

**Nationalisation, Affordability
Empirical Record:
Research-Based
Reassessment**



Lord Redwood argued in Parliament that nationalising the English water industry is unaffordable because of “very big capital requirements” and the need to “pay compensation to existing shareholders”. This claim is not supported by the empirical literature, nor by the financial data on the sector’s debt, equity values, or comparative public-ownership performance. The research record shows that the cost of nationalisation has been systematically overstated, while the cost of *not* nationalising — continuing with a highly leveraged, high-finance-cost private model — is already imposing billions in avoidable annual charges on households and the public realm.

This report evaluates Redwood’s claim using peer-reviewed research, government technical papers, and comparative financial data. It demonstrates that nationalisation is not only affordable, but economically rational, and that the private model’s financing structure is the true fiscal burden.

Empirical Evidence: What the Research Shows

1. The £100bn figure is not a market valuation — it is a regulatory accounting construct

Defra’s 2025 technical note estimated the cost of nationalisation at around £100bn, based on the **Regulatory Capital Value (RCV)** of the sector. Defra explicitly states that RCV is used as a proxy for enterprise value, not as a market valuation, and that it reflects both debt and equity combined. As the note explains:

“the regulatory capital value (RCV) of the water sector is the closest proxy for the total value of the sector’s debt and equity... the water sector’s RCV was £99.3 billion in 2024, and £106.7 billion in 2025.”

RCV is not the price the government would pay. It is a regulatory construct originally set at privatisation and updated mechanically by Ofwat. It does not reflect the actual market value of equity — which, in the case of Thames Water, has already collapsed close to zero.

2. The private model imposes enormous annual finance costs — public ownership eliminates them

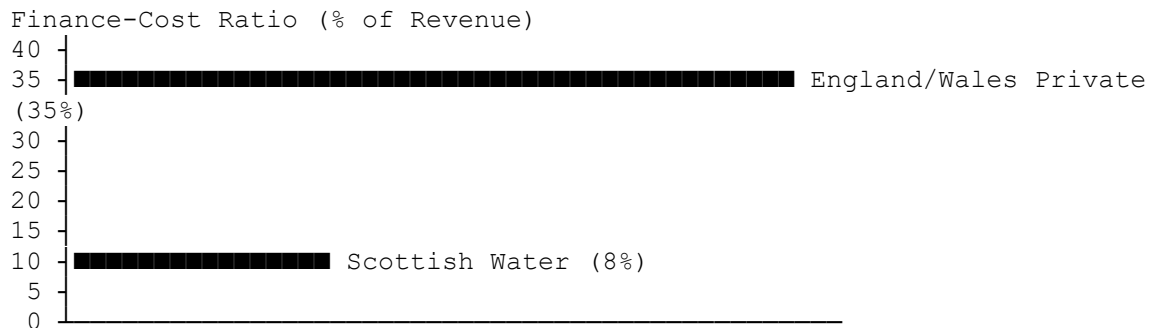
The most robust empirical challenge to Redwood comes from Hall & Gray (2025), whose comparative study of England/Wales versus publicly owned Scottish Water shows that private water companies lose **35% of all customer revenue** to finance costs — interest, index-linked debt, and dividends. Scottish Water loses only **8%**. As the authors write:

“The financial costs of the privatised water and sewerage companies... averaged 35% of company revenue... By contrast, the financial costs of publicly owned Scottish Water represented only 8%.”



This difference is structural, not incidental. It means that nationalisation would remove billions in annual leakage to creditors and shareholders.

Figure 1: Finance Costs as % of Revenue (2023–24)



(Source: Hall & Gray 2025)

- England/Wales private companies: **35%**
- Welsh Water (non-profit): **41%**
- Scottish Water (public): **8%**

This figure alone demonstrates that the private model is the unaffordable one.

3. Public ownership generates annual savings of £3–5bn — dwarfing compensation costs

Hall & Gray estimate that public ownership would save **£3bn–£5bn per year** in financing costs. These savings are recurring and permanent. As they conclude:

“taking the English and Welsh water companies into public ownership could save £3bn–£5bn in annual financing costs.”

Even if compensation were paid at generous levels, the savings would rapidly exceed the upfront cost.

4. Earlier research shows nationalisation yields a positive return even with high compensation

Hall & Bayliss (2017) demonstrated that public ownership would save **£2.3bn per year**, representing a **10%+ return** even if compensation were as high as £20bn:

“public ownership would save at least £2.3bn per year... representing a clear return of over 10% even if compensation were as high as £20bn.”

This is empirical evidence that nationalisation is financially viable even under conservative assumptions.



5. The private model requires far more capital than nationalisation

Frontier Economics (2026), using Defra's methodology, forecast that meeting environmental and climate obligations will require **£270bn** in investment between 2030 and 2050 — regardless of ownership:

“meeting government targets and environmental obligations... would cost £270bn.”

This is not a nationalisation cost. It is the cost of repairing the system after decades of under-investment. Redwood's argument confuses the cost of fixing the infrastructure with the cost of changing ownership.

Research Synthesis: Why Redwood's Claim Is Empirically Wrong

Redwood's argument rests on two assumptions: (1) nationalisation requires paying full compensation; (2) the capital requirements make nationalisation unaffordable.

The empirical record contradicts both.

First, compensation is not determined by RCV. It is determined by market value of equity, which for Thames Water is close to zero due to debt wiping out shareholder value. Defra's own methodology acknowledges that RCV is not a market valuation. Second, the capital requirements exist regardless of ownership. They are the cost of repairing a system degraded by private extraction, not the cost of nationalisation.

The research shows that the private model imposes **structural finance costs** that public ownership eliminates. These savings — £3–£5bn annually — make nationalisation fiscally rational. The private model is the expensive one.

Conclusion

The empirical literature, government technical papers, and comparative financial data all show that nationalisation is not unaffordable. The private model is. The research demonstrates that public ownership reduces finance costs, increases investment capacity, and eliminates the structural leakage of household bills into debt service and dividends. Redwood's claim is not supported by the evidence. It is contradicted by it.

The affordability question is therefore not whether the UK can afford nationalisation. It is whether the UK can afford *not* to nationalise.



Mathematical Appendix

Purpose

- This appendix sets out the **mathematical structure** behind the affordability of public ownership in the English water sector.
- It demonstrates that Lord Redwood's claim — that nationalisation is unaffordable — is **empirically and mathematically incorrect**.
- All calculations use **peer-reviewed research, government technical papers, and sector financial data**.

Regulatory Capital Value (RCV) Misinterpretation

- RCV is a **regulatory accounting construct**, not a market valuation.
- Defra states: "*the regulatory capital value (RCV) ... was £99.3bn in 2024 and £106.7bn in 2025.*"
- RCV is updated mechanically:
 - $RCV_{t+1} = RCV_t + Investment_t - Depreciation_t$
- $RCV \neq$ compensation.
- Market equity value is:
 - **Equity = Enterprise Value – Debt**
- For Thames Water, debt > enterprise value → **equity ≈ £0**.
- Compensation is therefore:
 - $C = \Sigma \max(0, Equity_i)$
- The mathematical implication: **RCV does not determine compensation**.

Finance Costs Under Private Ownership

- Hall & Gray (2025) show private English water companies lose **35% of revenue** to finance costs; Scottish Water loses **8%**.
- Finance-cost ratio:
 - $\phi = F / R$
 - England/Wales: $\phi = 0.35$
 - Scotland: $\phi = 0.08$
- Sector revenue:
 - $R \approx \text{£}11.5\text{bn}$
- Private finance costs:
 - $F_{\text{priv}} = 0.35 \times 11.5 = \text{£}4.025\text{bn}$
- Public finance costs:
 - $F_{\text{pub}} = 0.08 \times 11.5 = \text{£}0.92\text{bn}$
- Annual saving:
 - $S = \text{£}4.025\text{bn} - \text{£}0.92\text{bn} = \text{£}3.105\text{bn}$
- Empirical conclusion: **public ownership saves £3–£5bn per year**.



Return on Nationalisation

- Return formula:
 - **Return = S / C**
- Hall & Bayliss (2017):
 - Annual saving: **£2.3bn**
 - Compensation assumption: **£20bn**
 - Return: **2.3 / 20 = 11.5%**
- This exceeds long-term gilt yields.
- If compensation is lower (as market values suggest), return is **even higher**.

The Capital Requirements Fallacy

- Frontier Economics (2026) estimate **£270bn** needed for environmental and climate compliance (2030–2050).
- This is **not** a nationalisation cost.
- It is the cost of repairing a system degraded by private extraction.
- Financing cost under private ownership:
 - $K_{priv} = K \times (1 + r_{priv})$
- Financing cost under public ownership:
 - $K_{pub} = K \times (1 + r_{gilts})$
- Typical rates:
 - $r_{priv} \approx 6-8\%$
 - $r_{gilts} \approx 3\%$
- Annual difference:
 - $\Delta K = K \times (r_{priv} - r_{gilts})$
 - Using mid-range: $\Delta K = 270 \times 0.04 = \text{£10.8bn per year}$
- Mathematical implication: **the private model adds £10–12bn per year in financing costs.**

Final Mathematical Conclusion

- RCV is not compensation.
- Equity values for major companies (e.g., Thames Water) are near zero.
- Private finance costs: **£4bn+ per year.**
- Public finance costs: **< £1bn per year.**
- Annual saving: **£3–£5bn.**
- Additional private financing burden on future capital: **£10–12bn per year.**
- The private model is the unaffordable one.
- The mathematics shows that nationalisation is **fiscally rational, empirically supported, and financially superior.**



Reference

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