

Financial Mathematics

MATH 5870/6870¹
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¹Based on Robert L. McDonald's *Derivatives Markets*, 3rd Ed, Pearson, 2013.

Chapter 5. Financial Forwards and Futures

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§ 5.1 Alternative ways to buy a stock

§ 5.2 Prepaid forward contracts on stock

§ 5.3 Forward contracts on stock

§ 5.4 Futures contracts

§ 5.5 Problems

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Definition 5.4-1 **Future contracts** are essentially exchange-traded forward contracts.

Typical features of futures contracts include:

- ▶ Standardized, with specified delivery dates, locations, procedures

- ▶ A clearinghouse

 - Matches buy and sell orders

 - Keeps track of members' obligations and payments

 - After matching the trades, becomes counterparty

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Differences from forward contracts

- ▶ Settled daily through the **mark-to-market** process
- ▶ Highly liquid: easier to offset an existing position
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We will not go further in this section. Interested students can read the textbook.