LECTURE ONE

THE ECONOMICS OF UTILITIES

PRESENTED BY
PROFESSOR DIETER HELM CBE
AGENDA

APPROACHES
- Market failures
- Austrian uncertainty
- Asset-based & systems

SOLUTIONS
- Ignore
- Price & incentives
- Regulation to market prices
- The Austrian solution

SYSTEM FAILURES
- The key failures
THE MARKET FAILURE FRAMEWORK

- The perfectly competitive market ideal
- Fundamental theories of welfare economics
- Pareto optimality and general equilibrium
THE AUSTRIAN FRAMEWORK

- Competition is **dead** in perfect markets
- Trial and error
- Profits create incentives
- Creative destruction

PRICES CONVEY INFORMATION

- EX ANTE PRICES
- SUPER NORMAL PROFITS AND LOSSES
- ENTRY AND EXIT
ASSET BASED & SYSTEMS FRAMEWORKS

- Core infrastructure systems
- Assets-in-perpetuity
- Capital maintenance
- Non-marginal analysis
INTERVENTIONS AND SOLUTIONS

- CORRECTING PRICES
- INFO
- PREFERENCES

- REGULATING OUTPUTS
- FIXING FUNCTIONS
- FIXING MINIMUM QUANTITIES

- REGULATING OUTPUTS
- ASSET-BASES
- COST-BASES
- RATE OF RETURN AND COST OF CAPITAL
THE MAIN MARKET FAILURES

- TIME INCONSISTENCY
- MONOPOLY & MARKET POWER
- EXTERNALITIES & ENVIRONMENTAL IMPACTS
- INFORMATIONAL FAILURES
TIME INCONSISTENCY

- MC < AC
- AC & SUNK COSTS
- EX POST INCENTIVE TO SRMC

1. CONTRACT WITH STATE
2. REGULATORY CONTRACT
3. RAB
MONOPOLY & MARKET POWER

I: NEOCLASSICAL VIEW (CONVENTIONAL)

II: AUSTRIAN VIEW

- Pc/qc not competitive
- Entry & dynamics
- Incentive impacts of profits
- Entrepreneurs and tech change

III: ASSET VIEW

- Sunk fixed costs to asset base
- Operations separate for assets for pricing purposes
- Costs include capital maintenance
- Competitions for CAPEX and OPEX
EXTERNALITIES & ENVIRONMENTAL IMPACTS

I: NEOCLASSICAL VIEW

II: AUSTRIAN VIEW
- Coase and property rights
- Bargaining leads to internalisation
- Polluter or pollutee pays

III: ASSET VIEW
- Natural capital
- Renewables vs. non-renewables
- Thresholds & safe limits & benefits
- Asset base & nature fund + capital maintenance
- Compensation principle
EXTERNALITIES & ENVIRONMENTAL IMPACTS

I: NEOCLASSICAL VIEW
- Probabilities
- Inflation as a commodity
- Expected maximisation

II: AUSTRIAN VIEW
- Conjectures, trial & error
- Incentive properties
- Entry opportunities

III: ASSET VIEW
- Social primary goods
- Public goods
- Citizen entitlements
SUMMARY LECTURE ONE

- Answers depend on the questions
- Efficiency is not all that matters
- Neoclassical, Austrian and asset-view very different
- Most regulation is designed on neoclassical lines
- Except UK RPI-X in its first 20 years.
LECTURE RECORDINGS AVAILABLE AT
DIETERHELM.CO.UK

THANK YOU