per Share, which provides for the calculation and presentation of the basic and diluted EPS, and ASC 780, Stock Compensation, which provides for certain unique characteristics of stock compensation that impact the EPS calculation.

ASC 260 defines EPS as the amount of income attributable to each share of common stock. Basic EPS is calculated by dividing net income by the weighted average of the number common stock shares outstanding during the period, whereas diluted EPS includes all dilutive potential common shares outstanding during the period in the calculation. Generally, unvested equity awards that companies have granted to their employees are not included in the calculation of basic EPS, even though such contingent awards are legally considered outstanding.

Nevertheless, in some cases, unvested equity awards may be considered participating securities and included in the calculation of basic EPS. The application of the two-class method, discussed later in this article, reflects the treatment of unvested RSUs as participating securities. But employee equity awards generally impact only the denominator of diluted EPS unless they are antidilutive (ASC 260-10-45-17). The determination of whether an award is dilutive must be made on a quarterly and year-to-date basis for each grant (not in aggregate). Diluted EPS, however, always results in an antidilutive per-share amount whenever an entity reports a loss from continuing operations or a loss from continuing operations available to common stockholders (i.e., after any preferred dividend deductions; see ASC 260-10-45-19). Therefore, an entity that reports losses to its common stock holders does not report any diluted EPS.

ASC 780 impacts both the EPS numerator (net income) as well as the denominator (the average number of shares outstanding). Stock compensation not only reduces the net income and income tax expense but also impacts the amount of proceeds in the treasury stock method calculation that determines the average number of shares outstanding.

Restricted Stock Units

Restricted stock units (RSU) are one of the potentially dilutive contingent common shares that may impact the calculation of EPS. Although restricted stock is similar to an RSU, restricted stock is a transfer of stock upon its grant, whereas an RSU is a company’s promise to deliver shares of stock to its employees sometime in the future. Therefore, these shares of stock are not issued and are unvested until the employees meet certain vesting conditions and earn the right to those shares. Once employees earn the right to such shares, the company delivers the shares to them.

Unvested RSUs are usually excluded from the denominator in the computation of basic EPS until they become vested. Once vested, those RSUs are included in the computation of basic EPS, regardless of whether the shares have actually been issued. Unvested RSUs, on the other hand, can have a dilutive effect on diluted EPS as determined by the treasury stock method.

Treasury Stock Method for Calculating EPS

The treasury stock method basically assumes that a company uses the proceeds from the hypothetical exercise of the
awards to repurchase common stock at the average market price during the period. Therefore, a higher amount of assumed proceeds (the numerator) and a lower average market price during the reporting period (the denominator) will increase the number of shares that a company can repurchase. An increase in the number of shares that a company can hypothetically repurchase lowers the denominator and increases the diluted EPS.

The assumed proceeds under the treasury stock method include the following:

- The purchase price of the award that the grantee pays in the future. This is usually the exercise price of stock options and is not applicable to RSUs.
- The average compensation costs for future services that have not been recognized.
- Any windfall tax profits or shortfalls due to the exercise of awards.

A company should include unvested RSUs (due to a future service, performance, or market condition requirement) as contingently issuable shares (pursuant to ASC 260-10-45-17 and 18) in the calculation of treasury stock for diluted EPS. The assumed proceeds for the RSUs under the treasury stock method consist of the average unamortized compensation cost and any potential windfall tax profits or shortfalls (discussed in more detail below).

Because the grantee of the RSUs does not pay any exercise price at the time of vesting or exercise, no proceeds for the exercise price of RSUs would be included in the calculation of diluted EPS.

As described below, applying the treasury stock method to RSUs could be antidilutive, if, due to unrecognized compensation and windfall tax profits, the hypothetical repurchase of shares exceeds the number of RSU shares to be exercised. If so, these antidilutive RSUs should be excluded from the calculation of diluted EPS.

Under ASC 718, companies are required to develop an assumption regarding the pre-vesting forfeiture rate, which will have an effect on the amount of compensation costs recognized during the requisite service period. Companies usually “true up” the amount of the forfeiture reserve to actual forfeited awards periodically. The pre-vesting forfeiture reserve does not, however, impact the calculation of the assumed proceeds until the actual forfeiture occurs (ASC 260). As a result, the numerator (net income that incorporates stock compensation) and the denominator (the number of diluted shares calculated based on the treasury stock method) of the EPS calculation formula follow different rules for the estimated RSU forfeitures.

An RSU is a promise to deliver shares to employees in the future. Therefore, it is not until the award is vested that an employee will have taxable compensation and an employer will be eligible for a tax deduction. In a hypothetical exercise of RSUs, an entity must take into account the windfall tax profits and shortfalls associated with vesting of RSUs.

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### EXHIBIT 1
Calculating EPS: Dilutive Effect of the Treasury Stock Method

<table>
<thead>
<tr>
<th>(in thousands, except per-share amounts)</th>
<th>First Quarter</th>
<th>Second Quarter</th>
<th>Third Quarter</th>
<th>Fourth Quarter</th>
<th>YTD</th>
<th>Next Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net income before stock compensation</td>
<td>$1,000</td>
<td>$1,000</td>
<td>$1,000</td>
<td>$1,000</td>
<td>$4,000</td>
<td>$1,000</td>
</tr>
<tr>
<td>Less: stock compensation after forfeiture</td>
<td>90</td>
<td>90</td>
<td>81</td>
<td>81</td>
<td>342</td>
<td>81</td>
</tr>
<tr>
<td>Add: forfeiture true-up</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>18</td>
<td>–</td>
</tr>
<tr>
<td>Net income</td>
<td>$910</td>
<td>$928</td>
<td>$919</td>
<td>$919</td>
<td>$3,676</td>
<td>$919</td>
</tr>
<tr>
<td>Weighted average shares outstanding</td>
<td>10,000</td>
<td>10,000</td>
<td>10,000</td>
<td>10,000</td>
<td>10,000</td>
<td>10,360</td>
</tr>
<tr>
<td>Basic EPS</td>
<td>$0.0910</td>
<td>$0.0928</td>
<td>$0.0919</td>
<td>$0.0919</td>
<td>$0.3676</td>
<td>$0.0887</td>
</tr>
<tr>
<td>Weighted average stock price quarterly</td>
<td>$1.20</td>
<td>$1.40</td>
<td>$0.80</td>
<td>$1.30</td>
<td>–</td>
<td>$1.30</td>
</tr>
<tr>
<td>Weighted average stock price YTD</td>
<td>$1.20</td>
<td>$1.30</td>
<td>$1.13</td>
<td>$1.18</td>
<td>$1.18</td>
<td>$1.30</td>
</tr>
<tr>
<td>Weighted average RSUs outstanding</td>
<td>1,600</td>
<td>1,600</td>
<td>1,440</td>
<td>1,440</td>
<td>1,520</td>
<td>1,080</td>
</tr>
<tr>
<td>Total compensation cost</td>
<td>$1,600</td>
<td>$1,600</td>
<td>$1,440</td>
<td>$1,440</td>
<td>$1,520</td>
<td>$1,080</td>
</tr>
<tr>
<td>Intrinsic value</td>
<td>$320</td>
<td>$640</td>
<td>$288</td>
<td>$432</td>
<td>$274</td>
<td>$324</td>
</tr>
<tr>
<td>Average unrecognized compensation</td>
<td>$1,600</td>
<td>$1,600</td>
<td>$1,440</td>
<td>$1,440</td>
<td>$1,520</td>
<td>$1,080</td>
</tr>
<tr>
<td>Windfall tax profit (shortfall)</td>
<td>128</td>
<td>256</td>
<td>(115)</td>
<td>173</td>
<td>109</td>
<td>130</td>
</tr>
<tr>
<td>Assumed proceeds</td>
<td>$1,728</td>
<td>$1,856</td>
<td>$1,325</td>
<td>$1,613</td>
<td>$1,629</td>
<td>$1,210</td>
</tr>
<tr>
<td>Repurchased shares</td>
<td>1,440</td>
<td>1,326</td>
<td>1,656</td>
<td>1,241</td>
<td>1,381</td>
<td>931</td>
</tr>
<tr>
<td>Less: section 162(m) limitation</td>
<td>42</td>
<td>38</td>
<td>44</td>
<td>42</td>
<td>42</td>
<td>38</td>
</tr>
<tr>
<td>Total repurchased shares</td>
<td>1,398</td>
<td>1,288</td>
<td>1,199</td>
<td>1,199</td>
<td>1,339</td>
<td>893</td>
</tr>
<tr>
<td>Incremental shares</td>
<td>202</td>
<td>312</td>
<td>–</td>
<td>241</td>
<td>181</td>
<td>187</td>
</tr>
<tr>
<td>Weighted average diluted shares</td>
<td>10,202</td>
<td>10,312</td>
<td>10,000</td>
<td>10,241</td>
<td>10,181</td>
<td>10,547</td>
</tr>
<tr>
<td>Diluted EPS</td>
<td>$0.0892</td>
<td>$0.0900</td>
<td>$0.0919</td>
<td>$0.0897</td>
<td>$0.3611</td>
<td>$0.0871</td>
</tr>
</tbody>
</table>

1. $100,000 stock compensation less 10% forfeiture rate in the first and second quarters, and $90,000 ($100,000 − $10,000 cancellation) less 10% forfeiture rate for the third and fourth quarters and the first quarter of the following year.

2. The true-up for the forfeiture of 160,000 RSUs. $10,000 (cancellation per quarter) × 90% (estimate of nonforfeited RSUs) × 2 (for the first and second quarters).

3. 10,000,000 + [(1,600,000 − 160,000) ÷ 4 = 360,000] = 10,360,000

4. 160,000 RSUs were cancelled at the beginning of the third quarter due to termination of certain employees; therefore, 1,600 RSUs − 160 forfeited RSUs = 1,440.

5. Average of RSUs outstanding at the end of each quarter (1,600+1,600+1,440+1,440) ÷ 4 = 1,520.

6. Average number of RSUs outstanding × $1.00 for the fair market value of each award. In this example, it is equal to average compensation.

7. [Average stock price quarterly less (Fair market value at grant date)] times (Average number of RSUs outstanding during the quarter). For example, the intrinsic value for the first quarter is ($1.20 − $1.00) × 1,600,000 = $320,000. The intrinsic value for YTD is ($1.18 − $1.00) × 1,520,000 = $274,000.

8. During the third quarter, the grant had a negative intrinsic value of $288 that resulted in a windfall tax shortfall of $115. In practice, companies usually have a combination of grants that some are in a windfall tax profit position and the others in a windfall tax shortfall position.

9. Intrinsic value times 40% tax rate. For example, windfall tax profit for the first quarter is $320 × 40% = $128.

10. Assumed proceeds divided by weighted average stock price quarterly or weighted average stock price YTD. For example, the assumed proceeds of the first quarter is $1,728 ÷ $1.20 (weighted average stock price), equal to 1,440 purchased shares.

11. The excess of executive compensation (in thousands), which is ($50,000 ÷ 1,000), divided by weighted average stock price YTD. For example, in the first quarter, the IRC section 162(m) limitation is $50 ÷ $1.20 = 42 shares.

12. Weighted average RSUs outstanding less (hypothetical) total repurchased shares. For example, in the first quarter the incremental shares is 1,600 − 1,398 = 202. The number of incremental shares in the third quarter is nil, because it is antidilutive.

13. Net income divided by weighted average diluted shares. For example, in the first quarter, $910 ÷ 10,202 = $0.0892.
Windfall Tax Profits and Shortfalls

The tax impact of RSU exercises for the calculation of EPS mirrors the provisions of tax accounting for equity awards. There are two different approaches for tax accounting related to exercise of equity awards: The first is the “tax law ordering” approach, whereby a company follows the ordering provisions within the tax law to determine the sequence in which the net operating losses (NOL) and other tax attributes should be utilized for tax purposes. The second is the “with and without” approach, whereby the windfall is considered realized and recognized for financial statement purposes only when an incremental benefit is provided after the company has considered all other available tax benefits (e.g., NOLs). ASC 718 requires the application of the latter approach in the calculation of diluted EPS.

The windfall tax profit is the incremental tax benefit that exceeds the previously deferred tax assets recognized for that particular award (ASC 718-640-35-2). Companies must measure this windfall tax profit using the with-and-without approach (ASC 718-740-35-5). This approach gives primacy to continuing operations, which means that windfall tax profits would not offset current-year taxable income (i.e., a benefit would not be recorded in additional-paid-in-capital, APIC) if the amount of available NOL carryforwards generated from continuing operations is sufficient to offset the current-year taxable income before considering windfall tax profits. Therefore, a company cannot include a tax benefit in the calculation of assumed proceeds under the treasury stock method.

Additional Tax Considerations

The windfall tax benefits and shortfalls are impacted adversely by IRC section 162(a)(1), which allows a company to deduct ordinary and necessary expenses it has incurred as part of carrying on its trade or business. Publicly held companies, however, are subject to the IRC section 162(m) limitation, which states that for certain employees, the compensation expense deduction is limited to $1 million per year. The limit in IRC section 162(m)(1) applies to the company’s chief executive officer and the four highest paid executive officers (the chief financial officer is excluded from this
The guidance on the calculation of EPS does not specifically address the IRC section 162(m) issue. Absent specific guidance, the authors follow the conceptual approach that the application of tax rules in EPS should generally mirror the tax laws and their application for the calculation of tax liabilities and deferred tax assets liabilities.

The IRC section 83(b) election enables an employee to pay tax on the fair market value of equity awards on the grant date rather than the vesting date. An IRC section 83(b) selection does not, however, change the requirement for an employee to satisfy the vesting conditions. An IRC section 83(b) election must be filed no later than 30 days after the grant date; once filed, it remains irrevocable. RSUs by definition cannot be subject to IRC section 83(b); upon election they would change their status from an RSU to a restricted stock.

**An Example of the Treasury Stock Method**

The following hypothetical example reflects the quarterly and year-to-date (YTD) calculations of basic and diluted EPS.

**EXHIBIT 2**

Calculating EPS: Two-Class Method

<table>
<thead>
<tr>
<th>(in thousands, except per-share amounts)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Common stock dividend paid 10,000 shares, times $0.05</td>
<td>$500</td>
<td></td>
</tr>
<tr>
<td>Unvested RSUs (net of expected forfeiture dividend paid) 1,440 shares</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1,600 shares granted, less 160 forfeiture estimate), times $0.05</td>
<td>72</td>
<td></td>
</tr>
<tr>
<td>Total dividend paid</td>
<td>$572</td>
<td></td>
</tr>
<tr>
<td>Undistributed earnings (net income of $910 less dividend paid of $572)</td>
<td>$338</td>
<td></td>
</tr>
<tr>
<td>Undistributed earnings per share</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11,600 shares (10,000 common stock shares and 1,600 RSUs)</td>
<td>$0.0291</td>
<td></td>
</tr>
</tbody>
</table>

**Basic EPS calculation:**

<table>
<thead>
<tr>
<th>Common Shareholders</th>
<th>RSU Holders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undistributed earnings</td>
<td>$0.0291</td>
</tr>
<tr>
<td>Distributed earnings</td>
<td>0.0500</td>
</tr>
<tr>
<td>Total</td>
<td>$0.0791</td>
</tr>
</tbody>
</table>

¹. 72 (dividend to RSU holders) divided by 1,600 (number of RSU holders).

Entity A has a net income of $1 million per quarter, excluding any stock compensation, and a weighted average of 10,000,000 shares of common stock outstanding. The company has already exhausted all its NOL carryforwards; therefore, the RSUs’ windfall tax profits are deductible for tax purposes. The tax rate for entity A is 40%. The quarterly and YTD average stock price ranges between $0.80 and $1.40.

On the first day of its fiscal year, Entity A grants 1,600,000 RSUs to its employees and executives at $1.00 per share (fair market value at the time of grant). The RSUs will become vested in four annual tranches (i.e., there are four cliffs, and at the anniversary of each cliff 25% of the RSUs granted are vested). The grantee must be employed by the company on each vesting date to become vested in each tranche. Entity A has elected a policy of straight-line attribution for recognition of the RSU expense. Therefore, the stock compensation expense for each quarter is $100,000. The RSUs granted to the executives of the company are not performance-based and trigger the IRC section 162(m) limitation. Entity A has not pay any dividend to its common stockholders or the holders of RSUs.

The estimated forfeiture rate for both employees and executives is 10%. At the end of the second quarter, 160,000 RSUs were forfeited due to the termination of an executive. There were no other forfeitures for the remainder of the fiscal year and the first quarter of the following year. At the end of the second quarter, Entity A believed that the forfeiture of RSUs related to the terminated executive was an anomaly, and accordingly it trued up for the actual forfeiture in the second quarter and continued to apply the 10% forfeiture rate going forward. This true-up implies that the company has adjusted the amount of the forfeiture reserve to actual forfeited awards in the second quarter.

Entity A estimates that total compensation of its CEO exceeds $1 million ($1,050,000) in this and the following fiscal year. The compensations of other executives, however, remain below the $1 million threshold and do not trigger the 162(m) limitation.

In the third quarter, due to a decline in stock price, Entity A had a windfall tax shortfall. The inclusion of RSUs in this quarter would be antidilutive, and, as a result, they should be excluded from the diluted EPS calculation.

The EPS calculation is presented in the summary financial statements in Exhibit 1. The presentation of EPS is usually presented to two decimal points, but is presented here to four decimal points to better reflect the dilutive effect of the treasury stock method.

**Two-Class Method for Calculating Basic EPS**

ASC 260-10 requires that companies with multiple classes of common stock or with securities other than common stock that participate in dividends (i.e., participating securities) use the two-class method of computing EPS. The two-class method is an earnings allocation approach that determines the EPS for each class of common stock and participating securities according to the dividends declared (or accumulated) and participation rights in undistributed earnings. In June 2008, FASB issued Staff Position (FSP) Emerging Issues Task Force (EITF) 03-06-1, *Determining Whether Instruments Granted in Share-Based Payment Transactions Are Participating Securities* (ASC 260-10). This guidance addresses whether the instruments granted in
share-based payment arrangements are participating securities prior to vesting and, therefore, should be included in the calculation of EPS.

Paragraph 6 of FSP EITF 03-06-1 (ASC 260-10-45) states: “Unvested share-based payment awards that contain non-forfeitable rights to dividends or dividend equivalents (whether paid or unpaid) are participating securities and shall be included in the computation of earnings per share pursuant to two-class method.” The following illustration reflects the impact RSUs granted in the previous example in the calculation of EPS pursuant to the two-class method in the first quarter of the first year presented:

The prior example had assumed that there was no dividend applicable to unvested RSUs. If instead Entity A pays $0.05 per common per-share dividend on a quarterly basis and the common shareholders and the holders of RSU have rights to the dividend on 1:1 basis (share of common stock : RSU), the calculation of the two-class method for basic EPS in the first quarter would be as shown in Exhibit 2.

Considerations to Remember

The earnings per share (EPS) computation and the impact of stock compensation on the calculation of diluted per share is undoubtedly one of the most complex aspects of reporting for a publicly held company. Management of a publicly held company must be cognizant that grants of equity awards impact the calculation of the denominator of diluted and basic EPS, alongside the stock compensation expense. Managers should keep the following considerations in mind:

- A greater amount of proceeds (the numerator of treasury stock method) and a lesser average market price (the denominator of treasury stock method) during the reporting period would produce a greater number of shares that a company could theoretically repurchase and would lower the dilution.
- A higher average stock price usually results in higher windfall tax profits and lowers dilution.
- The estimated forfeiture impacts only the net income (the numerator of EPS), but the actual forfeiture impacts the number of shares (the denominator of diluted EPS) and a higher number of actual forfeited RSU awards generally lowers the dilution.
- The tax rate impacts the amount of windfall tax profits or shortfalls, and a higher tax rate creates a higher windfall tax profit and a lower dilution.
- The IRC section 162(m) provision, if applicable, reduces the windfall tax profits and results in a higher dilution.

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