

# Scenarios for a science superpower

**Graeme Reid and Sarah Main**

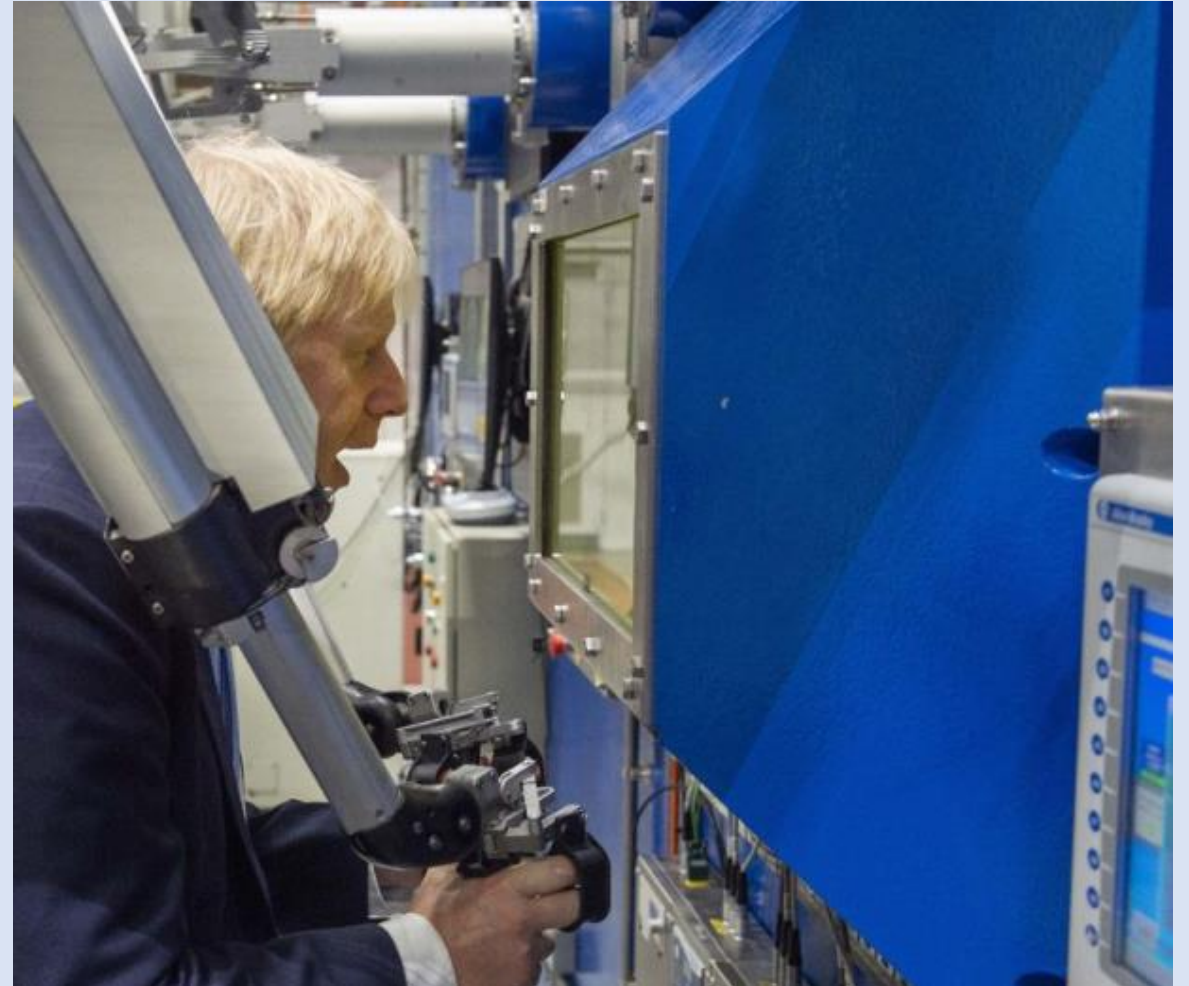
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**The British Academy  
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Wales Innovation Network**

## Scenarios for a science superpower

**“I want the UK to cement its status as a science superpower and, in so doing, level up right across the country.”**

Prime Minister Boris  
Johnson, 23 September  
2021



## Scenarios for a science superpower



**“...ensure the R&D tax reliefs continue to support cutting edge R&D methods ... reinforcing the UK’s status as a science superpower”**

Chancellor Rishi Sunak  
Budget & Spending Review 2021

## Scenarios for a science superpower

**“... countries must apply science and technology strategically and embed it in their policy- and decision-making.”**

Sir Patrick Vallance, 8 February 2022

Civil Service blog:

**UK's quest to be a global science superpower**



# Consulting stakeholders from:

- **Scotland, Wales, Northern Ireland, England**
  - **Academe: humanities, policy researchers, science researchers ...**
  - **University leadership**
  - **Business**
  - **Government: MoD, GO-Science, BEIS, Scottish Government**
  - **Funding agencies: UKRI; Medical charities**
  - **Think tanks and membership bodies**
  - **International diplomacy**
  - **Academic publishing**
- .... and more

# Reactions to “science superpower”

“You don’t become a science superpower by proclamation”

“I don’t know what it means but I want to be part of it”

“Does ‘science’ include humanities, engineering etc? ”

“The term ‘superpower’ has overtones of colonialism”

“It is a political slogan – but it has won wide support”

# Reactions to “science superpower”

“You don’t become a science superpower by proclamation”

“I don’t know what it means but I want to be part of it”

“...we stand ready to join the #ScienceSuperpower mission”

Tweet from PfizerUK, 16.3.22

“Does ‘science’ include humanities, engineering etc? ”

“Collaboration is key to keeping Scotland as a science superpower”

The Herald 4.5.22

“when [regulatory reforms are] implemented it will enable Legal and General to invest billions more in the UK’s ... science superpower agenda”

Financial Times, 21.2.22

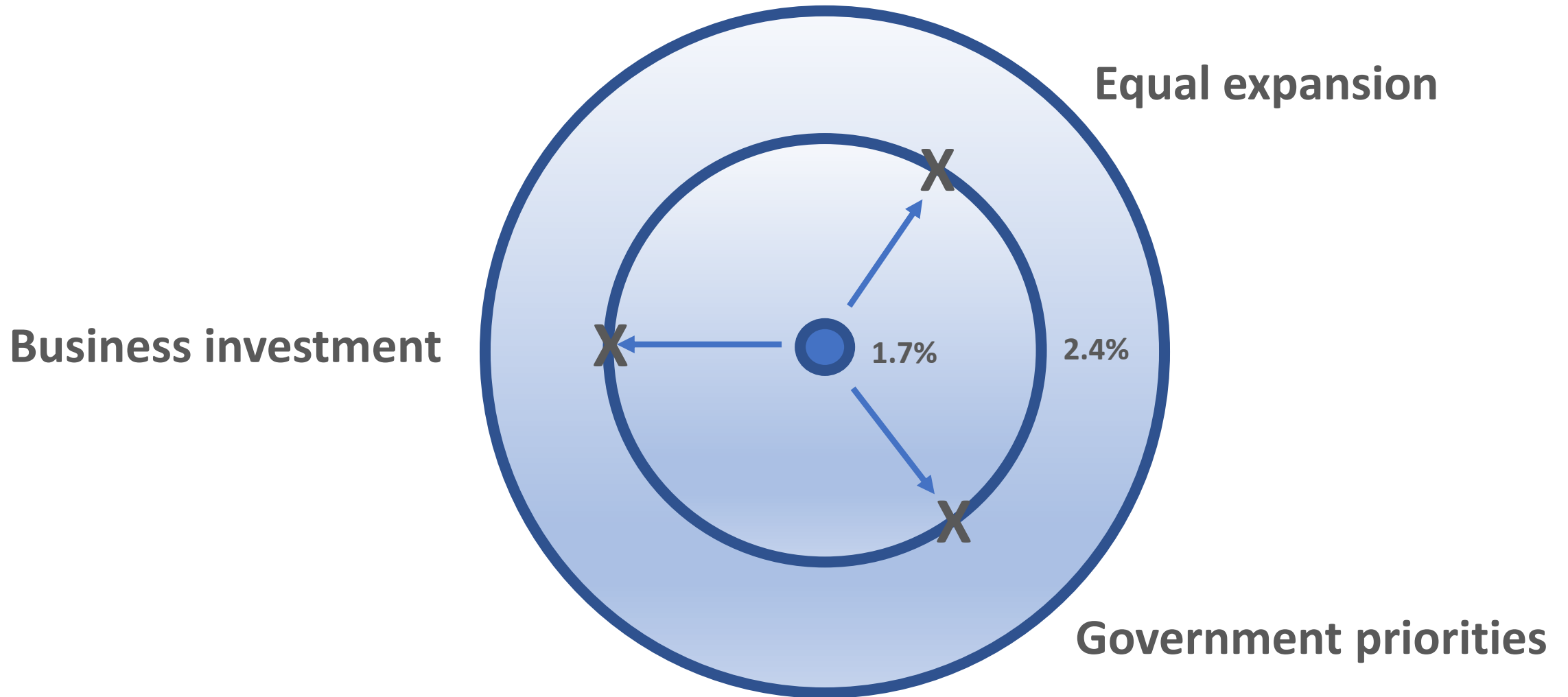
“The term ‘superpower’ has overtones of colonialism”

“It is a political slogan – but it has won wide support”

“World’s biggest property investors buy into ‘science superpower’ UK”

Financial Times 29.4.22

# Scenarios for a science superpower





Equal expansion	Business investment	Government priorities
Opportunities	Opportunities	Opportunities
Challenges	Challenges	Challenges

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<p><b>Opportunities</b></p> <p>Protects domains that may be threatened by further concentration</p> <p>Many stakeholders benefit a little</p>	<p><b>Opportunities</b></p>	<p><b>Opportunities</b></p>
<p><b>Challenges</b></p> <p>Locks in weaknesses in system and prevents radical reform</p> <p>Securing more public spending ahead of business investment</p>	<p><b>Challenges</b></p>	<p><b>Challenges</b></p>

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Equal expansion	Business investment	Government priorities
<p><b>Opportunities</b></p> <p>Protects domains that may be threatened by further concentration</p> <p>Many stakeholders benefit a little</p>	<p><b>Opportunities</b></p> <p>Case for expanding public spending on R&amp;D</p> <p>Pathways from academe to economy</p>	<p><b>Opportunities</b></p> <p>Government priorities reflect consensus (climate, health, defence etc)</p> <p>Signals long-term intent that attracts business investment</p>
<p><b>Challenges</b></p> <p>Locks in weaknesses in system and prevents radical reform</p> <p>Securing more public spending ahead of business investment</p>	<p><b>Challenges</b></p> <p>Policy instruments to attract business investment</p> <p>Free market influence (eg on regional distribution of R&amp;D)</p>	<p><b>Challenges</b></p> <p>Stability of Government priorities over time</p> <p>Differences in priorities across devolved nations and regions of UK</p>

**Equal expansion**

**Business investment**

**Government priorities**

**Researcher-led or  
Government-  
directed?**

**Top-down or  
bottom-up  
approach?**

**Central strategic  
approach or  
devolved and  
local adaptation?**

**Incumbents or  
insurgents?**

**Transformational  
or incremental  
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**International  
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research, investment or  
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**We want to hear from you**

**The science superpower ambition implies  
substantial changes to the research and innovation  
landscape**

**Your views on choices along the path to a  
superpower?**

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