

SBP MARKET CONDITION VALUATION PERFORMANCE PRICE TARGET OPTIONS

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The valuation of a performance price target employee stock option can be valued using the following process:

- Use term structure for the risk-free interest rate (based on the implied forward rates).
- Use term structure (mirror, shift or constant) for estimating expected volatility.
- Overlay exercise behavior:
 1. Suboptimal exercise factor (SOEF) to account for early exercise based on exercise price multiple.
 2. Post-vest exercise factor to account for early exercise based on time (similar to the SAB 107 method).
- Use the Black-Scholes-Merton formula to get an upper bound for the Fair Value of the contract based assuming no target.
- Use the Barrier Up & In One Touch formula to get a upper bound for the Fair Value of the contract assuming a barrier condition.
- Use turnover rate to account for employees leaving the company and forfeiting their options, as follows:
 1. Compute both the Fair Value and the Derived Service Period assuming that the turnover rate is zero (both before and after the market condition has been met).
 2. Compute both the Fair Value and the Derived Service Period assuming that: a) the turnover rate is zero before the market condition has been met; and b) the turnover rate is non-zero after the market condition has been met).
 3. Compute both the Fair Value and the Derived Service Period assuming that the turnover rate is non-zero (both before and after the market condition has been met).
 4. Compute both the Fair Value and the Derived Service Period assuming that: a) the turnover rate is zero before the end of the Derived Service Period computed by item 3 above; and b) the turnover rate is non-zero after the end of the Derived Service Period computed by item 3 above.



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