

# 27 FABLES of ESOP - Valuation of Stock Option Case Studies

*The significance of how valuable the stock options are cannot be undermined. A large number of companies use stock options, however very few professionals work in this area. It is highly recommended that young Company Secretaries get into this area and make their mark. With registered valuer concept becoming reality the study of ESOP valuation carries vital importance.*



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Last week of May 2018 started with two significant news. One, an announcement by Tata motors, the first flagship TATA entity to offer ESOPs and another on the TV channels Walmart acquiring flipkart and Sachin Bansal co-promoter and founder getting billions under ESOP. The significance of how valuable the stock options are cannot be undermined.

## CASE 1

Tata Motors has offered \$45 billion of equity to employees through stock options amounting to a little less than half a percent of its total equity. In this endeavor it has left behind other formidable TATA companies like Tata steel and TCS (yes, even IT sector).

The value additions arising out of ESOPs are

- ring fencing critical talent during turnaround phase, to quote P B Balaji CFO Tata Motors
- compensating management while making losses
- to compensate top management adequately without breaching the restriction under Companies Act of 5% of a company's profits on remuneration to whole time directors.

A large number of companies have used stock options, however very few professionals work in this area. It is highly recommended that our young CSs get into this area and make their mark. With registered valuer concept becoming reality the study of ESOP valuation carries vital importance.

## CASE 2

Indian laws (Companies Act, 2013) prohibit grant of stock options to non-employees. But globally stock options to non-employees are quite popular. The most famous case that comes to mind is of Indian Sabir Bhatia of Hotmail fame who issued stock options to his suppliers and service providers too. ESOPs have been used practically as currency by technology companies during the dotcom boom.

## CASE 3

Sachin Bansal of Flipkart (promoter – co-founder) earned

billions of dollars through his stake sale to Walmart. Though Companies Act prohibits stock options to promoters, the Singapore based foreign company could issue stock options to Indian subsidiary company's promoters.

An ESOP professional will come across complex factors of such nature to be considered in valuation of stock options.

The International Financial Reporting Standards under IFRS 2 and Ind AS 102 India's convergent accounting standards with IFRS, prescribe the accounting treatment and measurement (valuation) of ESOPs. To put it in simple terms, IFRS 2 (and Ind AS 102) has separate methodologies for measurement of stock options granted to non-employees and employees. Those granted to non-employees are to be recorded at fair value of goods and services provided. However, if the fair value cannot be measured reliably then the same should be measured at fair value of the ESOP instrument (that is, option granted).

Fair value measurement of goods and services provided could be comparatively easy (or rather less difficult). However, one may come across complex situations, for example, a non-employee, say a consultant, may be creating a new product or process resulting in creation of patent resulting in providing a capital intangible asset. Measuring such asset reliably would be surely too technical due to the uncertainty of benefits attached to it. A R&D company did it for one pharma company (name cannot be disclosed) with stock option granted as consideration.

## CASE 4

A telecom company bought 5 crores of handsets at a negligible per unit price. To compensate the supplier, it provided stock options of a giant group's subsidiary which was unlisted. Another instance of using equity as currency!

## CASE 5, 6

Another situation which needs consideration is change in existing shareholders stake. If it is increased due to rights and bonus shares then should the stock option holders and convertible option holders' stakes increase proportionately, i.e., should "value for value" principle be adopted? Almost all the companies have followed the intrinsic value method while making adjustments to outstanding options. Given the lack of clarity in the regulations, no one seems to have objected to such adjustments. Some of the recent cases where companies have used intrinsic value to make adjustments are:

Demerger between Polaris Financial Technology Limited

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(Demerged Company) and Intellect Design Arena Limited (Resulting Company).

Merger of Mahindra Satyam with Tech Mahindra (source -<http://www.esopdirect.com/newsletter/Corporate%20action%20adjustment.pdf>)

### CASE 7

Talking about Mahindra Group, Restricted Stock Units (RSU) comes to mind.

An *option* is a right to purchase stock of a company sometime in the future for a stated price, subject to a number of restrictions and limitations. Until you buy the stock, you own nothing, and if you don't buy the stock, you never own anything.

A *restricted stock unit* is a contractual promise by the company to either issue you stock a long time in the future after various events have taken place, or else pay you the cash equivalent. Similar to options, you don't own anything and you have no rights until and unless you own the stock, but it's a step further removed. It's basically phantom stock, a right to payment that is indexed on the future price of the company's stock.

(Source - Sir Gilberman, I've founded more startups than I can remember, and advised hundreds.)

In valuations of RSUs, the stocks are issued free and hence will have higher tax impacts.

### CASE 8

Amazon India which has offered RSU to its employees looks higher in first 2 years because of the way in which their compensation is designed:

Year 1: Base pay + sign-on

Year 2: Base pay + sign-on

Year 3: Base Pay + RSU

Year 4: Base Pay + RSU

It can be observed that sign-on is 25-30% of base pay. No hike on that annually. RSUs vest at 5%, 15%, 40%, 40% in years 1, 2, 3, 4. Most leave in 2 years – so one won't get 80% of one's RSUs.

(Source <https://www.quora.com/What-is-Amazons-stock-compensation-practice>)

### CASE 9

This is nothing but rolling stock options which were introduced by famous INFOSYS in India in 1990. It introduced graded stock options and had made an exception for its CEO Vishal Sikka when he joined the company in August 2014. At that time Infosys had granted the former SAP product chief 22,794 restricted stock units as part of his annual pay package that included stock options worth \$2 million a year.



[//economictimes.indiatimes.com/articleshow/50988373.cms?utm\\_source=contentofinterest&utm\\_medium=text&utm\\_campaign=cppst](http://economictimes.indiatimes.com/articleshow/50988373.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst)

### CASE 10

A bank in Saudi Arabia introduced graded stock options for employees with 1/3<sup>rd</sup> and 2/3<sup>rd</sup> to be exercised within completion of 18 and 30 months. The typicality of these options was they were granted by parent in USA and hence the valuation and accounting treatment as per US GAAP & IFRS differed in values. So, another aspect to be considered is whether use of different accounting standards would affect valuations.

The Securities and Exchange Board of India has clarified rules on employee stock option plans (ESOPs) after the new insider trading rules restricted the timing of sale of such shares. "Where a designated person sells shares (say on August 01, 2015), acquires shares later under an ESOP (say on September 01, 2015) the acquisition under ESOP shall not be a contra trade. Further, he can sell/pledge shares so acquired at any time thereafter without attracting contra trade restrictions. He, however, will not be able to purchase further shares during the period of six months from August 01, 2015 when he had sold shares."

Source -[//economictimes.indiatimes.com/articleshow/48671125.cms?utm\\_source=contentofinterest&utm\\_medium=text&utm\\_campaign=cppst](http://economictimes.indiatimes.com/articleshow/48671125.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst)

This is an effective mechanism to control insider trading and such controls should be incorporated at global level also.

### CASE 11

Overseas ventures like Jacobs Engineering offer stock options



which provides a classic example of non-vesting conditions -le of non-vesting conditions -

The following employees shall not be Eligible Employees under the Plan:

- i. Employees who normally work fewer than 20 hours per week;
- ii. Employees who normally work five or fewer months during the fiscal year of the Company;
- iii. Employees who have completed less than one year of employment by the Company or a participating subsidiary of the Company; and
- iv. Employees who are not actively employed by the Company at the beginning of a six-month Election Period, including employees who are on disability leave or leave of absence.

Source- <https://www.sec.gov/Archives/edgar/data/52988/000119312509011928/dex101.htm>

A valuer should first consider the following dimensions in order to arrive at fair valuation:

- a) Employees or non-employees
- b) Cash settled (SAR) or equity settled

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### c) ESPPS/ESPP or ESOP

#### CASE 12, 13

Let us now understand the terms like SAR. Mindtree and Saregama have issued ESOPs to be settled in cash, based on appreciation in share price and SEBI has clarified that it does not require its approval.

#### CASE 14, 15, 16, 17, 18

While Bank of America was the first one to introduce SARs in 2006. DLF, Birla SunLife, Bajaj Allianz, Cairns India followed largely the same which are famously titled as phantom stock options. In this, the treatment is similar to a shareholder in respect of dividends, bonus, rights etc. accumulating which gave a lot of retention value in the eyes of HR and employees both.

#### CASE 19

An example of a pharma company in Japan (name not disclosed) is worth studying. It offered listed MF options and listed debentures options of the group owned financial sector companies.

#### CASE 20

This may not be so relevant in India as the trading in debt market is not very easy. However, in the Indian context, new trends wherein stock options carry privilege of cash settlement if listing does not happen by a specific date are worth considering. Such options were granted by Foundation software, a famous ERP implementors of Y2k period. Valuation in such cases is carried out based on comparison of grant date fair values of both options and rights. If the options' fair value is higher then the difference is recorded as equity over a period while liability valuation including reassessment is recorded for liability portion.

#### CASE 21, 22

While on the subject of unlisted companies' huge numbers of start-ups come to our mind. These are booming in India. In the case of start-ups, stock option issue to promoters and few other liberal provisions have been made, compared to strict ruling of listed companies which can issue only up to 1% per employee maximum of the issued capital. The pharma aggregators like Netmeds, 1mg, the glassdoor.com anonymous feedback tells a lot about unlisted start-up wherein investors are expected to queue-in. Essentially the valuation of aggregators' shares depends on market and growth. So also, the ESOPs valuation with which the GMV gross mercantile value becomes a popular model to be used as a base.


#### CASE 23, 24

Similarly, giant famous taxi-hire aggregators like OLA and Uber offer huge stock options and the settlements go in few crores for key employees even in first few years. Then comes a growth phase like OLA acquired TFS with some major investments and cross-mergers, making GMV model vulnerable and multi-dimensional.

Ref. source vccircle.com.

#### CASE 25

The demerger of Blue star and blue star infotech was done with main objective of segregating a legal entity wherein

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stock options can be offered to growing IT sector employees distinguishing the IT company from white goods sector with lower growth and blue collared employees. It kept 3 parameters for eligibility like performance, years of service and grade.

### CASE 26

Similar mergers in pharma biggie Pfizer acquiring Park-Davis settled employee stock options of departmental heads for a few crores as early as in 1997 (imagine PPP that time and value of a crore those days.)

### CASE 27

One scheme of a famous insurance company even kept a restriction on sale of shares by an employee for a few years even after vesting. Such factors bring down the fair value in valuation.

To summarise, a valuer has to be agile enough to consider various factors in valuation even before applying mathematical models like Black and Scholes OR Binomial model. A mere financial modelling for the same does not mean an acumen for ESOP valuations.

The various factors leading to assumptions to be considered for mathematical models as provided in International valuation standards and International financial reporting standards as well as Ind AS, India's convergent version of IFRS are-

- Current share price
- Expected volatility
- Expected dividends
- Market based performance conditions like transferability
- Term of vesting period
- Behavioural aspects

Other factors to be considered are –

- Merger, demerger and venture capital possibilities
- Start-up specialties
- Competition
- Industry growth rate
- Non-vesting conditions
- Performance, grade, seniority like conditions
- Normal compensation package (other than ESOPs and the ratio of the two)
- Ring fencing talent during loss years – so turnaround when and which year relative to vesting period
- Graded vesting requires calculation of value of each vesting period to be worked out as if each one is an independent scheme.

ESOP valuation is normally required for accounting. However, the age-old concept of human asset accounting will require a review of human assets valuation under Lev and Schwartz model to look at employee stock options even from angle of pure valuation principles (leaving aside accounting definition) and then behavioural aspects of human being also come

into picture with relative ease of retention for better brand companies than near equivalent competitors. The most widely used model of ESOP valuation is Black-Scholes model. It has critical assumptions like-

- 1) The short-rate interest rate and volatility are known and constant through time.
- 2) No transaction costs or services associated with buying or selling the option.
- 3) The options are European-style options which can only be exercised on the expiration date.
- 4) The returns on the underlying stock prices are normally distributed.
- 5) The Black-Scholes model assumes that markets are perfectly liquid and it is possible to purchase or sell any amount of stock or options or their fractions at any given time.

(source [http://ideaexchange.uakron.edu/cgi/viewcontent.cgi?article=1410&context=honors\\_research\\_projects](http://ideaexchange.uakron.edu/cgi/viewcontent.cgi?article=1410&context=honors_research_projects))

Black-Scholes Model

$$C = SN(d1) - KE(-rt)N(d2)$$

C = Theoretical call premium

S = Current Stock Price

t = time until option expiration

K = option strike price r = risk free interest rate

N = Cumulative standard normal distribution

There are three key differences between ESOs and short-term traded options that must be accounted for with the inputs.

- 1) ESOs cannot be traded which makes them worth less than a traded option that can be sold/exercised at will.
- 2) ESOs can be forfeited if employee is terminated whereas the Black-Scholes model assumes the option cannot be forfeited prior to expiration.
- 3) ESOs typically have much longer terms (ten years) than traded options.

Author's comments - The 3<sup>rd</sup> i.e. last point is not valid in most of the companies as we see in India currently that young generation employees are not emotionally attached to companies and many of the companies also do not believe in providing job security. So, 10 years is farfetched in fact it has moved downwards from 3 years lock-in to graded options within 3 years. (source - <http://www.morganstanleyfa.com/public/facilityfiles/mssb269144/f5324d6f-ad5d-4891-9358-bc8da5b77d4f.pdf>)

Lattice Model - Binomial Options Pricing Model. The Binomial Model is an open-form or lattice model that creates a tree of possible future stock-price movements to achieve the option's price. In contrast, the Black-Scholes model is a closed-form model that solves for an option's price from an equation. A big advantage of the binomial is that it can value an American-style option, which can be exercised before the end of its term, and it is the style of option ESOs usually take.

Having made clear, the complexity of ESO valuations, the author wishes great success for the CS Professionals who will be registered valuers soon by taking training and passing examinations, will make a mark for themselves not only in India but become global valuers by understanding valuation nuances. 