

# Stock Based Compensation Accounting: Journal Entries

Under US GAAP, stock based compensation (SBC) is recognized as a non-cash expense on the income statement. Specifically, SBC expense is an operating expense (just like wages) and is allocated to the relevant operating line items:

1. SBC issued to direct labor is allocated to cost of goods sold.
2. SBC to R&D engineers is included within R&D expenses.
3. SBC for management and those involved in selling and marketing is included in SG&A and other operating expenses.

The consolidated income statement will often not explicitly identify SBC on the income statement, but it's there, inside the expense categories. In fact, footnotes in financial filings will often detail the allocation by expense category.

Operating activities:  
Net income  
Adjustments to reconcile net income to cash and cash equivalents:  
Depreciation and amortization  
**Stock-based compensation**  
Deferred income tax expense  
Changes in operating assets and liabilities:  
Accounts receivable, net  
Inventories  
Vendor non-trade receivables  
Prepaid and non-current assets

## Stock based compensation journal entries

There are two prevailing forms of stock based compensation: Restricted stock and stock options. GAAP accounting is slightly different for both. We'll start with an example with restricted stock and then proceed to stock options.

### Restricted stock example

- On January 1, 2018, Jones Motors issued 900,000 new shares of restricted stock to employees
- Jones Motors current share price is \$10 per share
- Employees cannot sell their shares for a "service period" of 3 years
- Vesting occurs only if employees stay with the company for 2 years; otherwise the shares are forfeited

The journal entries are as follows:

January 1, 2018 - The grant date

	Debits	Credits
Contra-equity - Unearned (deferred) Compensation <sup>1</sup>	\$9.0 million	
Common Stock & APIC – Common Stock <sup>2</sup>		\$9.0 million

<sup>1</sup> The unearned compensation account is simply a contra-equity account to make the balance sheet balance. It will be reduced as the employees earn their awards.

<sup>2</sup> Calculated as [300,000 shares \* \$10 per share].

First, notice that nothing really happened. An equity account was created and was exactly offset by a contra-equity account. Also notice that there is no income statement impact and no stock based compensation expense has been recognized yet. It will only be recognized once it's earned (i.e. vested). Also notice that the value of each share of restricted stock recognized by Jones Motors on its balance sheet is equal to its current share price. That's not the case with stock options as we'll see shortly.

#### January 1, 2019 - After one year

	Debits	Credits
Retained earnings - SBC expense	\$3.0 million	
Contra-equity - Unearned (deferred) Compensation		\$3.0 million

The same thing will happen on January 1, 2020 and again one final time on January 1, 2021.

So that's the basic accounting for restricted stock under GAAP. The key takeaways are:

1. Common stock and APIC is impacted immediately by the entire value at grant date but is offset by a contra-equity account, so there is no net impact.
2. The value recognized for each restricted share is the same as its current share price (for non-dividend paying stock).
3. Restricted stock is recognized on the income statement over the service period

Once the restricted stock is vested, the employees that own them can trade them and do whatever they want with them. However, if an employee leaves prior to vesting, the stock based compensation expense is reversed via the income statement. In our example, had the employees left after 1 year, the restricted stock would be forfeited and the following journal entries would need to be made:

#### January 1, 2019 - Employees forfeit their restricted stock

	Debits	Credits
Contra-equity - Unearned (deferred) Compensation <sup>1</sup>	\$3.0 million	
Retained earnings - SBC expense		\$3.0 million

We now turn to the accounting and journal entries for stock options, which are a bit more complicated.

### Stock options example

- On January 1, 2018, Jones Motors issued 900,000 stock options to employees
- The exercise price of the options is \$10 per share.
- Jones Motors current share price is \$10 per share.
- The fair value of each stock option is determined by Jones Motors to be \$5 using the Black-Scholes option pricing model.
- The stock options will vest over 3 years: 33% on January 1 of each over the next 3 years.

The journal entries are as follows:

#### January 1, 2018 - The grant date

Nothing happens at the grant date. Unlike restricted stock, there are no offsetting journal entries to equity at the grant date. The stock options do not impact the common stock and APIC balance at the grant date.

### January 1, 2019 - After a year of vesting

	Debits	Credits
Retained Earnings - SBC Expense <sup>1</sup>	\$1.5 million	
APIC - Stock Options <sup>2</sup>		\$1.5 million

<sup>1</sup> Calculated as 300,000 shares \* \$5 per share. This is an expense recognized on the income statement. It reduces retained earnings.

<sup>2</sup> To balance the balance sheet, APIC for stock options increases

The same thing will happen on January 1, 2020 and again one final time on January 1, 2021. Now unlike restricted stock, once stock options vest, they still need to be exercised in order to become shares. So assume the following:

- On January 2, 2021, the day after all the stock options vest, all option holders exercise their options
- Jones Motors share price on the exercise date (January 2, 2021) is \$20 per share.

### January 2, 2021 - Upon the exercise of options

	Debits	Credits
Asset (Cash) - Option Proceeds <sup>1</sup>	\$9.0 million	
APIC - Stock Options <sup>2</sup>	\$4.5 million	
Common Stock & APIC - Common Stock		\$13.5 million

<sup>1</sup> Calculated as 900,000 shares \* \$10 per share.

<sup>2</sup> Calculated as 900,000 shares \* \$5 per share. As options are exercised and become common stock, the APIC - Stock Options account is reversed and transferred into this Common Stock & APIC - Common Stock account below.

Notice that the net increase to equity on the balance sheet at the exercise date is simply the amount of option proceeds. When building [financial statement models](#), the fact that there is actually a transfer from the APIC - Stock Options account to the Common Stock & APIC - Common Stock account is ignored and only the net effect is modeled. Notice also that the market price of Jones Motors stock price is irrelevant in the journal entries.

## Digging deeper on stock based compensation

So far, we have described the GAAP accounting treatment of stock based compensation. In practice, many analysts actually ignore the stock based compensation expense entirely when [calculating EPS](#) or [when calculating EBITDA](#) or when [valuing companies](#). We discuss the wisdom of these approaches separately in those individual articles.