



The majority of long-term incentives arrangements utilize shares of company stock as a mechanism for driving employee behavior and aligning compensation to shareholder value creation. The use of shares does not create a cash expense; however, it does have a cost to shareholders through dilution of earnings and voting power of existing shareholders. (See separate document for accounting treatment of long-term incentives.) Dilution, overhang and run rate are various methods for measuring this cost to shareholders.

Dilution and Overhang

The terms dilution and overhang are often used interchangeably to refer to the same analysis and calculation. When a company uses shares of stock through stock options, restricted shares, performance shares or other share-based arrangements, earnings and voting power of existing shareholders are diluted. Using a simple example of a company with 100 shares outstanding, each share entitles the owner to 1% of company earnings and 1% of the voting power of the company. If Jon held 5 shares of stock, he would own 5% of the company. Now assume the company reserves 10 new shares of stock to be used for stock options to executives. If all of those shares are issued, the company will have 110 shares outstanding, and Jon's 5 shares will now command a smaller portion of earnings and voting power of the company. The formula to calculate the potential dilution (or overhang) of issuing these 10 shares is as follows:

- A = Incentive Shares Reserved in Plans but Unissued
- B = Incentive Shares Outstanding (unexercised options, unvested RSUs)
- C = Total Common Shares Outstanding

$$\text{Potential Dilution (Overhang)} = (A + B) / (A + B + C)$$

Applying this formula to the example above would result in $10 / (10 + 100) = 9.01\%$. This means that an existing shareholder's earnings and voting power would be diluted by 9.01% if all 10 shares were issued.

Most companies keep a close watch on dilution to ensure costs to shareholders are kept within acceptable limits. This is typically done through a comparison of dilution levels to a group of similarly sized peer companies within the same general industry. If potential dilution (overhang) is kept within a reasonable range (25%–30%) of the 50th percentile of peers, it will likely remain acceptable from a shareholder perspective.

Run Rate

Run rate (or burn rate) is a simple method for measuring the annual usage of shares for incentive purposes. The formula for run rate is:

- A = Total shares issued in fiscal year for incentives (option, RSU, restricted share grants)
- B = Weighted Average Common Shares Outstanding

$$\text{Run rate} = A / B$$

Run rate allows a company to track how quickly it is using its available shares. A high run rate indicates the available share pool may be used more quickly. A high run rate, over multiple years, will likely lead to high dilution (overhang) levels. Most companies aim to maintain run rate levels of less than 2%.

Institutional Shareholder Services (ISS) Methodology

ISS applies its own methodology when evaluating dilution and run rate. ISS applies this evaluation whenever a company seeks shareholder approval for a new authorization of shares under an incentive plan. The ISS dilution approach is referred to as their Shareholder Value Transfer (SVT) model and they refer to run rate as burn rate. The SVT model has some similarities to the simple dilution formula described earlier; however, the SVT model differentiates between vehicles such as stock options and restricted shares, placing a greater weight on full-value share awards such as restricted shares. The ISS burn rate formula is very similar to the run rate formula discussed earlier; however, ISS applies a factor to full-value awards giving them greater weight.