



# Young ICCA— Skills Training Workshop

## Introduction to Financial Instruments

Erin B. McHugh, CFA

Associate Director, NERA Economic Consulting

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## Introduction to Financial Instruments

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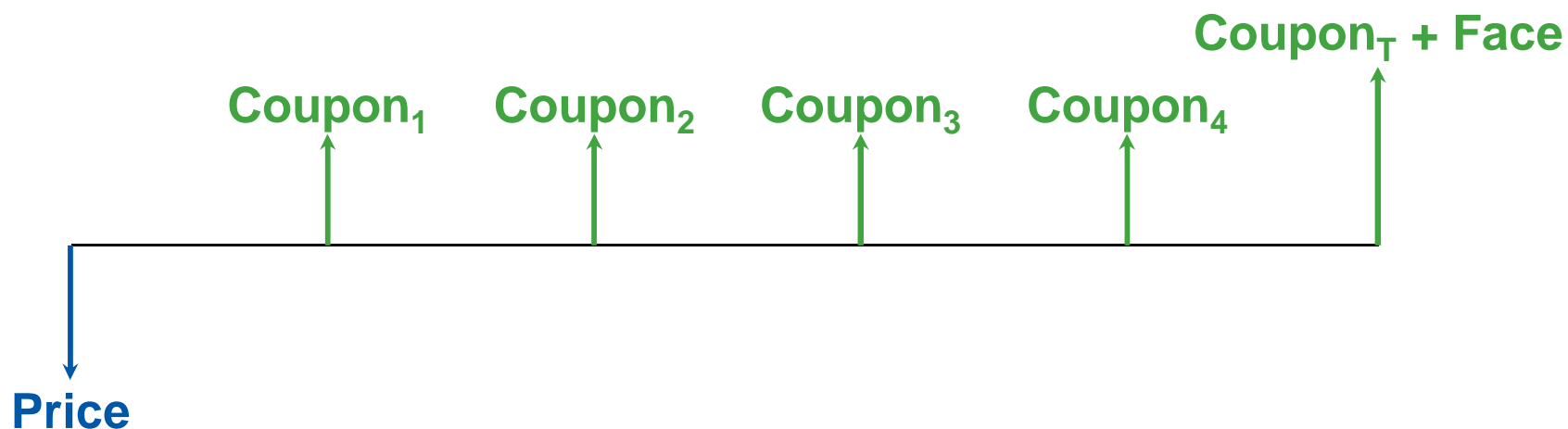
- **Stock / Share (equity)**: security representing ownership interest in a corporation, entitling shareholder to dividends
- **Bond (debt)**: security representing borrowing by an entity (typically corporation or government), entitling bondholder to the repayment of principal (face value) at a specified date (maturity), as well as periodic interest (coupon) payments
- **Derivative**: financial instrument whose cash flows depend upon the performance of one or more underlying assets, indices, or rates

## Comparison of Common Stock and Bond Features

	<u>Common Stock</u>	<u>Bond</u>
Claim on assets	Junior	Senior
Voting rights	Yes	No
Form of periodic payments	Dividend	Coupon
Marketplace	Exchange	Generally OTC*
Maturity	Perpetual	Stated

## Bond Example

Price of bond equals bond's cash flows  
(periodic coupons and repayment of principal at maturity)  
discounted by the appropriate rate(s)



$$\text{Price of bond} = \frac{\text{Coupon}_1}{(1 + r_1)} + \frac{\text{Coupon}_2}{(1 + r_2)^2} + \dots + \frac{\text{Coupon}_T + \text{Face}}{(1 + r_T)^T}$$

# Introduction to Derivatives

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## Types

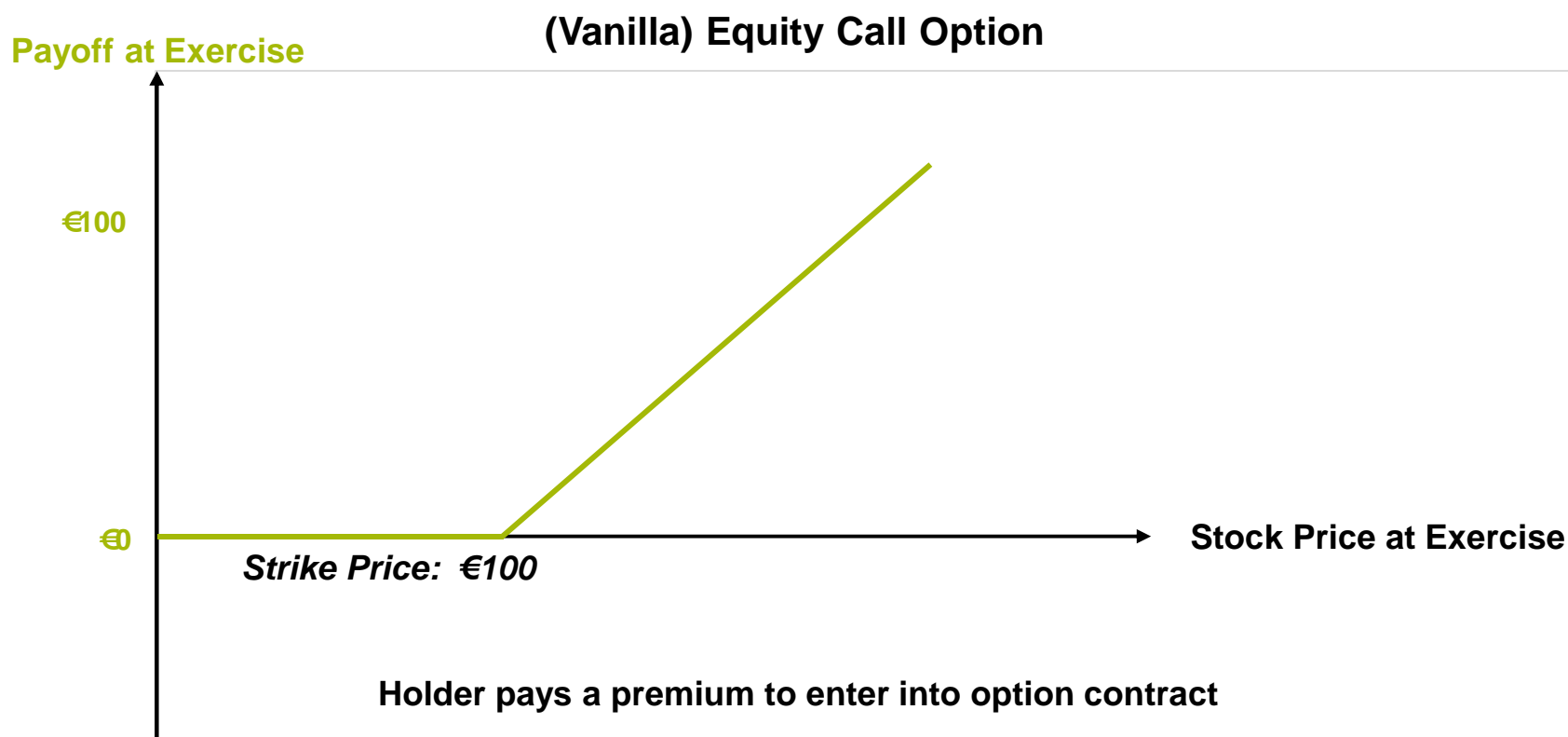
- Forward (OTC)
- Future (exchange)
- Option (exchange and OTC)
- Swap (OTC)
- Other (e.g., Swaption)

## Underlyings

- Common Stock
- Bond
- Index
- Currency
- Other (e.g., Commodity)

## Option Example

Entitles the holder to buy (**call**) or sell (**put**) an asset (e.g., stock) at a specified (**strike** or **exercise**) price at (or before) a specified date

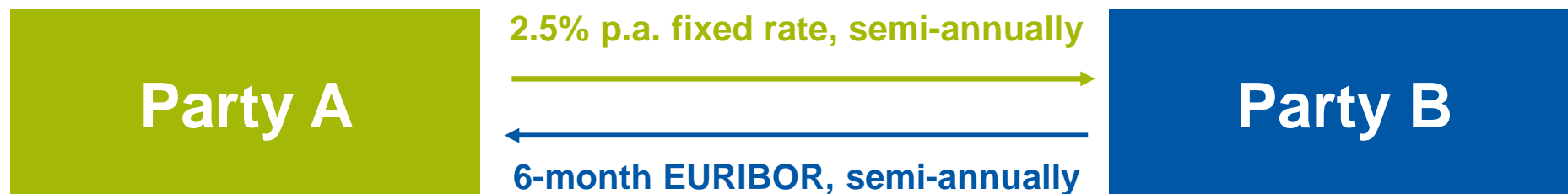


## Swap Example

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An agreement between two counterparties to exchange cash flows

**(Vanilla) Interest Rate Swap where Party B receives fixed rate**



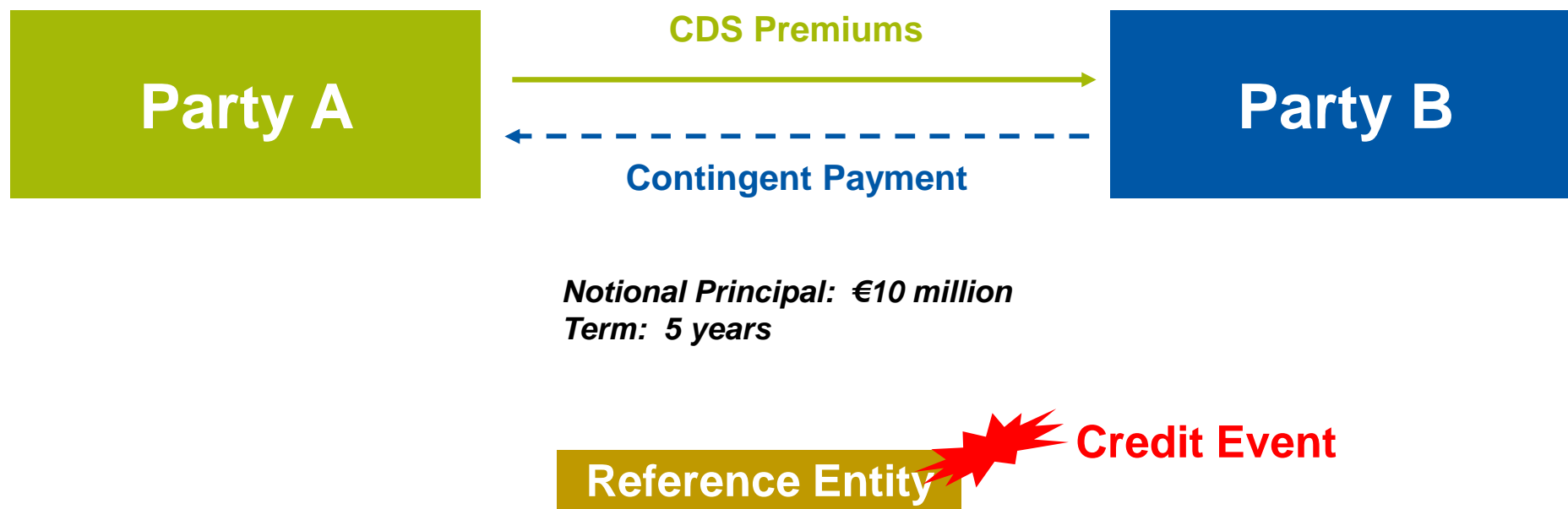
**Notional Principal: €100 million**  
**Term: 10 years**

## Credit Default Swap Example

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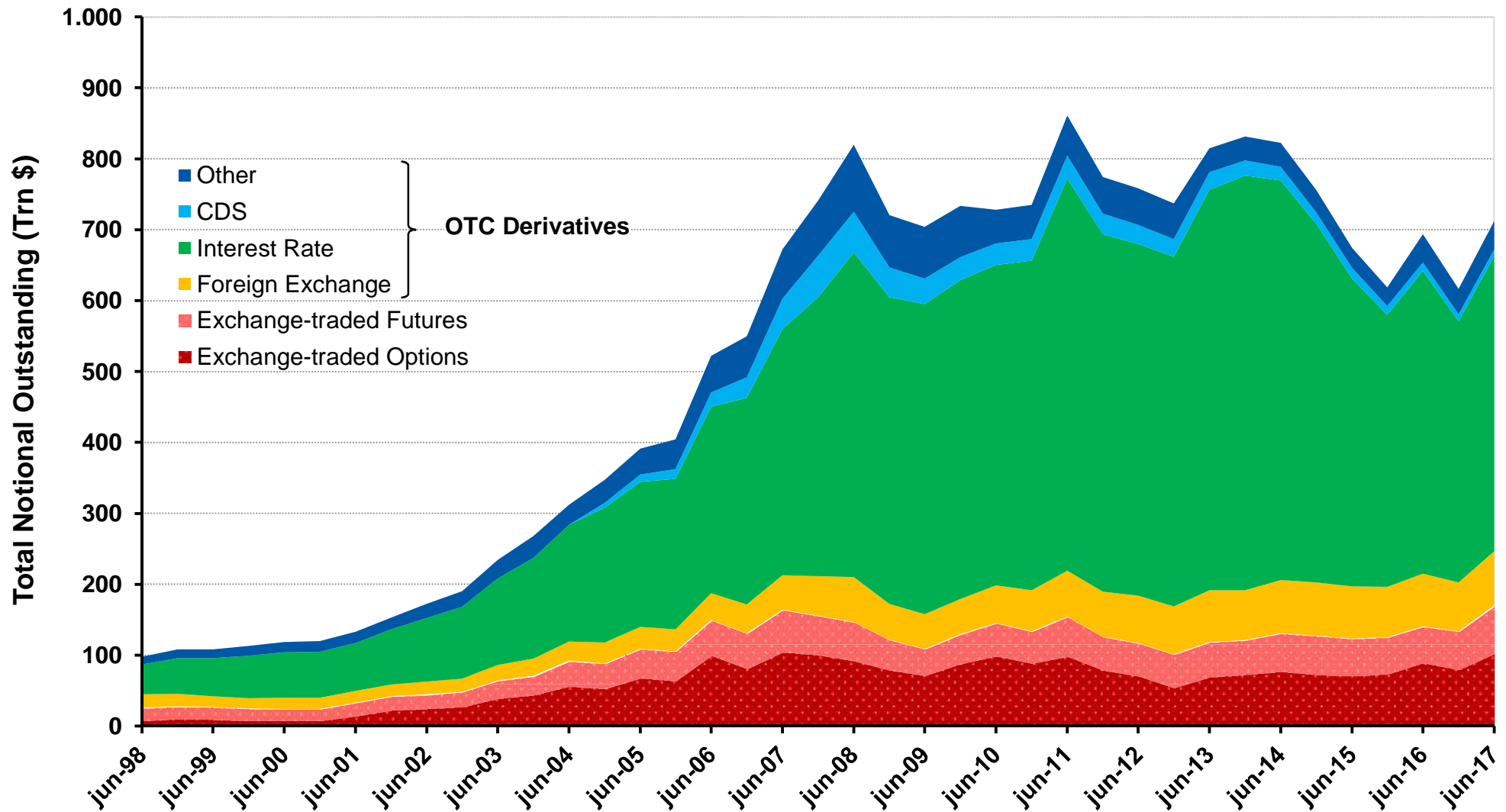
An agreement in which one counterparty makes periodic payments to the other for insurance against a specified credit event

CDS where Party A buys protection from Party B on the Reference Entity





# Global derivatives market is very large, with interest rate derivatives representing largest portion



**Notes and Sources:**

Data are from BIS Derivative Statistics, updated as at 29 November 2017 for both semi-annual OTC derivatives statistics and exchange-traded derivatives statistics.

## Valuation Considerations for OTC Derivatives

- Upon early termination of transaction, valuation required to determine close-out amount
- Unlike with exchange-traded derivatives, may not be able to observe pricing in the markets
- Market participants may come to different opinions regarding:
  - Mid-market valuation (different valuation models and/or different model inputs)
  - Bid-offer spread / liquidity charges
  - Netting
- Disputes may arise requiring expert determination



# Contact Us

Erin McHugh, CFA

Associate Director  
NERA—London  
+44 20 7659 8736  
[erin.mchugh@nera.com](mailto:erin.mchugh@nera.com)