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The cost of capital: a UK cross-sectoral perspective

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WACC in the UK: after 30 years thinking about it

- Price controlled private entities since 1984
  - Energy networks privatised in 1986, 1990 and 1991
  - WACC a central issue in practically <u>all</u> price reviews
  - An ‘industry of WACC analysis’ has built up over the decades
  - In energy networks , water, telecoms, airports, air traffic control, rail, post
  - Analysed by regulators, investors, academics, appeal bodies, consultants …
  - The issues are largely generic
- WACC remains critical for investor confidence
  - Frustration that different regulators reach different conclusions on generic components of the WACC
- Thought: we would benefit from more consistency
  - Consistency in WACC: early objective for a new club des régulateurs, UKRN
  - Expectation that we would coalesce around agreed estimates

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Coordinated work across sectors

- UKRN
  - Cross-sectoral group of regulators, prompted by government
  - Led by CEOs, supported by panel of experts
  - "**Coherent and consistent economic regulation across sectors**: we will give a clear joint view where cross-sector regulatory agreement or consistency is needed and will ensure that our actions deal effectively with cross-sector issues"
- UKRN's cost of capital working group
  - http://www.ukrn.org.uk/?page_id=429
  - Membership from 6 regulators (others may and do attend)
  - Agreed terms of reference
  - Meeting weekly for much of last 2 years
  - Now meeting 1-2 times each month
  - Ongoing programme of projects, peer reviews and issue-sharing

Cost of capital working group initiatives

- Statement of **cost of capital principles**

In setting the cost of capital in our sectors, UKRN members* will follow these principles:

- **Consistency** - recognise the benefits of consistency and stability in our own and collective regulatory approaches - explaining why if a different approach is taken, and reflecting our own duties.
- **Risk reflective** - the reward will reflect the allocation of risk in the regulatory framework and sectors.
- **Investment** - Facilitate necessary investment in the infrastructure and services consumers want.
- **Communication** - Be clear and transparent in our communication with stakeholders.
- **Good practice** - Learn from each other's approaches, those used in other jurisdictions and latest academic thinking.
- **Evidence** - Use market and other evidence to inform our work
- **Review** - Review these principles and our own approaches to the cost of capital at appropriate intervals.

* CAA, NIAUR, Ofcom, Ofgem, Ofwat and ORR

Cost of capital working group initiatives

- Statement of **cost of capital principles**
- **Compare and explain** principle
  - Annual comparative report
  - Central depository
  - Regulators encouraged to explain comparisons in their decision documents
- **Resource sharing**
  - Peer review
  - Cross-memberships in advisory panels
  - Shared expert inputs
  - Loans/secondments of staff
- We considered but <u>rejected</u>
  - ~~Agreed approach to WACC components~~
  - ~~Having a joint cost of capital team~~

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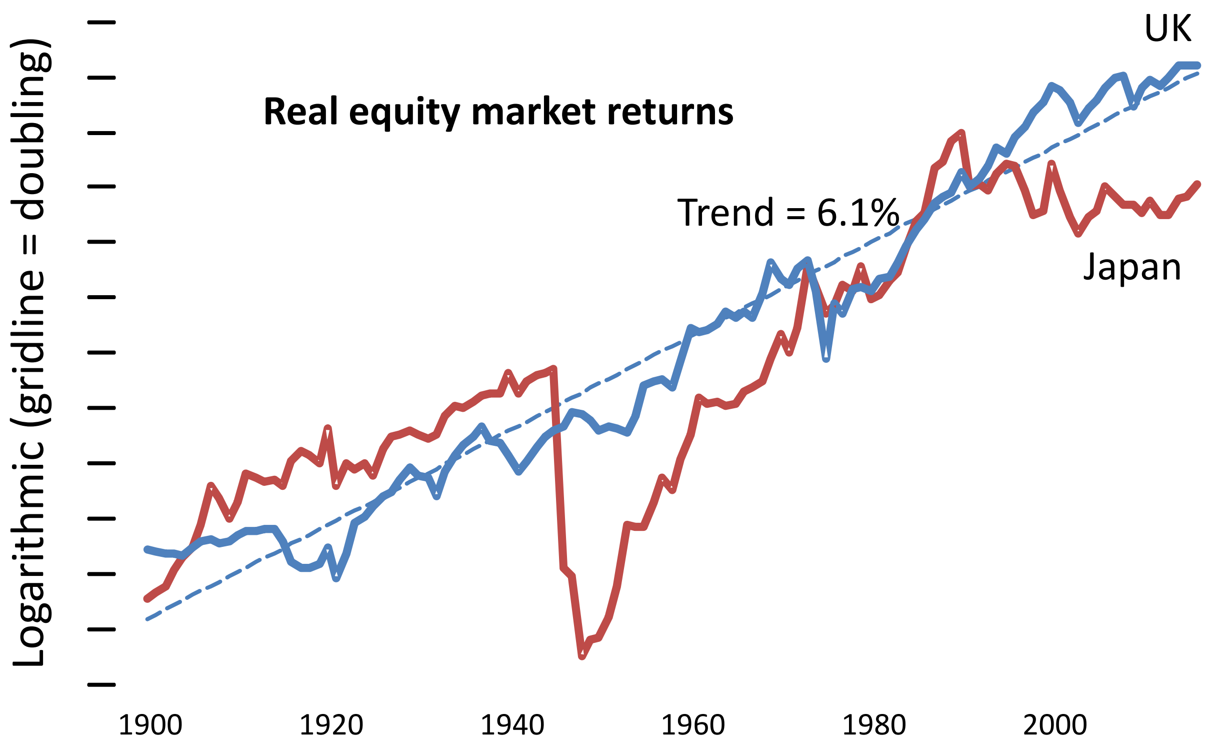
So, why not agree on components?

- UKRN's description of Ofgem's latest decision:

  "there was significant uncertainty in all the numbers contributing to the WACC and that it was not therefore the intention to achieve a precise match to the actual WACC and its components for the DNOs as a group as this would represent spurious accuracy. Accordingly Ofgem do not publish a point estimate of all the individual components of their WACC calculation."
  (note 1, page 8 of UKRN's 2016 annual comparison report)

Areas of uncertainty

- Forward-looking risk-free rate
  - In a world of sustained negative real yields on government bonds
- Forward-looking equity market return
  - What is low risk-free environment really telling us?



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Areas of uncertainty

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- Forward-looking equity market return
  - What is low risk-free environment really telling us?
- Beta risk
  - Beta observations difficult
  - Observed evidence is ambiguous
  - No clear source for beta risk exposure
- Regulatory and political risk
  - Traditionally, we don’t even include this in our WACC calculations

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Other issues

- How should we remunerate uncertain cost of debt?
  - How do we better forecast debt costs ex ante?
  - Or, should we adopt a cost of debt index (like Ofgem)?
- How sensitive is cost of equity to the risk-free rate?
  - Are we over-remunerating equity in today’s market?
  - Will we hit problems in rising interest rate scenarios?
  - Should we adopt a cost of equity index?
- As regulators, how can we best manage risk?
  - Careful engineering of incentive/risk framework
  - How can we minimise regulatory/regulatory risk?
- What scope for convergence with structured finance?

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Our priority is to protect and to make a positive difference for all energy consumers. We work to promote value for money, security of supply and sustainability for present and future generations. We do this through the supervision and development of markets, regulation and the delivery of government schemes.

We work effectively with, but independently of, government, the energy industry and other stakeholders. We do so within a legal framework determined by the UK government and the European Union.