

Pricing European barrier options with rebates

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Outline

- 1 The reason for selecting topic
- 2 Methodology
- 3 Objectives
- 4 Process and Completion

The reality of derivatives securities in Vietnam market



- 10/08/2017: opening derivatives market

The reality of derivatives securities in Vietnam market



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- Derivative products: stock index and government bond futures

The reality of derivatives securities in Vietnam market



- 10/08/2017: opening derivatives market
- Derivative products: stock index and government bond futures
- 12/2017: Options are expected to operate

The potentiality of the barrier options

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- Matching beliefs about the future behavior of the market
- Matching hedging needs more closely

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Advantages

- Matching beliefs about the future behavior of the market
- Matching hedging needs more closely
- Premiums are generally low

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- Based on the BlackScholes pricing paradigm

The martingate pricing approach

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- Using the reflection principle in the Brownian process

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- Based on the BlackScholes pricing paradigm
- Using the reflection principle in the Brownian process
- Deriving the density function of the first passage time to the barrier

New points



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- Classifying some pricing formulas

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- Classifying some pricing formulas
- Applying FPT stock to the research formula

Merits



Merits



- Applying the joint knowledge from 3 majors: risk management, finance and programming

Merits



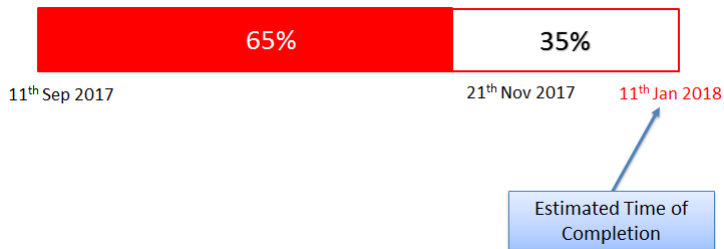
- Applying the joint knowledge from 3 majors: risk management, finance and programming
- Classifying the European barrier call option

Merits

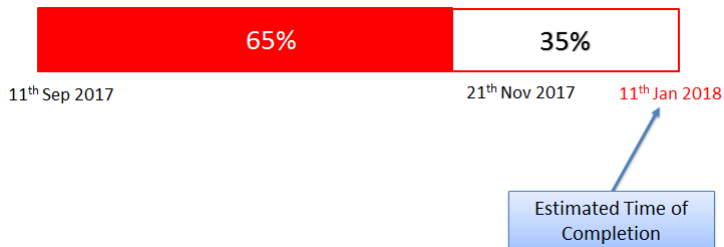


- Applying the joint knowledge from 3 majors: risk management, finance and programming
- Classifying the European barrier call option
- Applying this formula for Vietnam derivative market, especially FPT stock

Completion



Completion



- Completing 35% report
- Deriving the Black-Scholes-Merton model
- Applying the Black-Scholes-Merton model to FPT stock

Remain tasks

- Deriving the pricing model of the European barrier call option
- Apply this model to FPT stock
- Completing the report

Thanks for listening