

Financial Mathematics

MATH 5870/6870¹
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Le Chen

lzc0090@auburn.edu

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Auburn University
Auburn AL

¹Based on Robert L. McDonald's *Derivatives Markets*, 3rd Ed, Pearson, 2013.

Chapter 2. An Introduction to Forwards and Options

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§ 2.1 Forward contracts

§ 2.2 Call options

§ 2.3 Put options

§ 2.4 Options are insurance

§ 2.5 Summary of forward and option positions

§ 2.6 Problems

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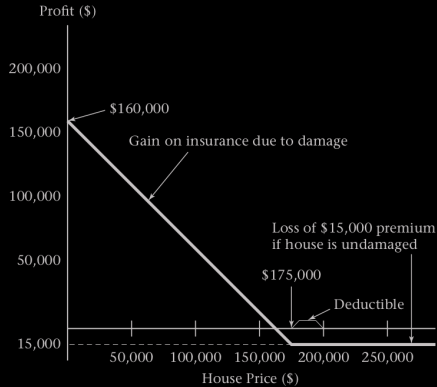
§ 2.6 Problems

Example 2.4-1 Homeowner's insurance is a put option:

Value of house = \$200,000

Deductible = \$25,000

Premium = \$15,000



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or
the value of the put option
depends on

- ▶ Riskiness of the underlying asset
 - ▶ The amount of deductible.
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Difference with options

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1. for an asset we already own.
 2. for a long position.
 3. against a decrease in value.
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2. for a short position.
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