

Intrinsic & Extrinsic Value

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1 Intrinsic & Extrinsic Value

1.1 Intrinsic Value

- The Intrinsic value of an Option is an answer to the following question: If you were to exercise the option right now, ie either buy or sell a certain stock at the current market price how much would that be worth?
- We calculate the Intrinsic value in different ways depending whether the option is a Call or a Put.

$$\text{In Calls: Intrinsic Value} = \text{Market Price} - \text{Strike Price} \quad (1)$$

$$\text{In Puts: Intrinsic Value} = \text{Strike Price} - \text{Market Price} \quad (2)$$

- In other words the Intrinsic value is the ITM portion of the Option Premium.

1.2 Extrinsic Value

- The Extrinsic Value of an Option Premium is any premium that is not intrinsic value.

$$\text{Extrinsic Value} = \text{Option Premium} - \text{Option's Intrinsic Value} \quad (3)$$

- It is comprised of mainly two components: Time Premium, Volatility Premium
- In other words it is the OTM portion of the Option Premium.
- Upon expiration extrinsic value is always 0.