

HELM  
TALKS

LECTURE THREE

# THE COST OF CAPITAL

PRESENTED BY

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# AGENDA

**THE PRICE OF TIME**

**THE PRICE OF RISK**

**PROJECTS AND THE STAGES OF RISK**

**THE WACC & THE INCENTIVE PROBLEM**

**DIVIDEND GROWTH MODEL**

**SPLIT COST OF CAPITAL**

**INDEXATION**

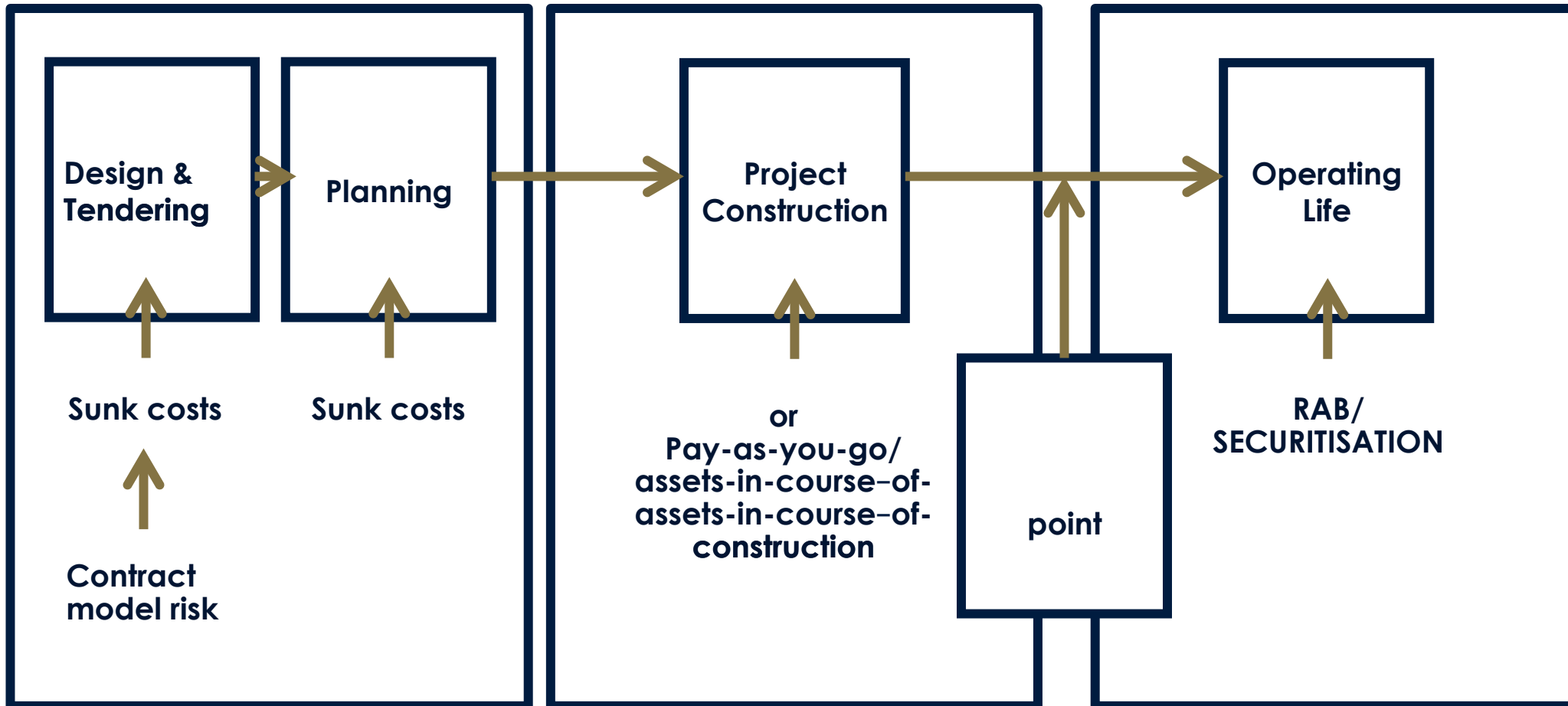
# PRICE OF TIME

- Why discount at all?
- Social time preference vs. private time preference
- The case for and against zero discounting
- Gilts as a proxy – debt not equity

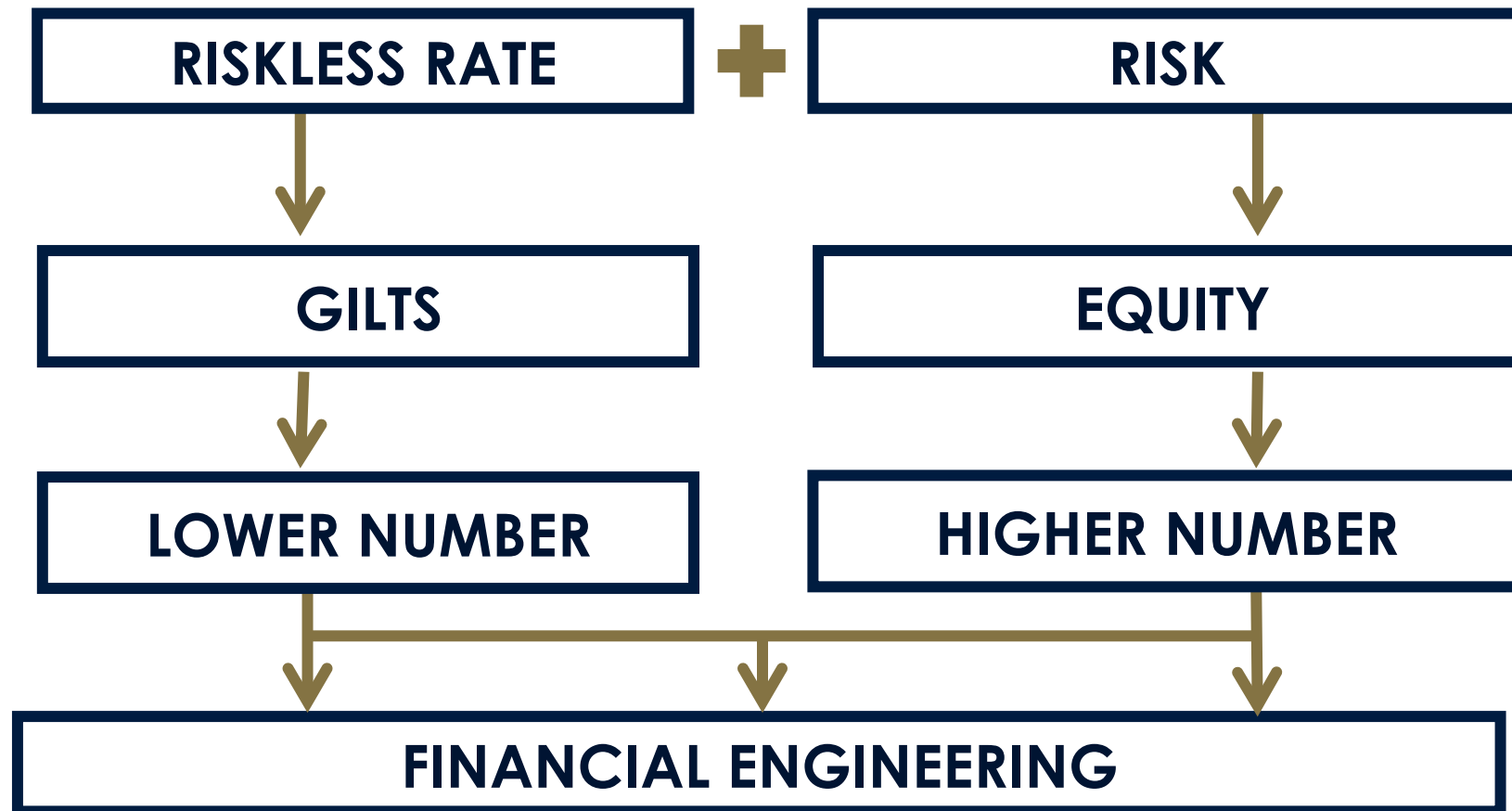
# PRICE OF RISK

- What is risk?
- Allocation of risk in different regulatory models
- Customer, taxpayer and shareholder equity
- Pricing CAPEX risk
- Pricing OPEX risk
- Risk of RABs

# PROJECT AND THE STAGES OF RISK



# WACC & THE INCENTIVE PROBLEM



# DIVIDEND GROWTH MODEL

- Value of share =  $\sum_{t=\infty}$  dividends over time  $\pm$  scrappage value

- $r$  = rate that discounts these to zero
- Still need to calculate  $r$

# INTERVENTIONS AND SOLUTIONS

**FOR THE RAB**

EQUITY RISK TO CUSTOMERS  
DUTY TO FINANCE FUNCTIONS  
DEBT FINANCE

**FOR THE PROJECT  
DEVELOPMENT AND ASSET  
MANAGEMENT**

EQUITY RISK TO SHAREHOLDERS  
EQUITY FINANCE

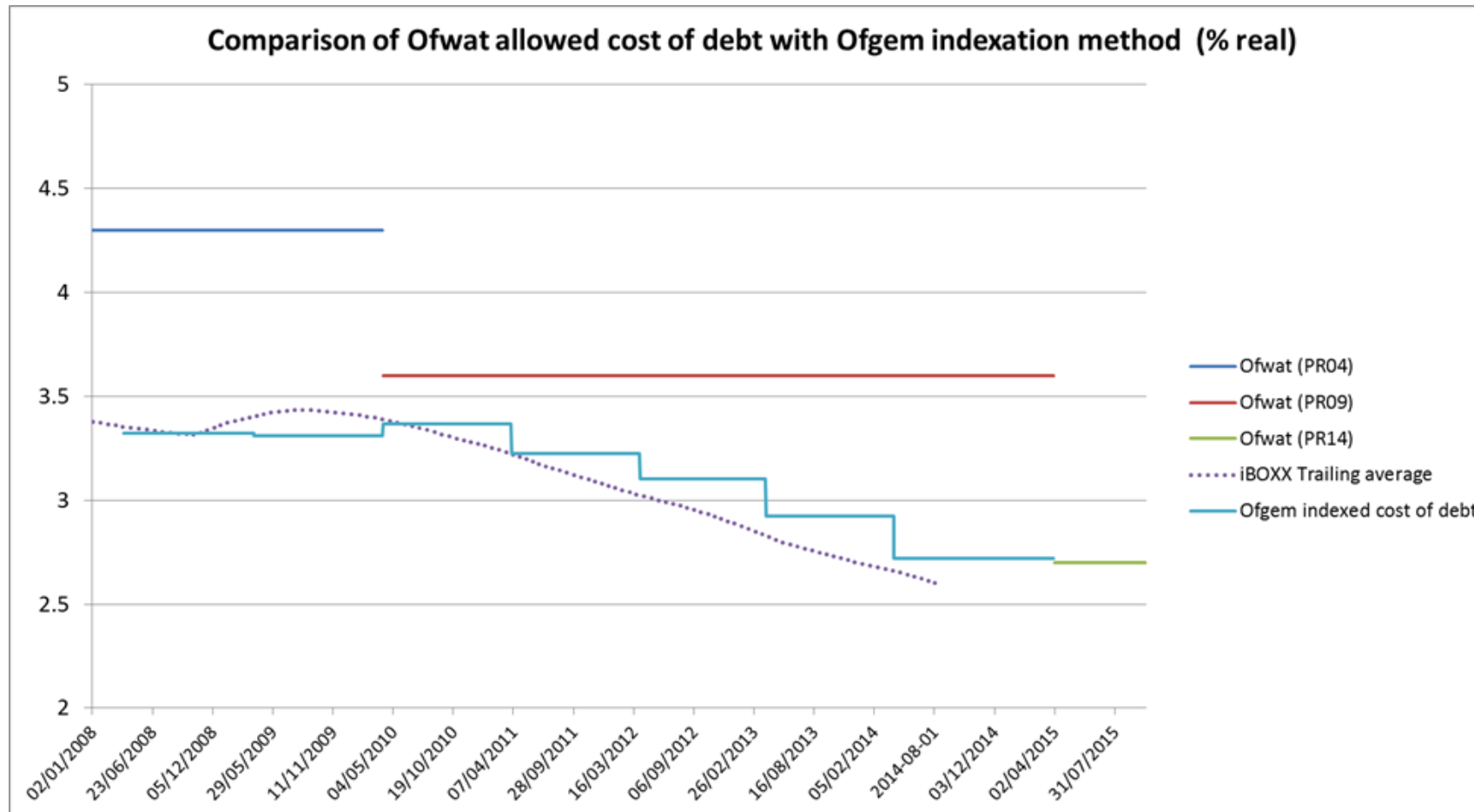


# SPLIT COST OF CAPITAL



# INDEXING THE COST OF DEBT

- Companies cannot beat the market
- To date **Interest rates < allowed return**



# SUMMARY LECTURE THREE

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- **Cost of capital is about time and about risk**
- **Disaggregation of utilities & projects leads to different costs of capital**
- **The current WACC approach has helped to cause massive financial engineering**
- **Alternatives are the divided growth model & the split cost of capital**
- **Indexation is an efficient allocation of risk**

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LECTURE RECORDINGS AVAILABLE AT

**DIETERHELM.CO.UK**

THANK YOU

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