

# Evaluating research funding organisations: Some notes from a systemic exploration

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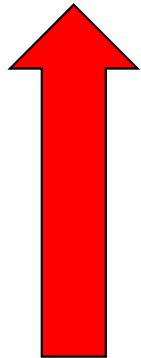
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## Road map

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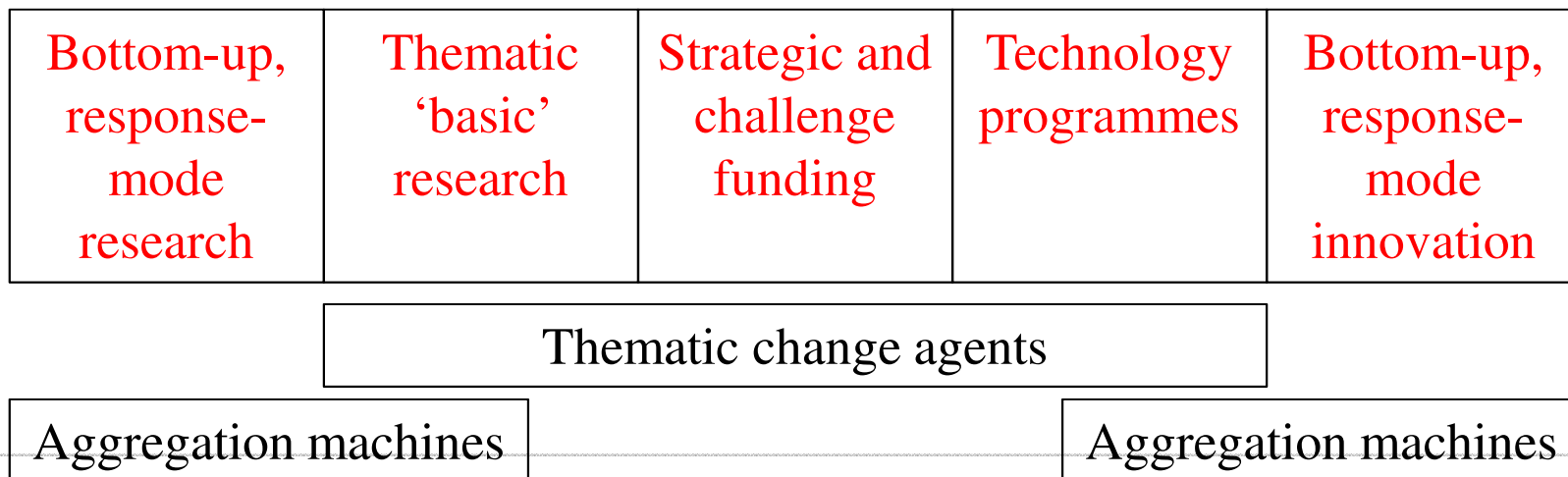
- Funding roles
- Coordination in NRIS governance
- Calling “Time!” on the two-pillar model?
- Change agency
- Principal-agent issues
- Research and evaluation questions

## A curious symmetry of functions...

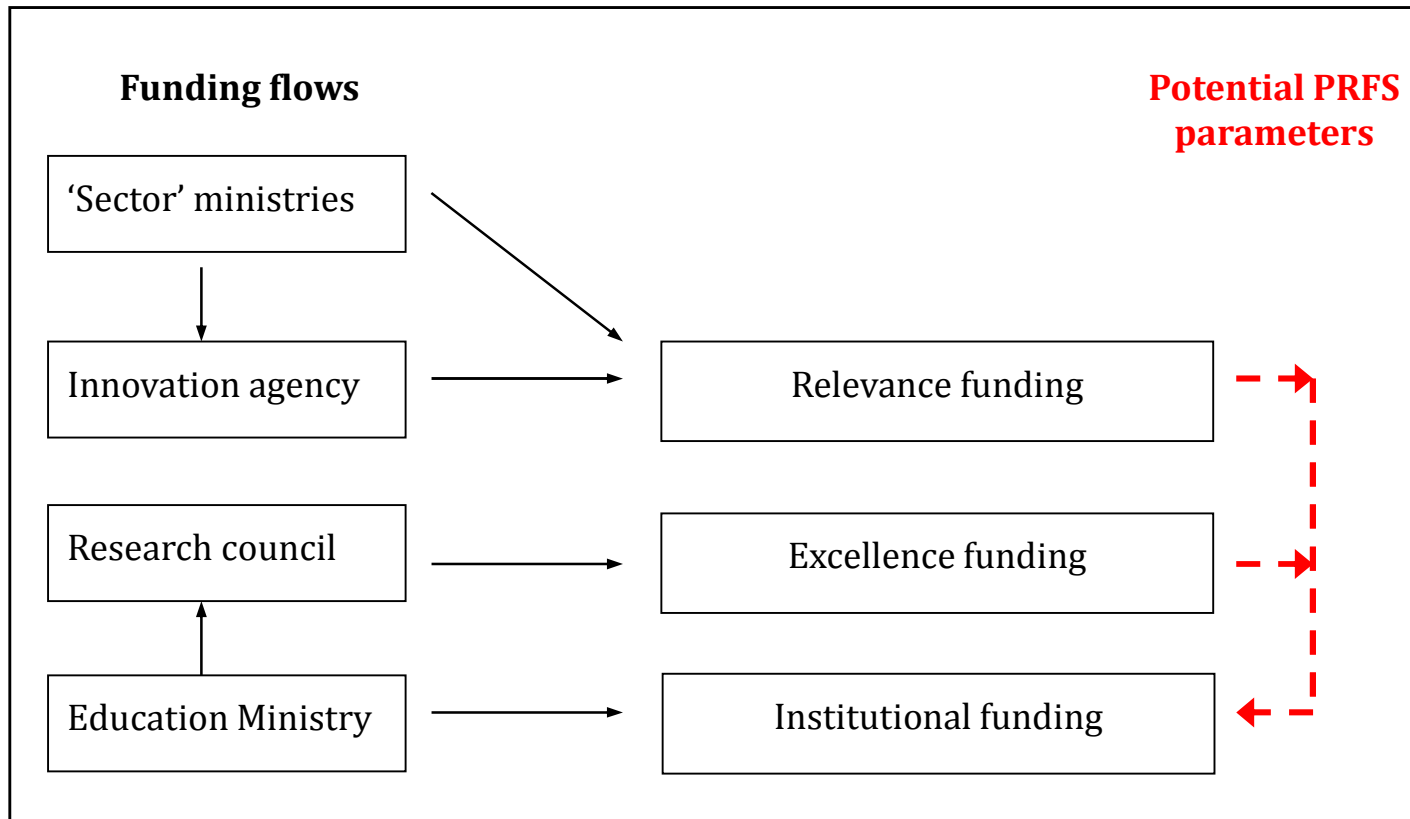


Structural change agency

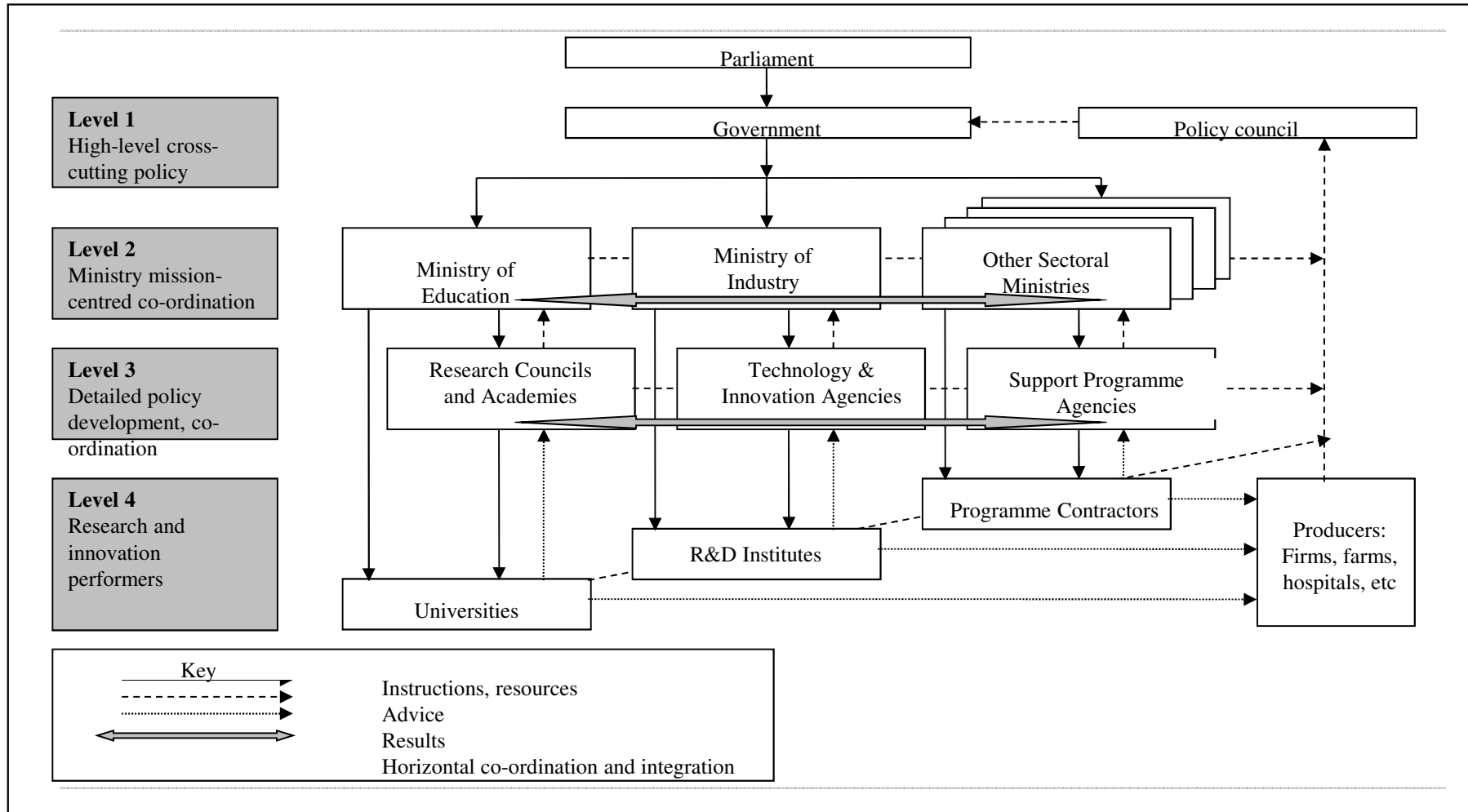
- Centres and clusters
- Young, new, small beneficiaries
- Completely bottom-up (with unfettered Matthew effect)



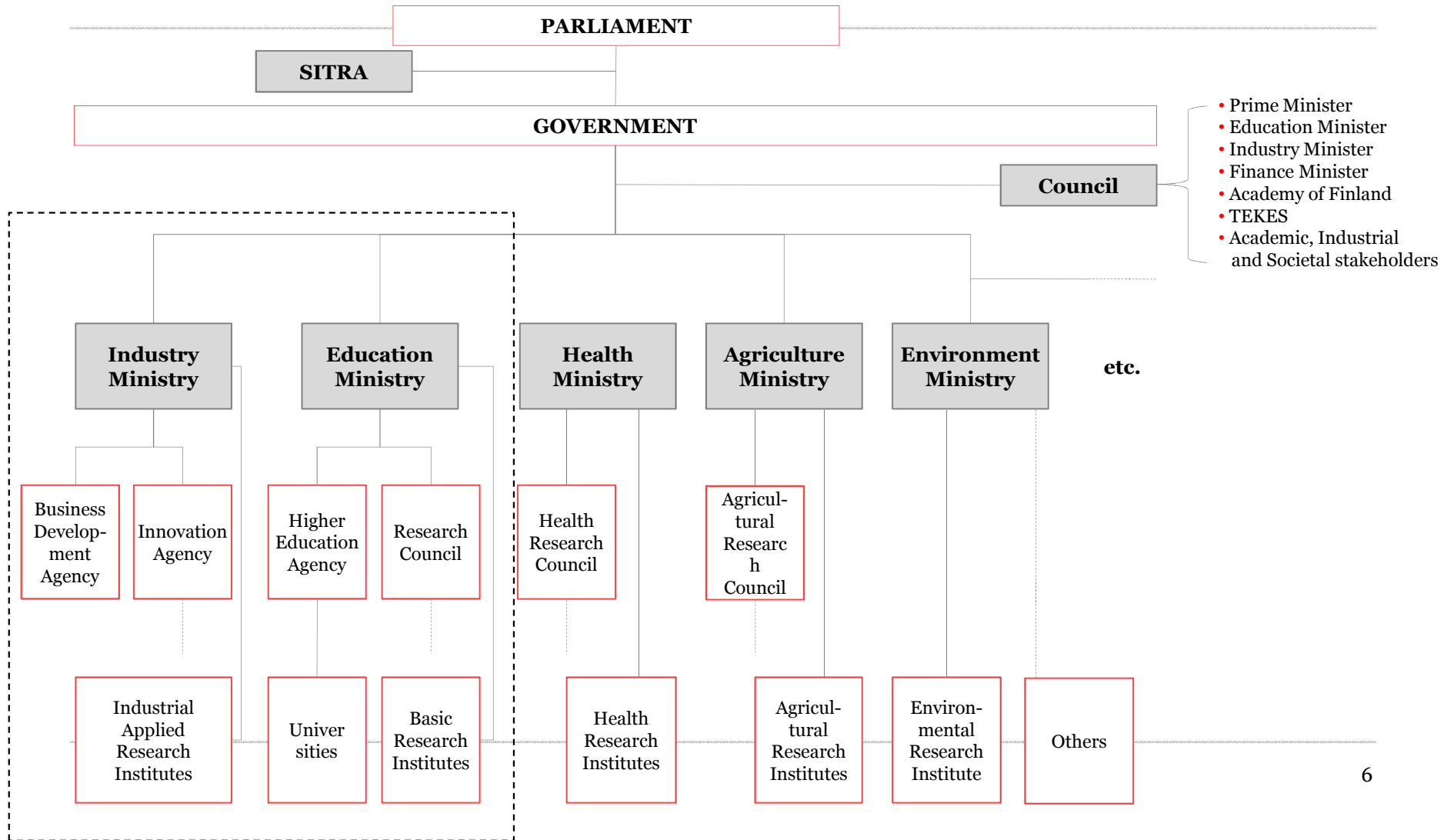
In research, we build these into incentive systems ...  
though we seem to get a bit muddled when it comes to  
performance-based institutional funding



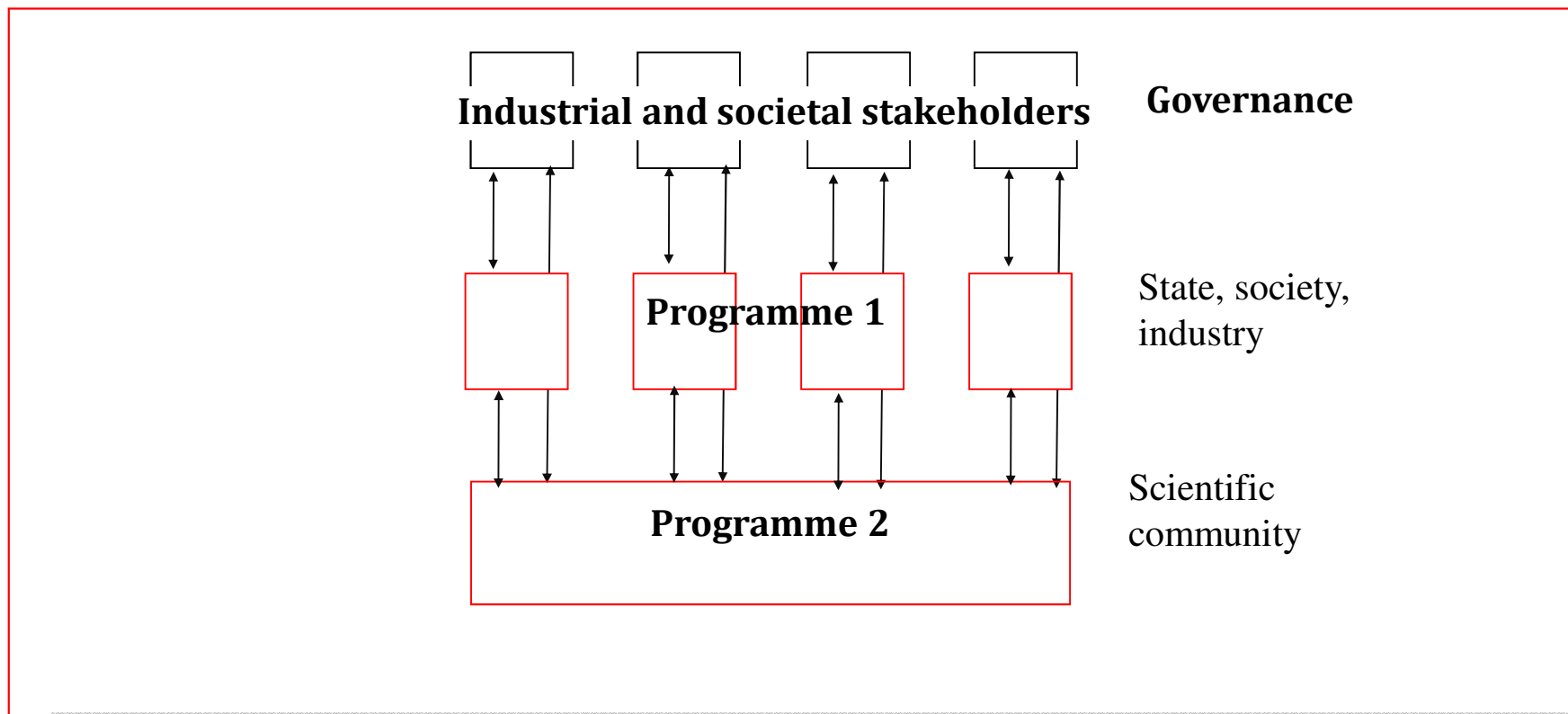
# How do we implement and coordinate across the NRIS?



# The 'two pillar' model in Finland is widely admired

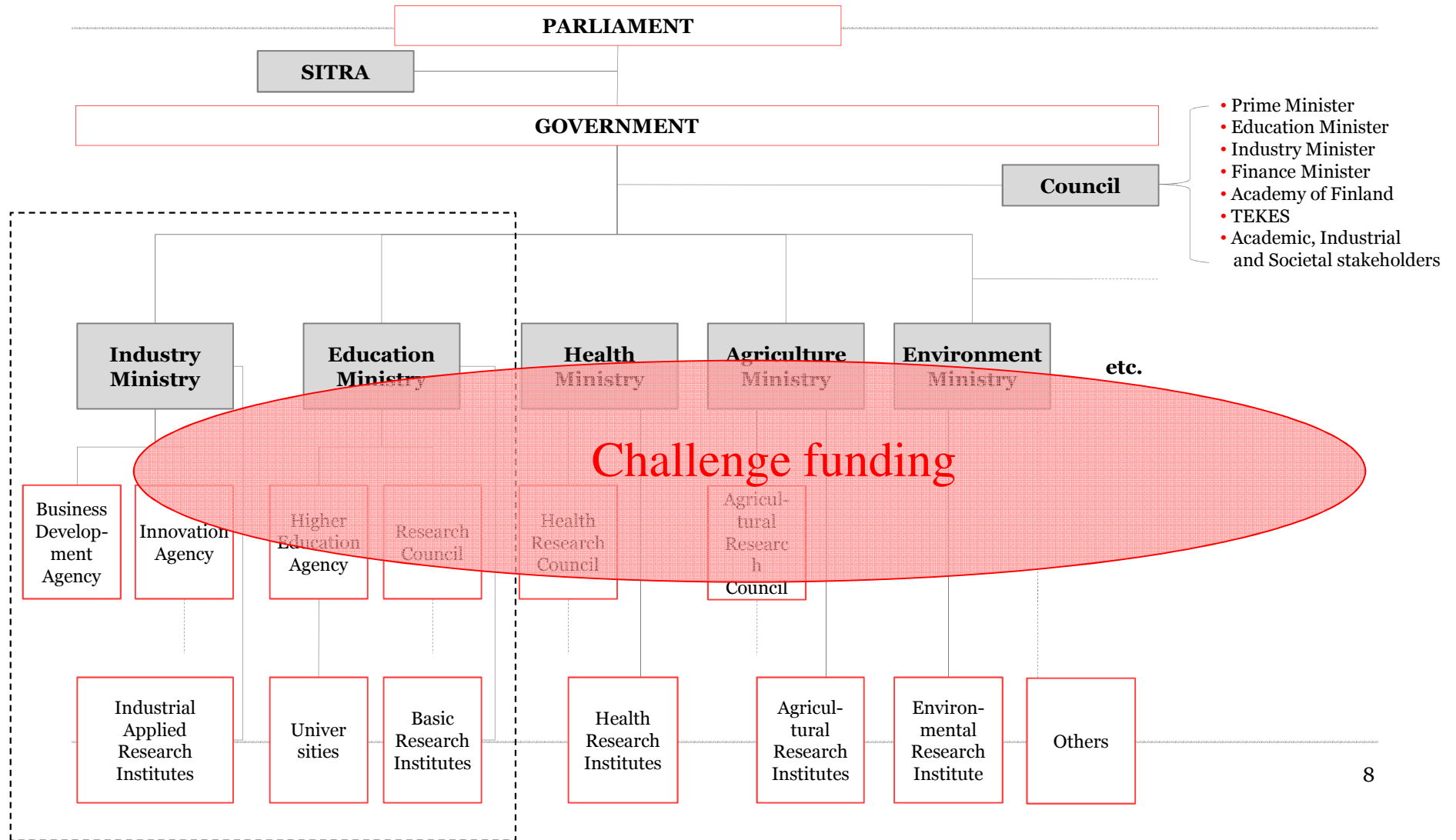


## The original two-pillar logic from Sweden (STU\*) – largely tuned for industrial development



\*Swedish National Board for Technological Development

# What about the challenges?



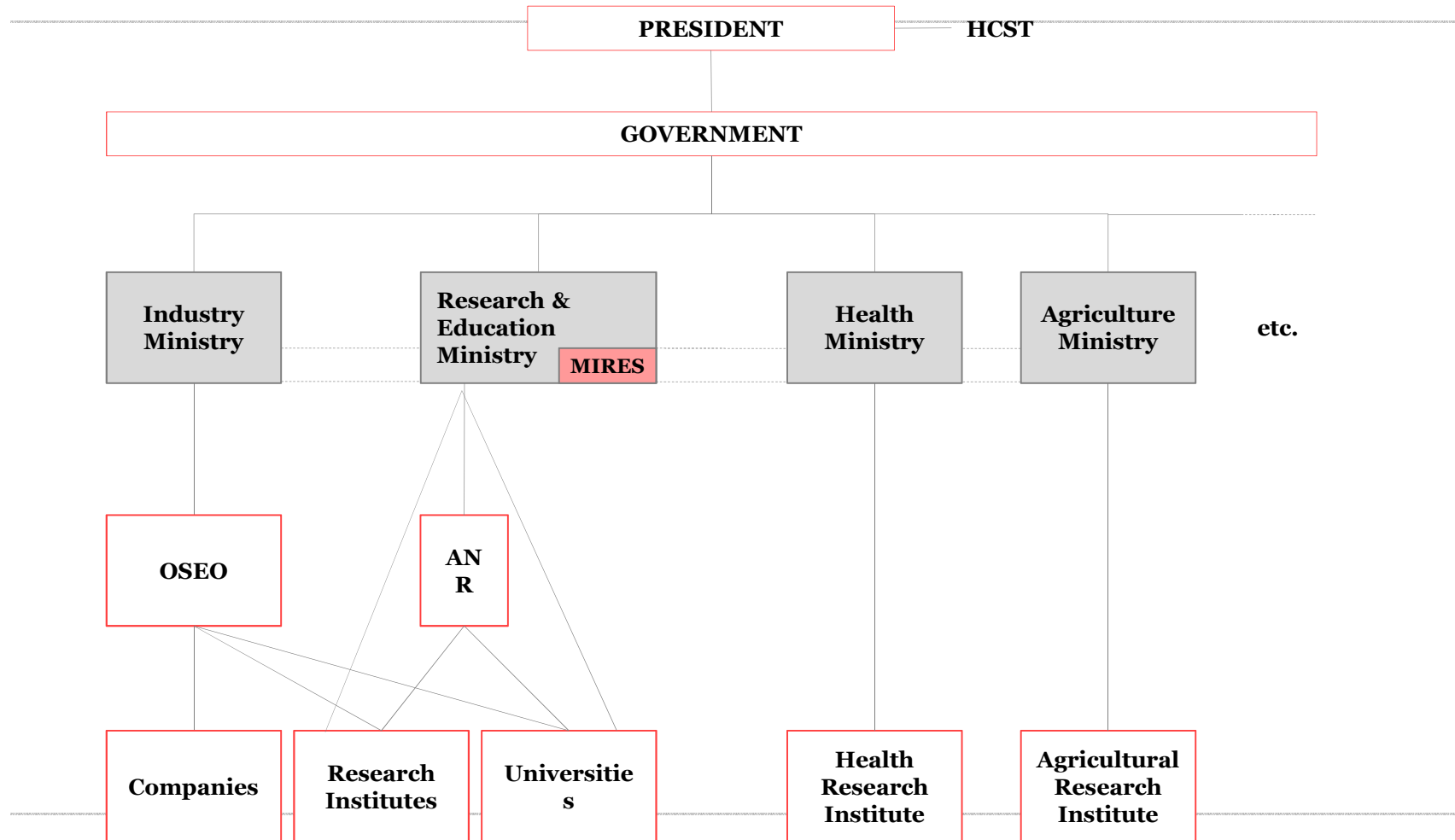


## Is time up for the 2-pillar model?

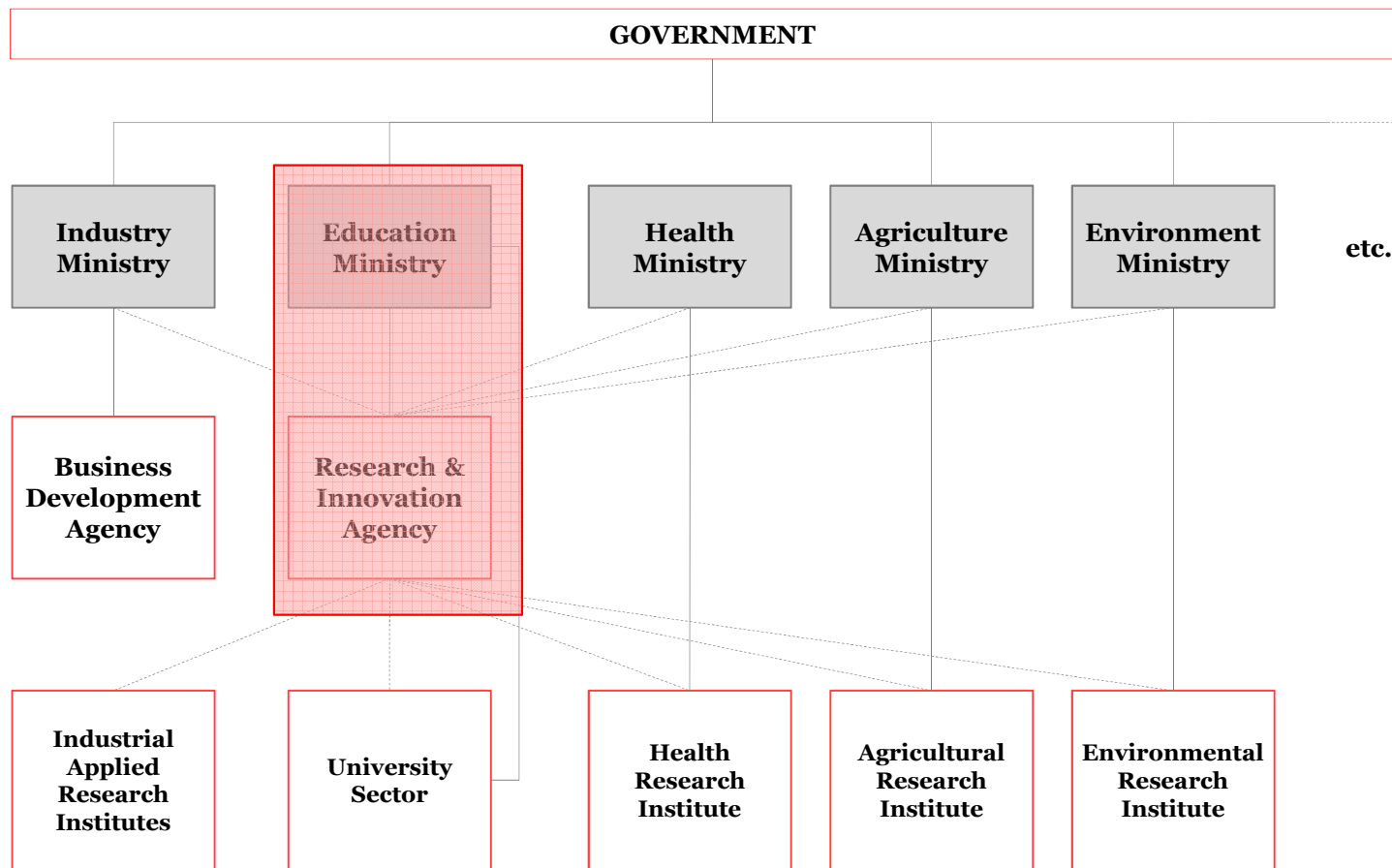
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- The 2-pillar approach has always been defective
    - *Reinforces the divide between education and industry ministries*
    - *Misses out the massive missions effort you see in the USA, China*
    - *Creates a need for coordination*
    - *Leads to a 'strategic research' gap, cp the TFR story in Sweden or strategic funding in Finland today*
  - A shift to challenge funding can't be handled well by the two-pillar system
    - *Requires a funding style that fits neither pillar*
    - *Demands even more coordination than before, if we retain a 2-pillar structure*
    - *Has to engage additional stakeholders who traditionally play little role in the 2-pillar model but who inhabit separate, mission systems*
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# Coordination by a science ministry (France) seems ineffective



# Coordination through one agency (Norway) is less usual but might be a more effective way to integrate challenge funding

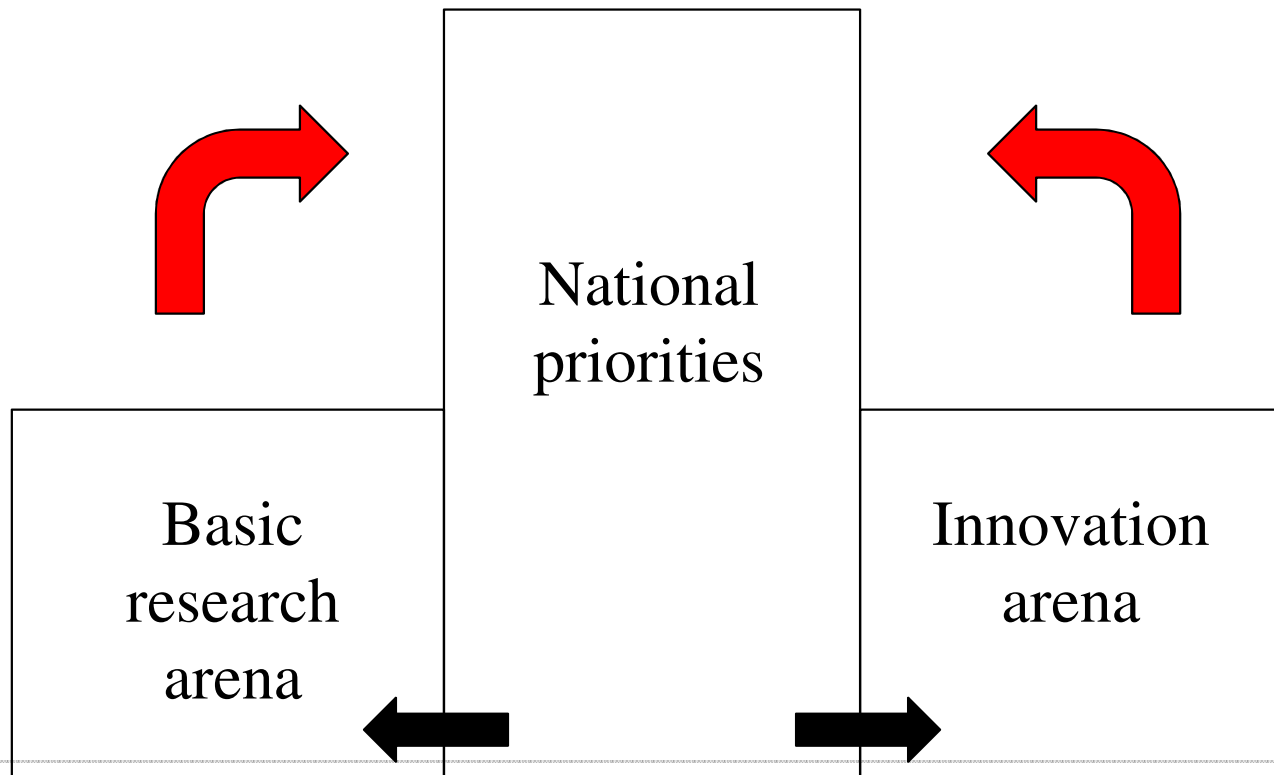


— Ownership and money

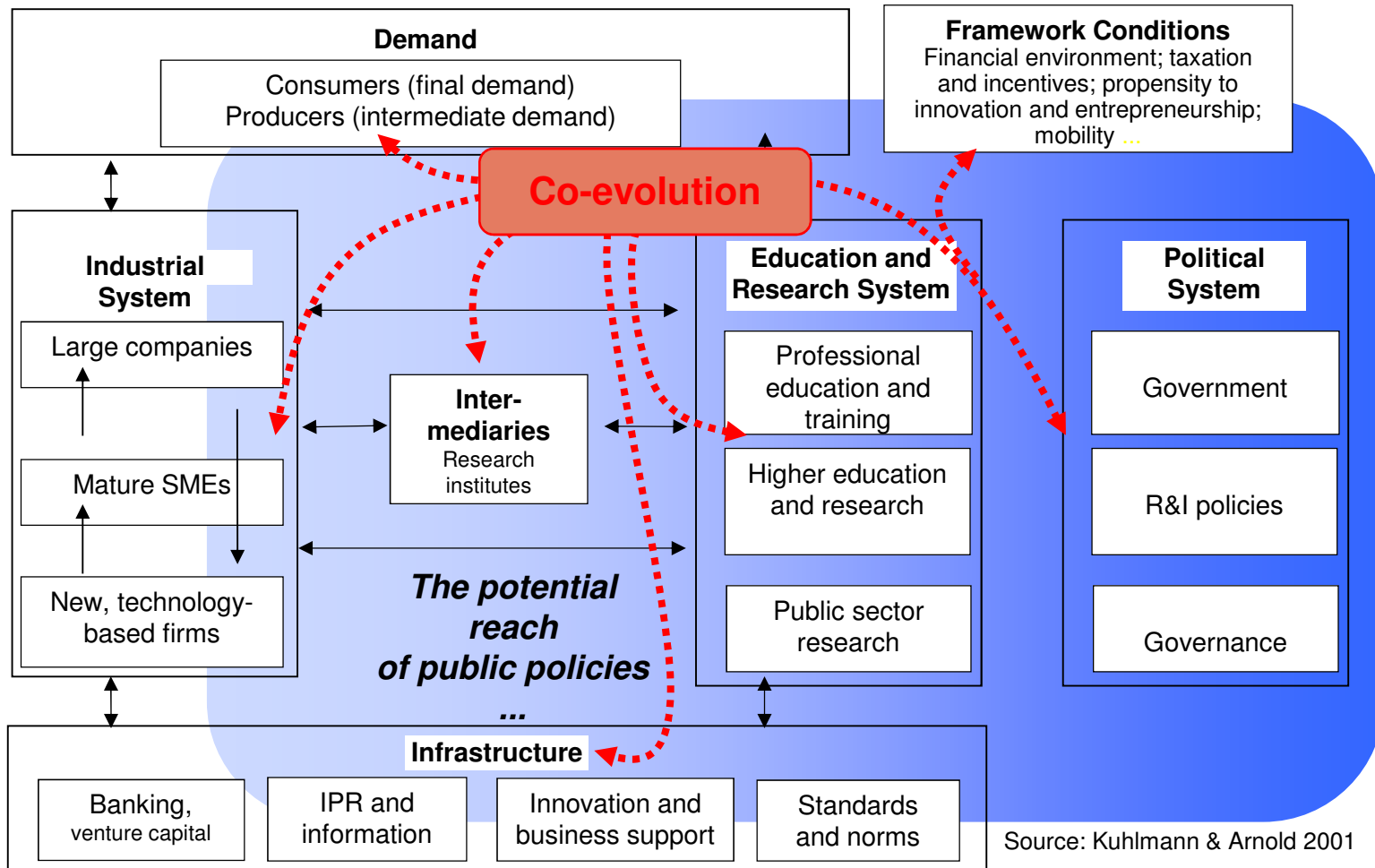
..... Money

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Three-in-one-pillar logic from Norway – integrating industrial, scientific and other societal needs (but probably only good for small countries)



# Major organisational evaluations are systems evaluations



Source: Kuhlmann & Arnold 2001

## Some challenges for the RCN evaluation

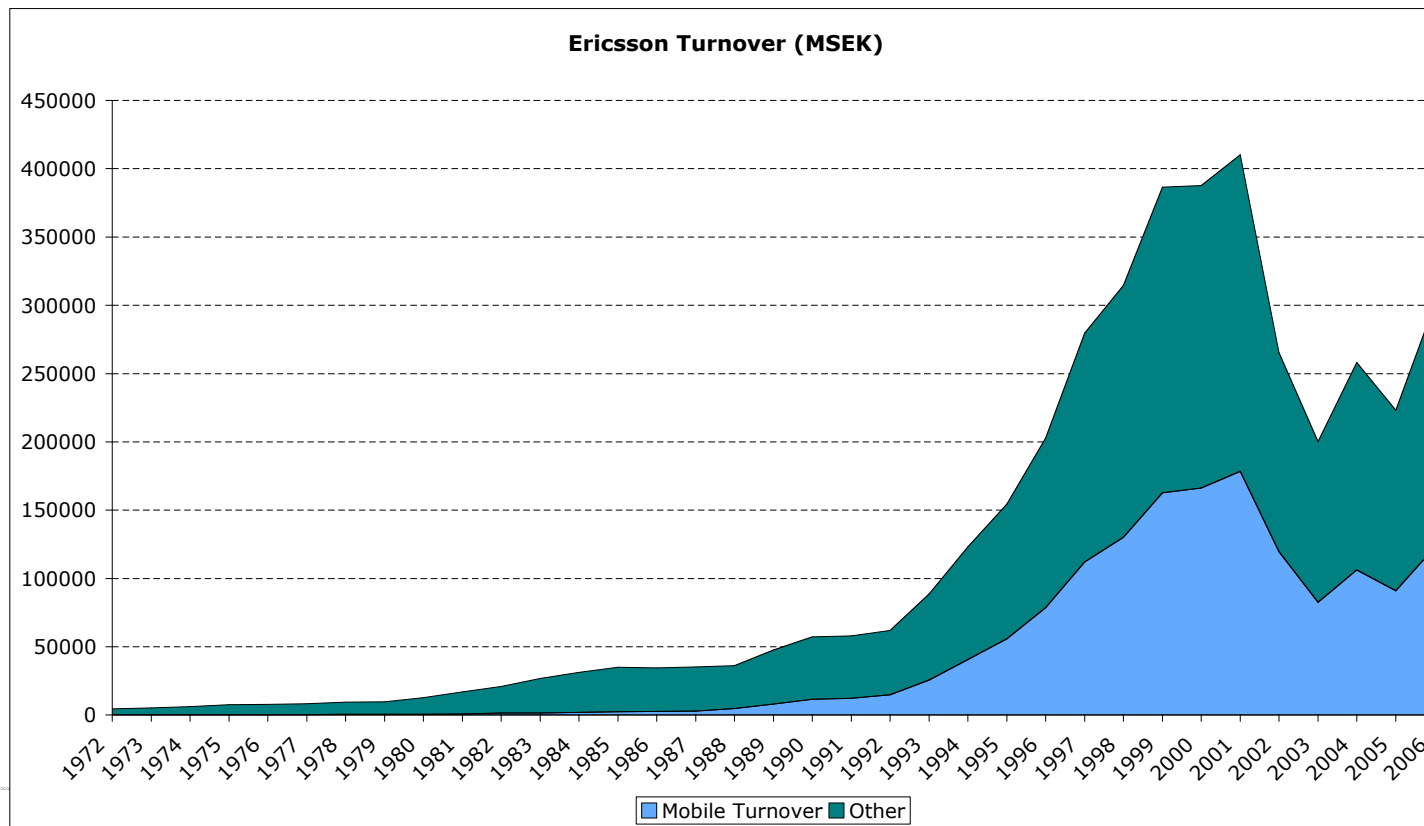
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- Understanding the specificities of the Norwegian research and Innovation System and RCN's systemic impacts
  - *Characteristics*
  - *Performance*
  - *History and culture*
- Tackling governance and principal-agent relations – especially where the principal is the evaluation customer
- Assessing change agency within a unique NRIS and history
  - *No control*
  - *No universally applicable or general 'theory'*
  - *No way statistically to specify expected performance*

## Change agency: STU spotting and betting on the Radio Club

	Speech coding	Channel coding	Modulation	Propagation, equalisation	Components
Per Hedelin	X				
Lars Zetterberg	X	X			
Tomas Ericsson		X			
Rolf Johannesson		X			
S-O ...hrvik		X			X
Jens Zander		X		X	
Lars Ahlin		X		X	
Björn Gudmundsson				X	
Carl-Erik Sundberg			X		
Tor Aulin			X		
Arne Svensson			X		
Mats Torkelsson					X
Sven Mattisson					X
Claes Hammar					X
Lars Wanhammar					X

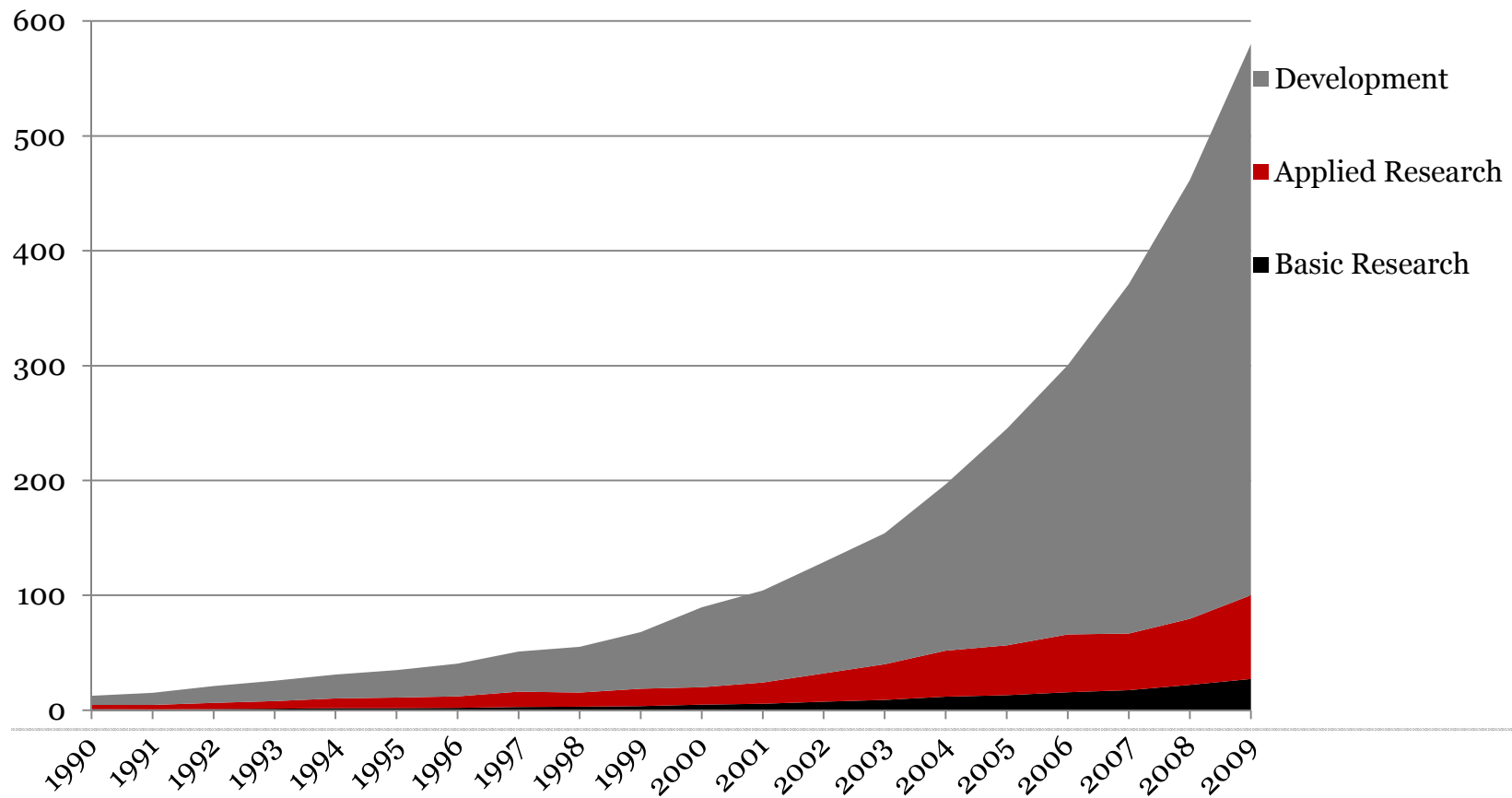
# Explains how Ericsson did this ...



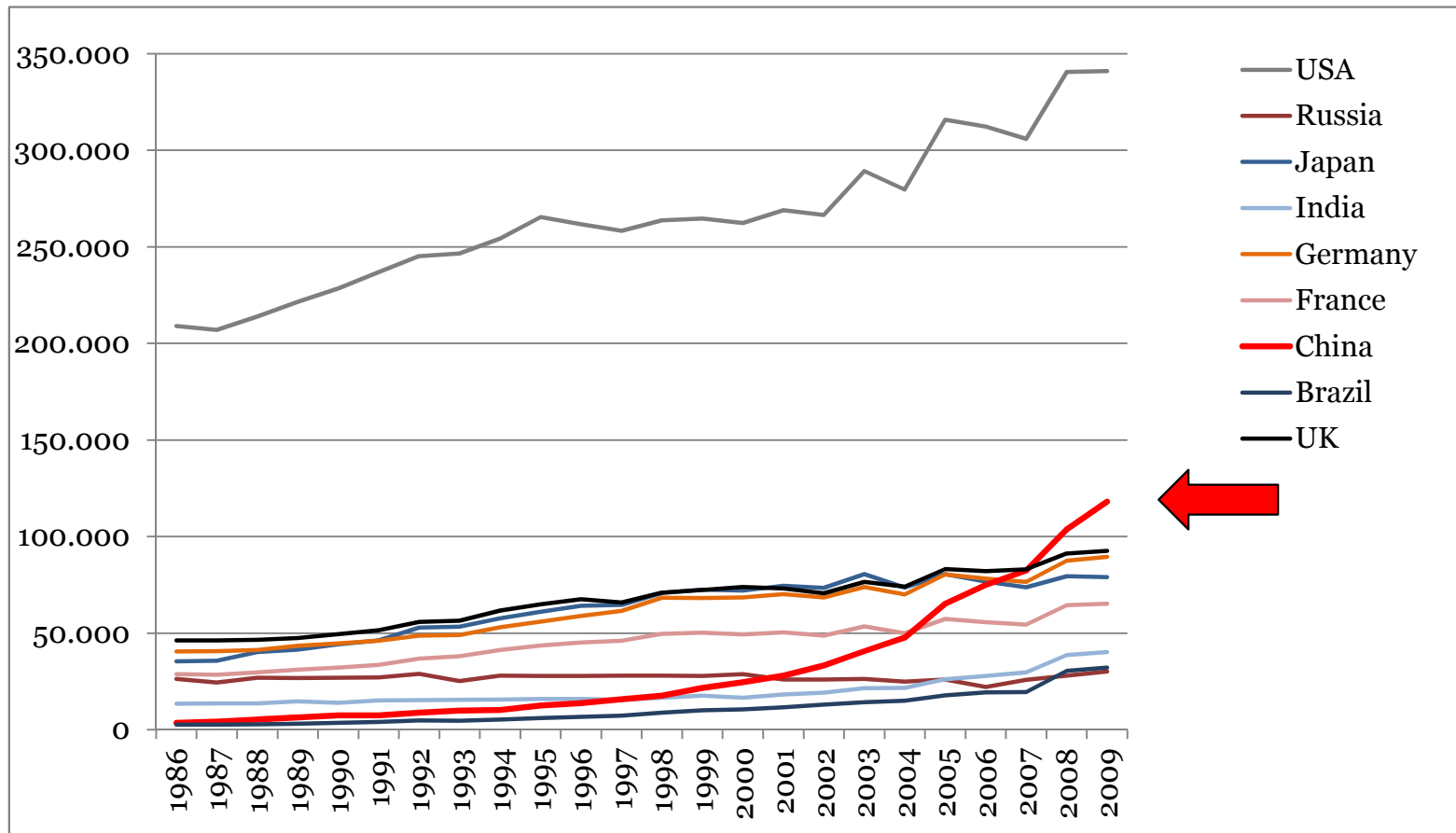


## NSFC did this (well, some of it ... )

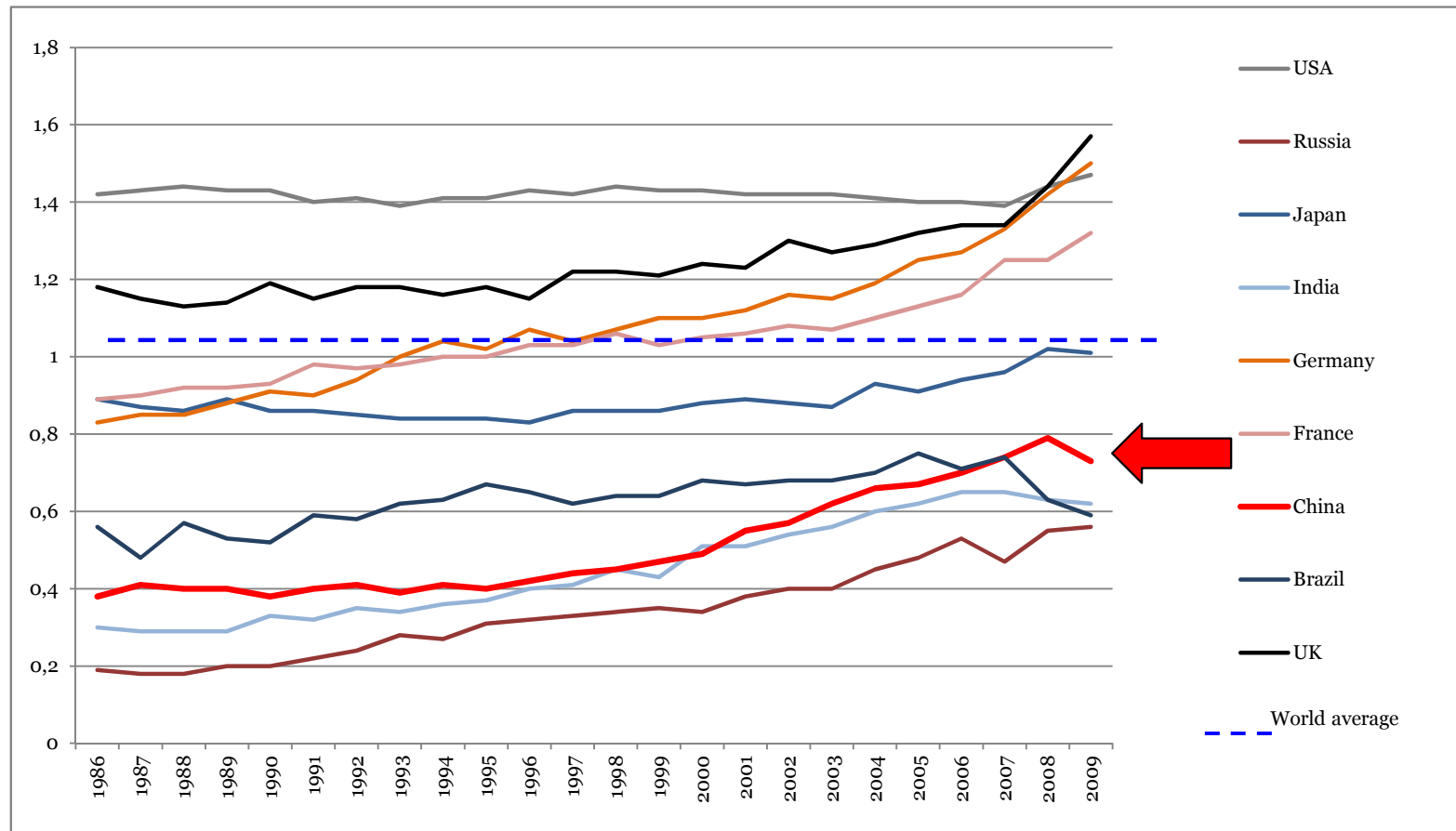
**China: GERD. Basic share constant at 5% (RMB billions)**



# It's amazing what you can do with just 5%. Chinese publications in the WoS

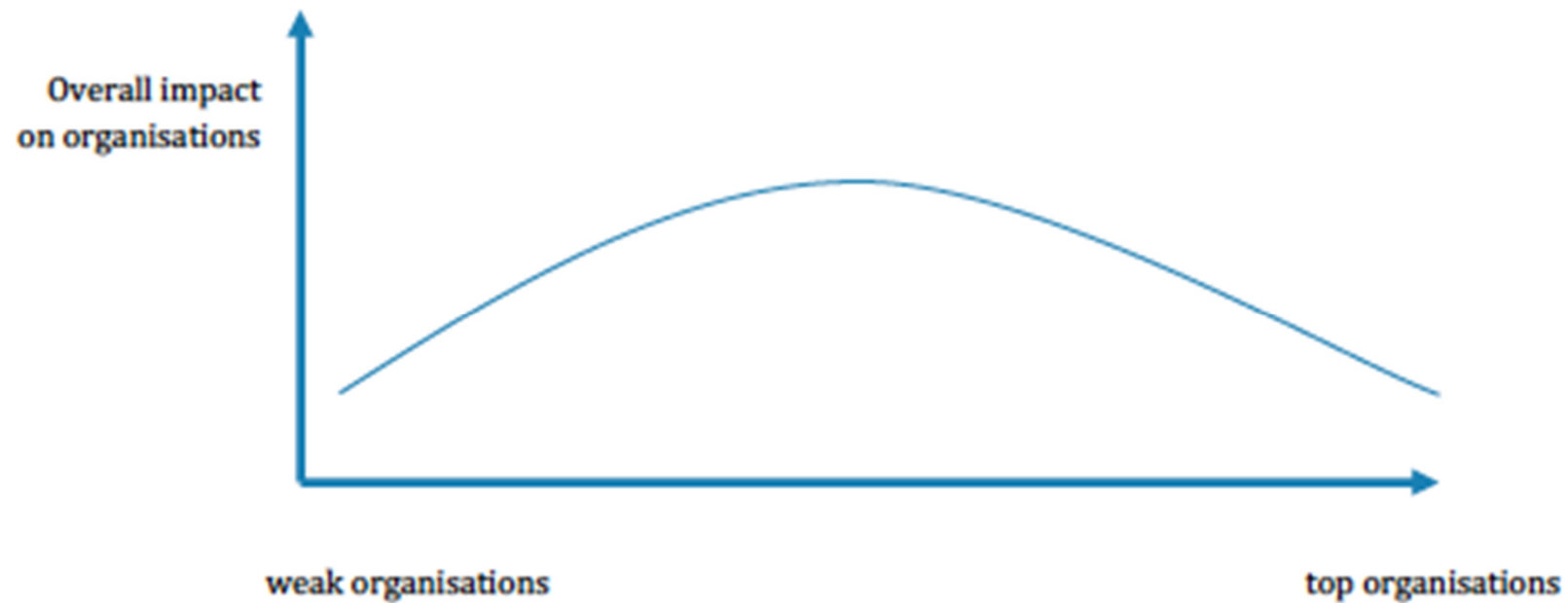


## Impacts of Chinese publications relative to the World



## Structural impact of ERC on research performers

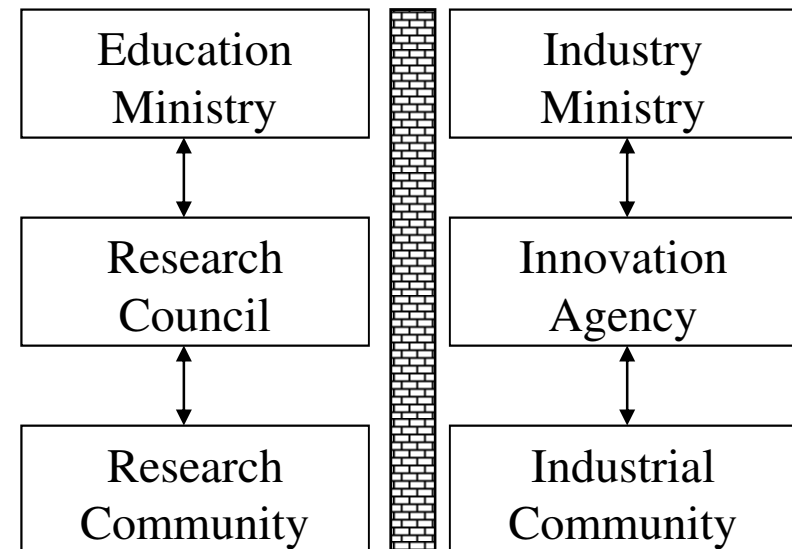
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## Governance and principal-agent games

- Do multi-principal agencies always lock in?
- Finding the right balance of strategic intelligence and power
  - *Oxenstierna, the weakness of Swedish ministries and the locus of coordination*
  - *Norway: a balance of power*
  - *NL Agency*
- Lock-ins caused by academic governance in Sweden
  - *Early STU*
  - *The Sandström commission*

### Capture of principal-agent systems by client communities\*



\* See Dietmar Braun, 'Who governs intermediary agencies? Principal-agent relations in research policy making,' *Journal of Public Policy*, 13 (2), 1993, pp135-162

## Research opportunities

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- Proper tracking of boundary work
  - *Interplay between governance, funding and the emergence of new fields, disciplines and knowledge communities*
  - *Role of stakeholders in locking innovation in or out*
- Limits to governance in the implementation of national strategy through funding
- Co-evolution of funding organisations in NRIS
- Effects of balance of intelligence and power in multi-level governance

## Evaluation questions

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- Mixes
  - *Policy, programming, aggregation machines vs change agents, incentives, institutions ...*
- Coordination effectiveness
- Flexibility, adaptability and timeliness of funders in triggering or reacting to change
- Policy conformance
- Structural impacts of funders
- Cost-effectiveness

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Thank you

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