SQW

Making the infinite countable? Responding to the challenges when evaluating innovation policy

Presentation to the UK Evaluation Society Conference 2016

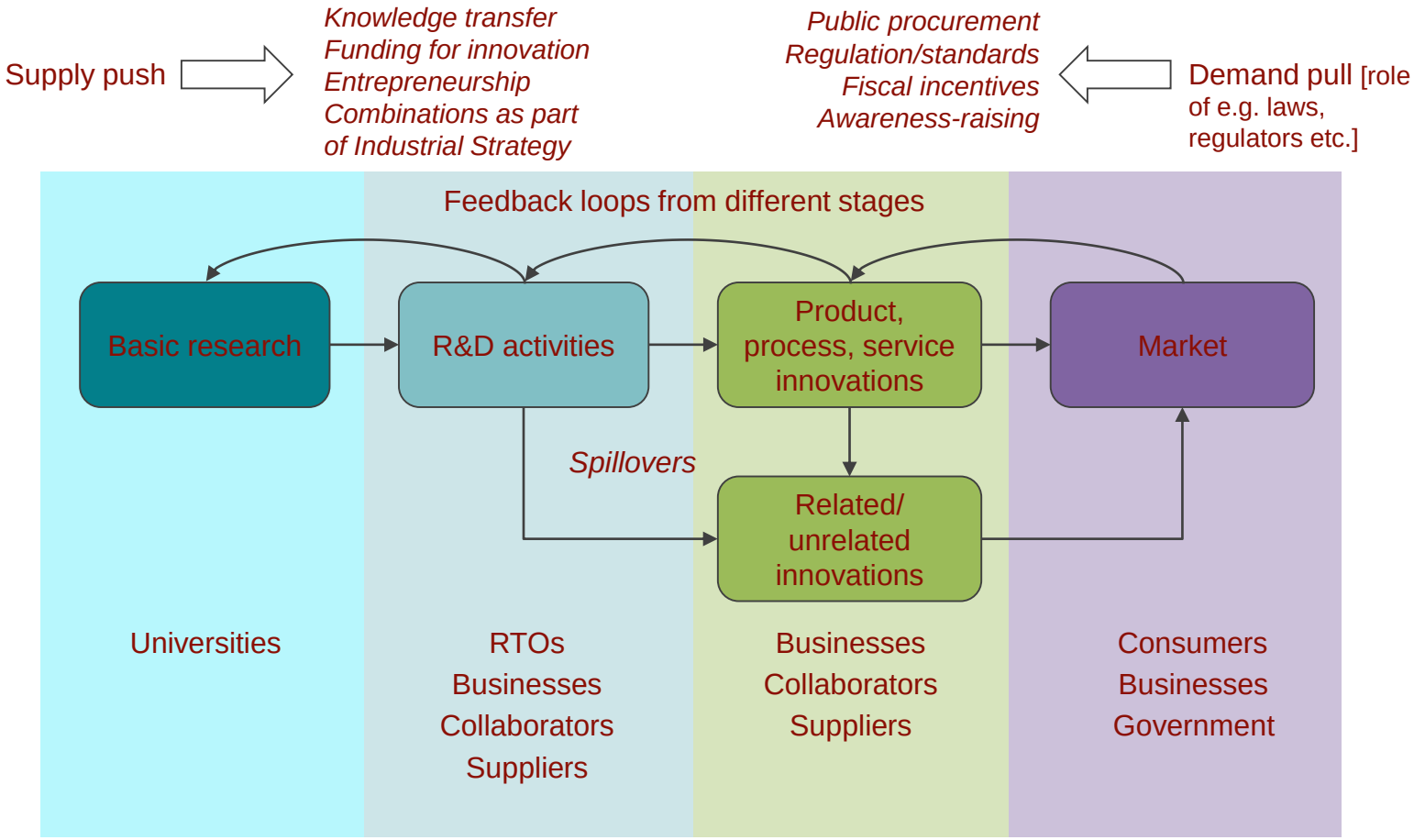
Jonathan Cook

My underlying logic for today

- Setting the scene: innovation models & the role of policy
- Characteristics of different types of interventions
- Challenges & expectations
- Possible solutions
- Conclusions

SQW

Setting the scene



Linear models … to open models

Supply-side … to demand-side measures

SQW

Characteristics of different intervention types

Type	Standard intervention?	Partners	Routes to outcomes
R&D grants	Yes	Single	More likely to be standard, but may vary
Collaborative R&D (industrial strategy)	Yes, but varying partnerships	Several	May vary & may include other contributions
Translational centres (e.g. Catapults)	No, bespoke & can be multiple parts	Single/ several/many	Different, with feedback loops, can be uncertain
Demand-side Roadmaps	No, multiple parts within a 'system'	Many	Different + uncertain routes to outcomes

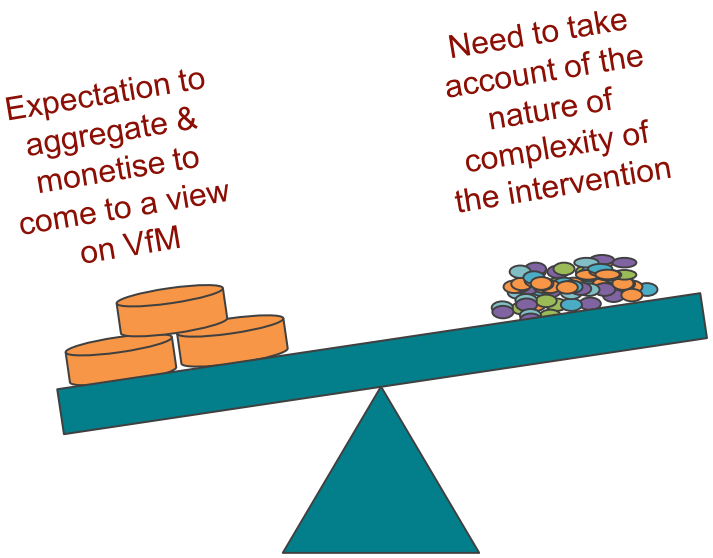
Increasing complexity

- Complexity exacerbated by:
  - Timescales to outcomes can vary for all types & be long (15+ yrs)
  - Propensity for highly skewed outcomes across all types
  - Potential for, & importance of, spillover effects for all types

SQW

Balancing expectations

- Key challenges:
  - Heterogeneity & bespoke interventions
  - Complicated/complex routes to outcomes
  - Hard-to-trace effects, some with potential to be transformational
  - Objective to quantify – as soon as possible!

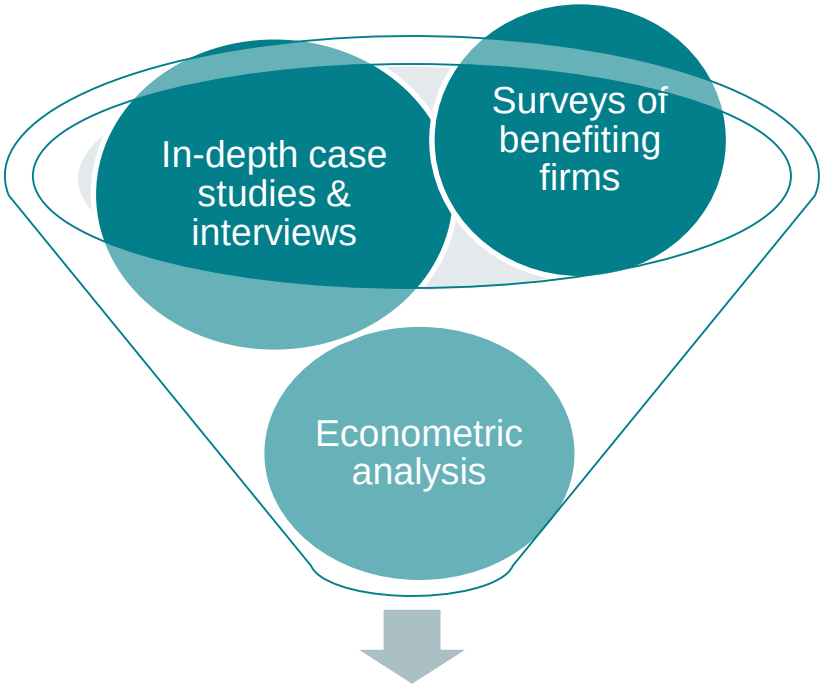


"We're asking SQW essentially to make the infinite countable"

SQW

Our solutions have drawn on mixing methods

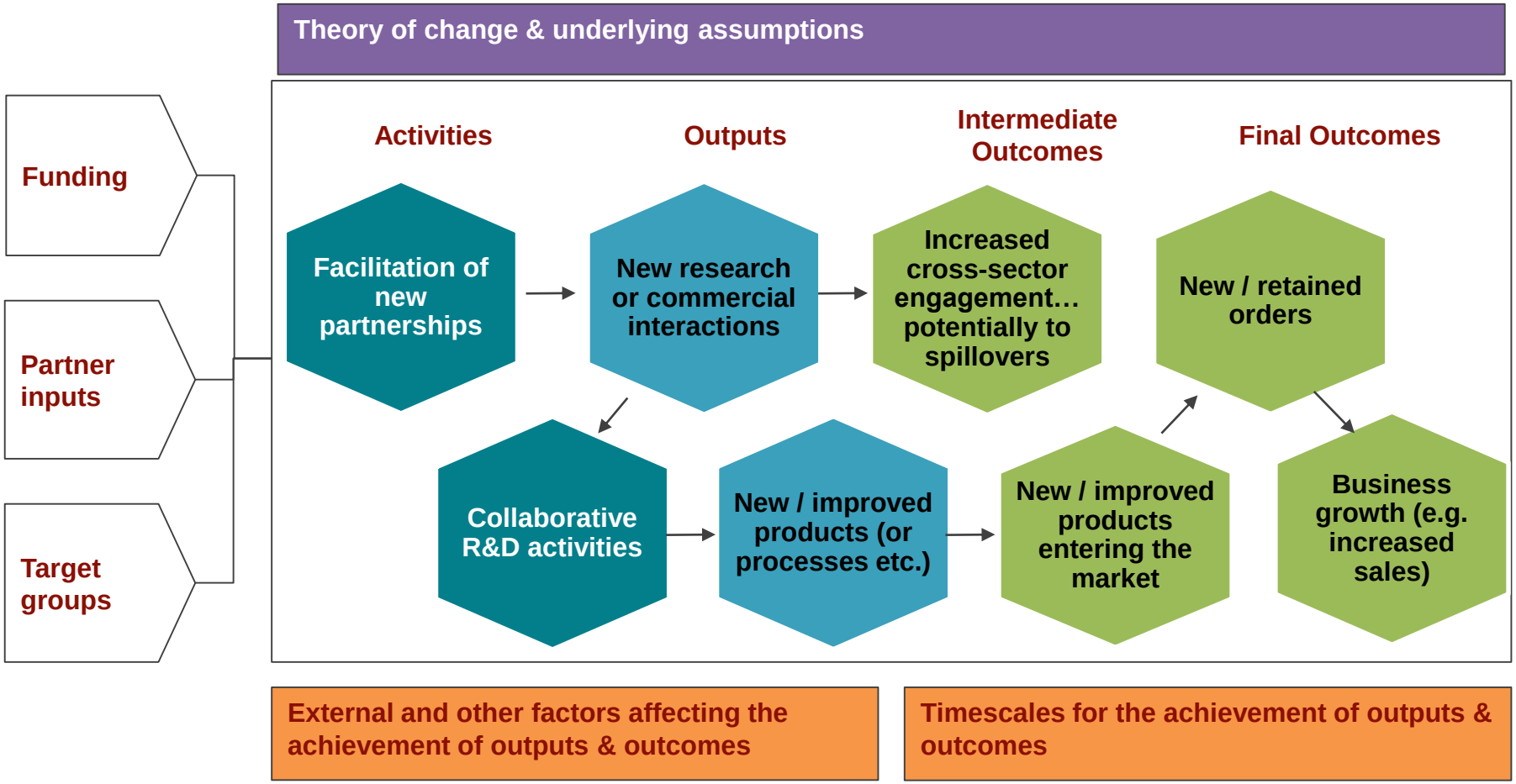
- E.g. mixed methods within theory-based approach
  - ‘Black box’ econometric analysis
  - In-depth data collection
- As part of this, also need tools to build & test theories



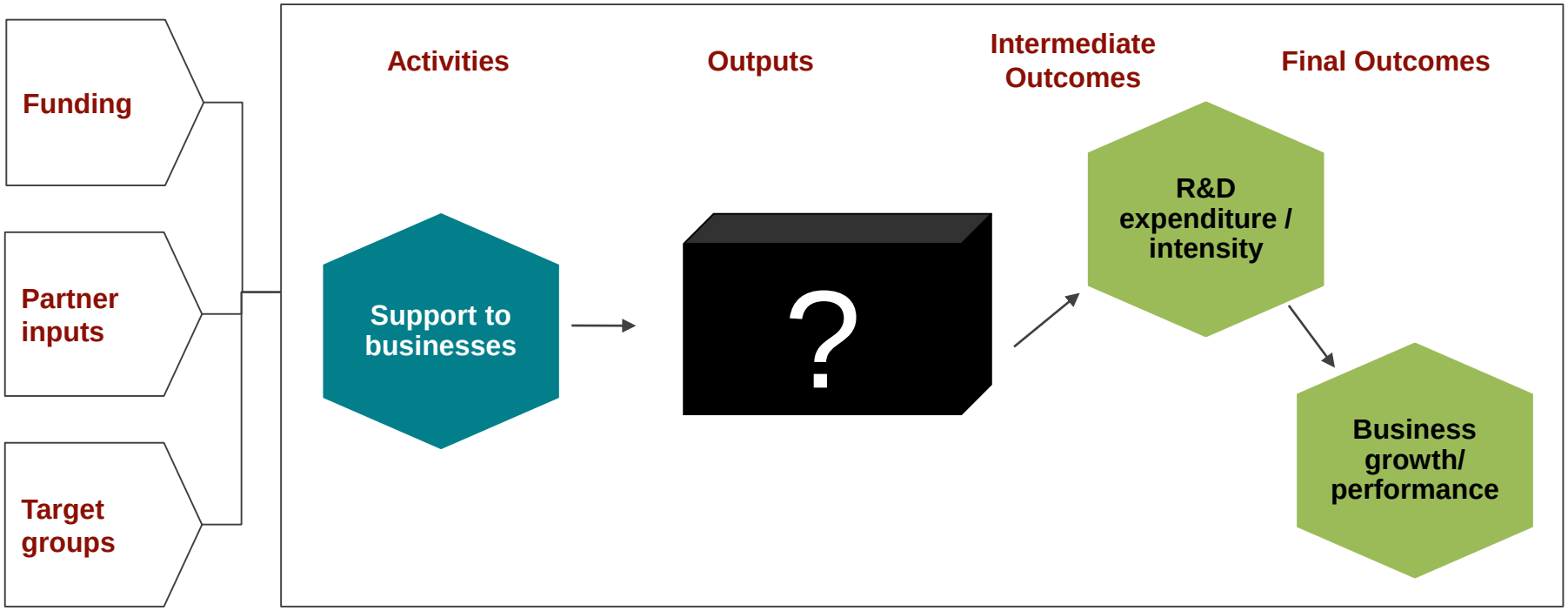
Mixed methods within theory-based approach

SQW

Building & testing theories of change



‘Black box’ econometric analysis



SQW

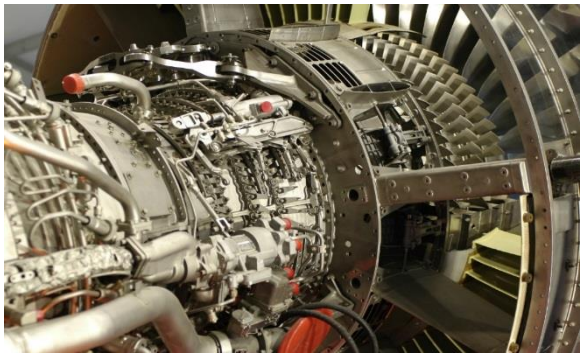
Mixing econometrics with survey & interview-based evidence to get inside the 'black box'

- Example: R&D grants
- Programme-level econometric analysis suggested no effect of the grants
- But survey/interview evidence highlighted:
  - Crowded landscape of provision (non-supported projects funded elsewhere)
  - Highly skewed outcomes
- … & helped us to revise the econometric analysis to consider different segments of businesses
  - Segmented analysis provided evidence on impacts, which aligned with survey feedback

SQW

The danger of focusing on the quantifiable

- Innovations can have transformative effects
  - GPS, touchscreens, search algorithms
- Knowledge spillovers can broaden benefits
  - E.g. motorsport technologies in auto, aero, defence sectors
  - Developing a skilled workforce
- Need to take these types of effects into account



SQW

Conclusions

- Making the infinite countable?
  - *"Not everything that counts can be counted"*
  - Complicated questions unlikely to yield simple answers
- Need to strike the balance between:
  - Quantifying/monetising impact as far as can be done, but also…
  - Setting out the wider evidence on the nature and potential scale of other effects
- Requires:
  - Effective ways of mixing methods
  - Communicating the value and rigour of theory-based approaches
  - Ensuring that policy-makers and practitioners recognise that focussing on monetisable effects may be misleading

SQW

Contact

Jonathan Cook

Director

SQW

t. 020 7391 4105

e. jcook@sqw.co.uk

w. www.sqw.co.uk

SQW