

Increasing Public R&D Budgets

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Why listen to me ?

- CEO UK Research Council: 7 yrs
- EURAB: 6 years
- Visit to USA via EURAB.
- Edinburgh: Financial services
- Board: Fermilab, Chicago

Tension vs Economics

- Blue Sky:
- Knowledge Transfer: UK model
- Societal needs:
 - Global warming
 - Defence: Wartime
 - Ageing

Blue Sky:UK

- TRUST, Probity, efficiency
- Research Councils: arms length.
- Political consultants: power?
- Politics: Clear and simple .

Hence, danger,

- Duplication and Fragmentation
- Strategy, Forward Looks
- Common peer review.

Who do we trust?

Knowledge Transfer

The UK model

- Knowledge in Universities
- Patents; spinouts.
- Entrepreneurial Universities.
- Autonomy
- Financial freedom

Societal Needs

- Market failure vs Societal needs.
- Venture Capital vs State funds.
- Old industry vs Surfing the Wave.
- Creative Destruction vs Creation

Picking winners?

USA Model

- IP is a good.
- State can buy any good it wants.
- Innovation drives the economy
- Debate is thus about efficacy.
- Many methods: DARPA vs DoD
- Firms and universities together.
- Hydrogen car versus Internet
- Cure Cancer vs Measure genome.
- Google versus Cray

- Real Government Aim: Create a global Industry
- Venture capital agrees

European Model

- Picking Winners.
- Venture capital
- Fragmented markets.
- Fragmented science systems.
- Round pegs in square holes.
- EIT backwards.
- Who is responsible?

Governments versus Markets?

Outputs vs Despair

- Autonomous universities: winning!
- ERC: half way.
- ESFRI: Challenge.

Next

- Common peer review
- Strategy/Forward looks
- Mission driven