

## Pocket Guide to Share Option Valuations

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Share options are a common and attractive way to incentivise directors and employees as they allow the company to conserve cash, encourage long-term decision-making and act as a retention mechanism.

Typically, once the options are issued two valuations are required: one for tax and one for financial reporting, which often require separate valuation approaches and lead to different outcomes.

In this guide we will only consider the accounting valuation requirements under IFRS and UK GAAP which are almost identical in their requirements.

### 1. Why does this matter?

Boards can be caught out by the complexity of the accounting valuation requirements: a seemingly small change in option terms can lead to an unexpected increase in complexity and thus result in a need to consult a valuation specialist which, if not engaged quickly enough, can also result in delays to timetables, changes to profit numbers and audit fee overruns.

Increasing regulatory focus means that auditors are less inclined to accept simpler and cheaper Black Scholes valuations as reasonable approximations for options that should be valued using the more complicated Monte Carlo method.

This pocket guide provides a whistle-stop tour of how different vesting conditions drive the accounting valuation requirements which in turn affect the cost and complexity of the valuation method needed. This will allow company boards and their finance teams to ascertain the accounting impact of the options that have been issued or are about to be issued and kick start the conversations with their auditors.

### 2. Setting the scene

When a company grants share options to employees which, subject to any vesting conditions, may result in the company issuing shares, it enters into an equity-settled share-based payment transaction. The fair value of the options granted is calculated once - at the date of grant and is not subsequently remeasured (unless the terms are modified before the options vest).

How to value such options, and whether these transactions should even be recognised at all, has been a subject of heated debates in accounting circles. After all, is it not the shareholders rather than the company who bear the cost of the share options through dilution? How can one reliably value share options that may be settled years into the future, particularly for a private or a newly listed entity?

IFRS standard setters have recognised that, if the equity-settled share-based payments are to be recognised in the accounts, then an expansive set of rules needs to be created in order to ensure comparability of financial statements and accept that these rules will always have their detractors.

The end result – IFRS 2 *Share-based Payment* – consists of a set of rules that may appear arbitrary and even contradict with accounting treatment in other IFRSs for similar transactions. Therefore, extrapolating experience of accounting from one scheme to another can fall afoul of these specific rules.

With the exception of micro entities, all UK companies have to account for share-based payments, with UK GAAP, which closely mirrors IFRS 2.

### 3. Vesting conditions

The most crucial step when accounting for and valuing share options is to classify each vesting condition into the 3 categories set out in IFRS 2, as it determines whether or not these conditions are incorporated into the option valuation and whether the option charge is reversed if the condition is ultimately not met.

The 3 categories are:

1. **Non-vesting conditions** – broadly speaking, these are vesting conditions that do not include an explicit or implicit service requirement for the option holder. In simple terms, it means the condition is not linked to continuous employment requirement. A typical example would be options that vest in the event of an IPO, where the employee may need to complete a minimum employment period, say, 1 year pre-IPO, but there is no requirement to be employed at the date of the IPO itself which can be, say, 5 years into the future. Non-vesting conditions are incorporated into the valuation. As an aside, the reason for the confusing terminology is due to the fact that these conditions do not affect the ‘vesting period’ over which the option charge is spread.
2. **Market-based vesting conditions** – these are vesting conditions which include a service requirement and are linked to the market price (or value) of the company’s equity instruments. Examples include conditions linked to the company’s share price or total shareholder return, whether in absolute terms or relative to an index or a peer group. Just like non-vesting conditions, they are incorporated into the valuation. No true-up is allowed in the financial statements if the options do not vest due to the failure to meet the market-based condition.
3. **Non-market based vesting conditions** – these are essentially all vesting condition that do not fall into the categories above. They are vesting conditions that are linked to the service requirement but are not linked to a market condition and are instead linked to some other metric related to the company, such as revenue, EPS, ESG or profit targets. Share options that do not have any vesting conditions other than continuous employment fall into this category. Unlike the other two categories, these conditions are ignored when the options are valued. Instead, these conditions drive the ‘true-up’ of the option charge as detailed below.

At each reporting date, management have to estimate the number of options expected to vest based on the non-market-based performance conditions alone and adjust the cumulative IFRS 2 charge accordingly.

Below is a helpful summary:

	Impact on grant date fair value	Impact on IFRS 2 charge at reporting date	Impact on IFRS 2 charge if condition is ultimately not met
Non-vesting conditions	Incorporate into the valuation	Ignore when estimating number of options expected to vest	Charge is not reversed*
Market-based vesting condition			
Non-market-based vesting condition	Ignore in the valuation	Incorporate when estimating number of options expected to vest	Charge is reversed

\*Failure to meet some non-vesting conditions is treated as a cancellation leading to accelerated recognition of IFRS 2 charge.

Therefore, two very similar option agreements can have a very different accounting treatment and valuation cost.

A share option agreement that requires continuous employment and is linked to a profit/EBITDA target is (as discussed in the next section) relatively straightforward to value and will result in an IFRS 2 charge that reflects the actual number of options that vested. The same option agreement but linked to the share price instead will be more complex to value and the IFRS 2 charge for the options that lapsed solely due to the failure to meet the share price target will remain in the financial statements.

#### **4. Valuation method: Black Scholes vs Monte Carlo**

Having established which, if any, vesting conditions need to be included in the IFRS 2 valuation, the question to consider is how to do the valuation itself. Valuation is, of course, an art and not a science, but the following is the generally accepted approach to valuing share options for accounting purposes.

Broadly speaking, a mathematical model has been developed that gives a distribution of possible share prices at a future date, based on the current share price and a handful of assumptions regarding the underlying shares, such as volatility, expected dividend yield and market risk-free rate.

The next task is to turn this future share price distribution into a single figure, which is the value of the option. Depending on the option terms, this can either be done using a formula (the Black Scholes model), or a numerical computation needs to be performed (the Monte Carlo method).

##### Black Scholes

The Black Scholes model is a formula that gives a theoretical valuation of a simple call or put option. The mechanics of the valuation are therefore relatively straightforward, and the complexity is driven by the accounting analysis of vesting conditions and calculation of inputs.

Some finance teams may be able to perform the whole calculation in-house and the audit teams would review the valuation without engaging their own internal valuation specialists.

The drawback of the Black Scholes model is that it can only be applied to 'simple options'. In other words, the gain on the exercise of the option must depend solely on the difference between the share price and exercise price and there can be no vesting conditions attached to the option, such as no minimum thresholds, cap and collars, etc.

Linking back to the earlier discussion, this means that the Black Scholes model would typically be used where the share options only have non-market-based vesting conditions (as these are ignored in the valuation).

For all other options, a numerical simulation will need to be performed.

##### Monte Carlo

The most common method of computing option values numerically is to apply the Monte Carlo method. It works by taking the initial share price and simulating, many thousands of times, its possible future movements over the term of the option in order to arrive at a representative sample. The option value for each simulated share price path is calculated and the average over all paths is the value of the share option.

The Monte Carlo method is very robust and can accommodate multiple and complex vesting conditions.

Its drawback is that a valuation specialist will need to be engaged to build the model and the company's audit team will also require specialist support, leading to an increase in cost. The increase in costs can be compounded further if the need for the model is discovered late in the audit process and the model needs to be built and audited at the last minute.

## **5. How ONE Advisory can help**

We can assist with every step of accounting for share options, including:

- Analysis of the share option agreement to cover all aspects of the accounting treatment and advising on the suitable valuation model, taking materiality into account;
- Calculating the inputs into the valuation model and documenting assumptions made;
- Building a Monte Carlo valuation model if required;
- Calculating the IFRS 2 charge for the current and future reporting periods and considering accounting requirements for entities within a group if applicable (this is one area of difference between UK GAAP and IFRS);
- Drafting applicable accounting disclosures for the annual report; and
- Liaising with your auditors.

We can also prepare an impact assessment of a proposed scheme prior to its implementation to avoid any surprises.

If you would like any further information on valuing share options, please get in touch with us.

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