

Competition Policy and Regulation of Prices in Natural Monopoly: Information, Incentives and Governance

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1. Introduction

The Importance of Competition in China

- Development of China's Socialist Market Economy
- Transition to a High-Income Economy
- Re-Balance Economy Towards Consumers

Classification of Industries

- Strategic Industries
- Pillar Industries
- Natural Monopoly

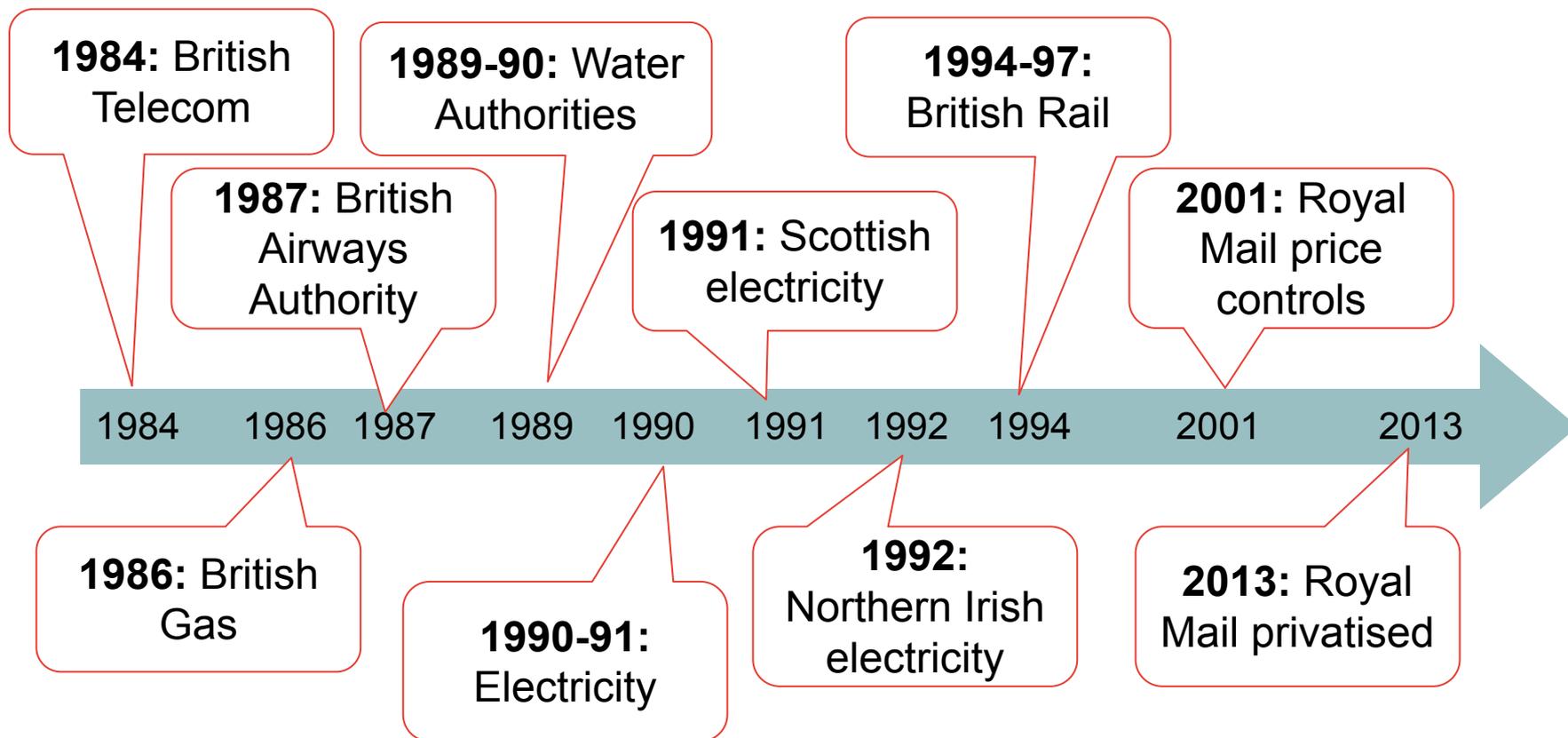
2. A little UK History

- 1970s – 80s: Poor Economic Performance
- Performance of State-Owned Natural Monopolies
- Privatisation of British Telecomms
- RPI – X Price control

The Early RPI – X Regime

- Rejection of Rate-of-Return Regulation
- RPI – X as an Incentive Mechanism
- A Temporary Device until Competition Emerges?
 - In fact, Core of the Subsequent Regulatory Regime
- International Adoption
 - Latin and Central America
 - Caribbean
 - Australia
 - Several European Countries
 - Others in Central and SE Asia
 - Examples in US
- ‘Light Touch’, Non-bureaucratic Regulation
- Impact Unforeseen

Chart 1: Privatisations and roll-out of RPI-X regulation



3. The RPI – X Mechanism

- Industrial Re-structuring: Isolating Natural Monopoly
- Pass-through of Uncontrollable Costs
- Setting the Value of X (Chart 2)
- The ‘Ratchet’ Mechanism (Chart 3)
- Allocative Efficiency versus Productive Efficiency
- Generation of Competitive, Fair Prices

Chart 2: Building blocks of the RPI-X mechanism

Allowed revenues = PV of annual required efficient costs

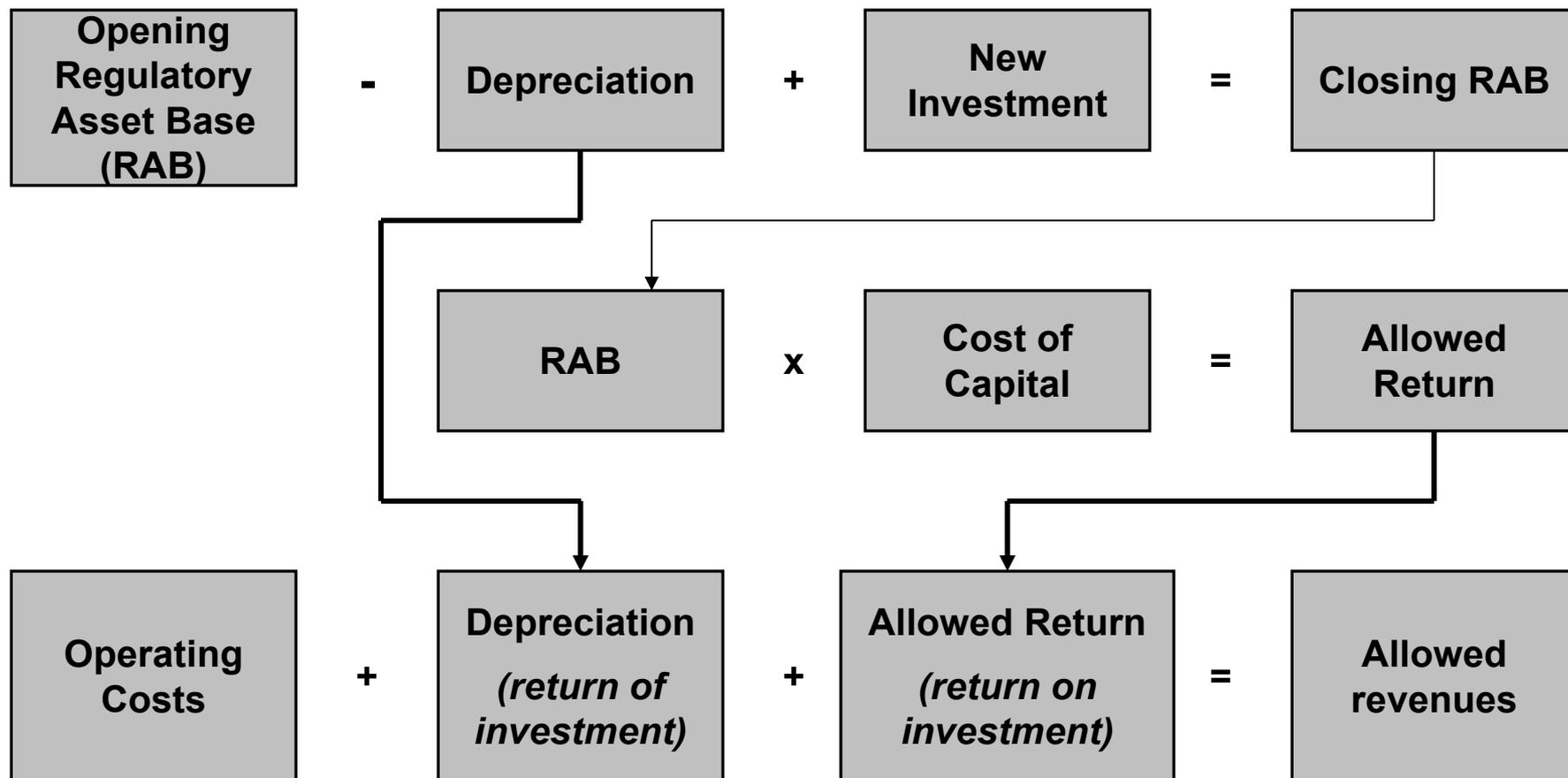
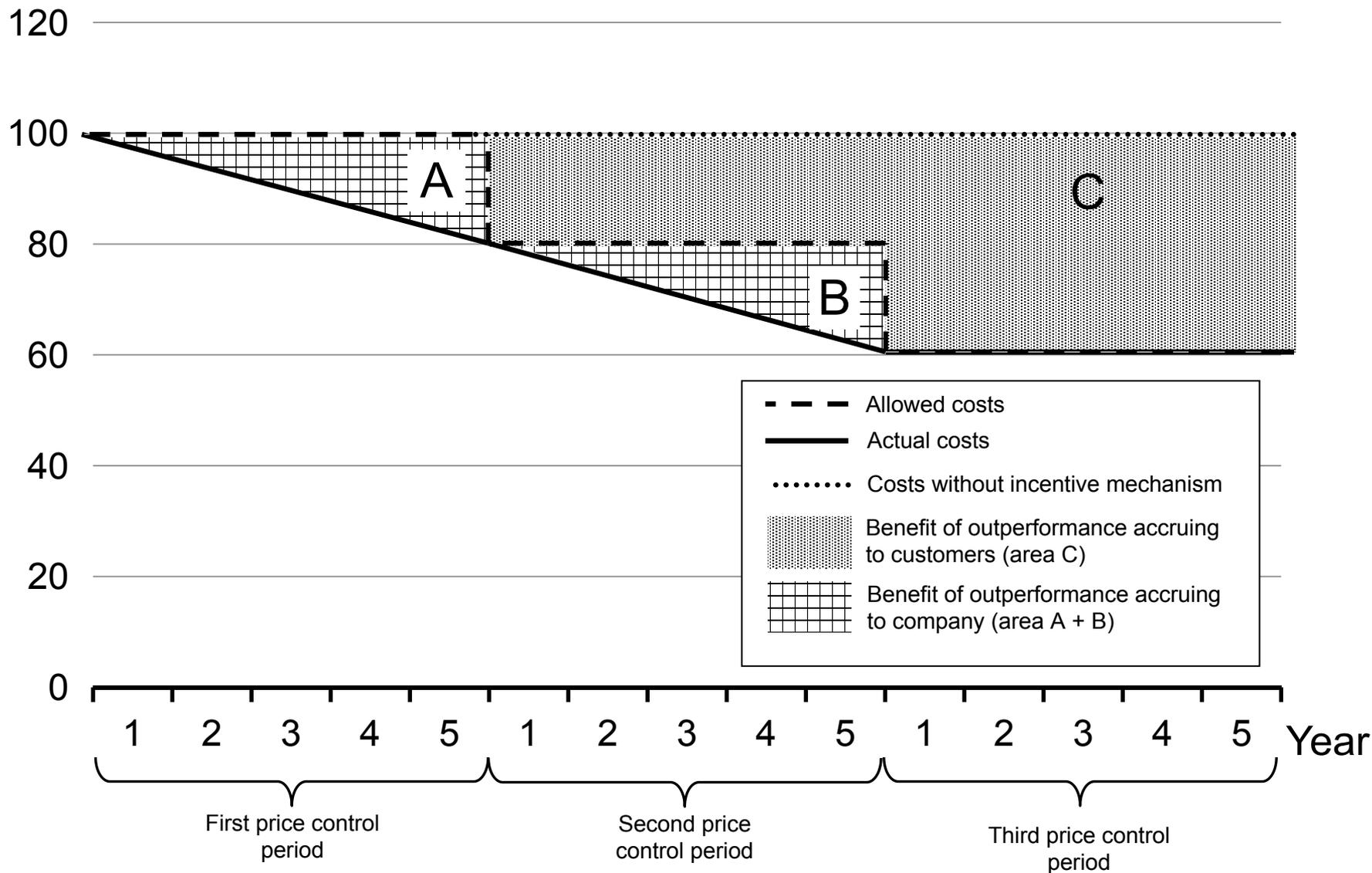


Chart 3: Illustrative ratchet mechanism



4. The Impact of RPI – X

- Gas, Electricity, Telecomms (8 to 10 years)
 - 25 – 50% reduction in real charges
- Water
 - 40% increase in real charges, explained by
 - Renewal of 19th Century infrastructure
 - European Union Directives for Drinking Water and Sewerage

Caveats

- Pre-Privatisation Trends
- But some Correlation with Value of X
- Rail Regulation
- Regulation versus Privatisation
- Ownership *Per Se* Less Critical?

5. RPI – X in Practice

- OPEX and CAPEX
- The Weighted Cost of Capital (Chart 4)
- The ‘Po Drop’(Chart 3)
- Quality and Reliability
- No Longer ‘Light Touch’

Chart 4: The Weighted Average Cost of Capital: The Capital Asset Pricing Model

1) The WACC = Cost of Debt x Proportion of Debt + Cost of Equity x Proportion of Equity

2) Cost of Debt = Riskless Rate of Interest + Debt Risk Premium

(= Cost of Company Bonds)

3) Cost of Equity = Riskless Rate of Interest + Company Equity Risk Premium

4) Company Equity Risk Premium = BETA x Market Equity Risk Premium

5) BETA is a Measure of the Degree of Correlation between the Value of the Company and the Value of the Stock Market as a Whole

6. Underlying Issues 1: Information

- The Information Problem
- Yardstick Competition
- Competition as a Process of Revelation
- Regulation as a Process of Revelation
- Product and Process Innovation
- ‘The Craftsman and the Gardener’

Underlying Issues 2: Incentives

- Regulation as a Mimic of Competition
- Incentives vs. Structure and Ownership
- State-Owned Enterprises
 - Not Incompatible with Incentive Effects, but:
 - i. Incentives must be Related Purely to Financial Performance
 - ii. Enterprise Operations must be Ring-fenced
 - iii. Industrial Policy Measures must be Transparent and Separately Accountable

Underlying Issues 3: Governance

- The Four Levels of Activity
 - Management
 - Ownership
 - Regulation
 - Industrial Policy
- Experience in the United Kingdom
- The Consequences of Separation of Activities
 - Incentive-based Regulation
 - Efficiency and Innovation
 - Minimum Return Necessary to Finance Activity
 - Transparent Industrial Policy



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