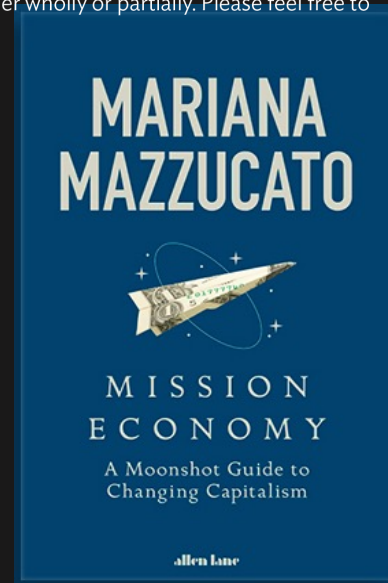
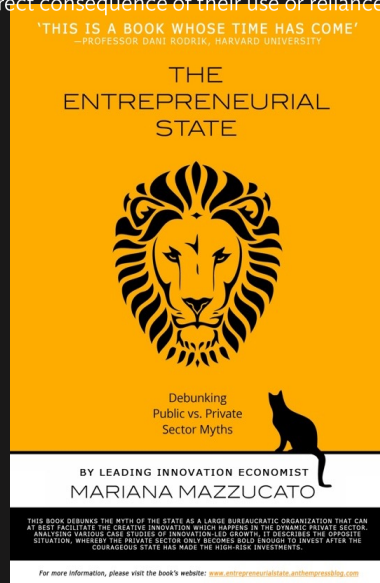


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AN ENTREPRENEURIAL MISSION-ORIENTED **GREEN** STATE: implications for public funds



Institute for Innovation
and Public Purpose

Mariana Mazzucato

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Founding Director Institute for Innovation and Public Purpose
University College London @MazzucatoM

Slides @MarianaMazzucato

Rethinking the ‘direction’ of growth

- Green New Deal
- Smart sustainable inclusive growth
- Sustainable Development Goals
- Return of ‘industrial strategy’
- Building back ”better”



By simply “levelling the playing field”?

- Set rules of the game
- De-risk, enable, incentivise, ‘facilitate’ private sector
- Fix market and system ‘failures’
- Lender of last resort



the assumption



private
sector

vs.

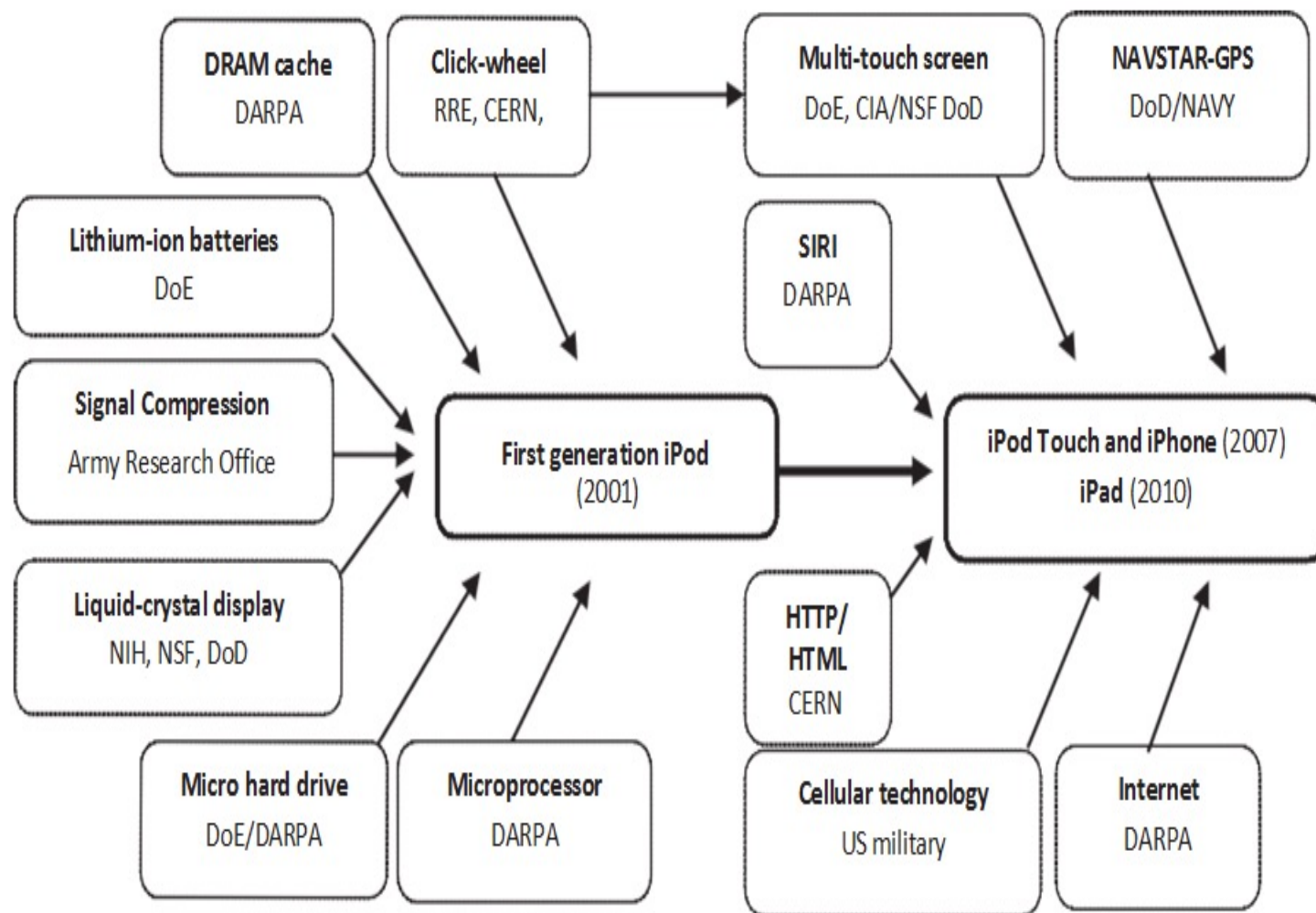


public
sector

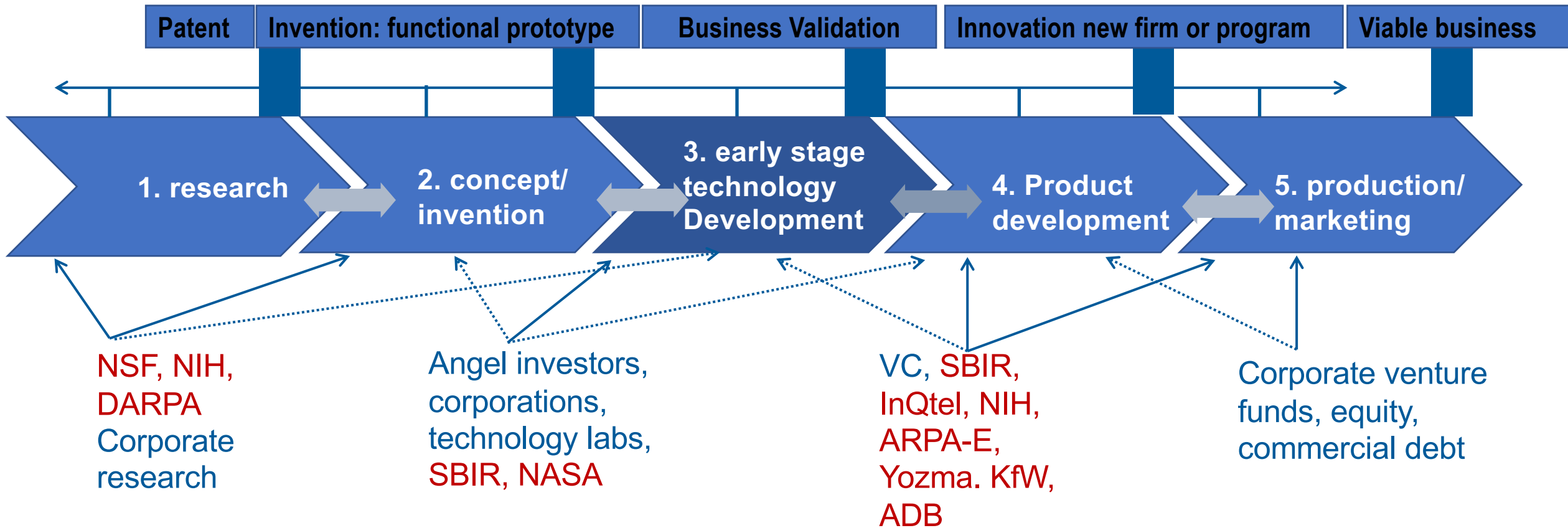
Market fixing policies didn't get us GPTs

- 'mass production' system
- aviation and space technologies
- IT and internet
- nuclear power
- nanotechnology and AI
- green technology

What made the iPhone so 'smart'?



Public investment across the entire innovation chain



Co-creating missions not fixing markets

NASA's mission is to “*Drive advances in science, technology, aeronautics, and space exploration to enhance knowledge, education, innovation, economic vitality, and stewardship of Earth.*” NASA 2014 Strategic Plan

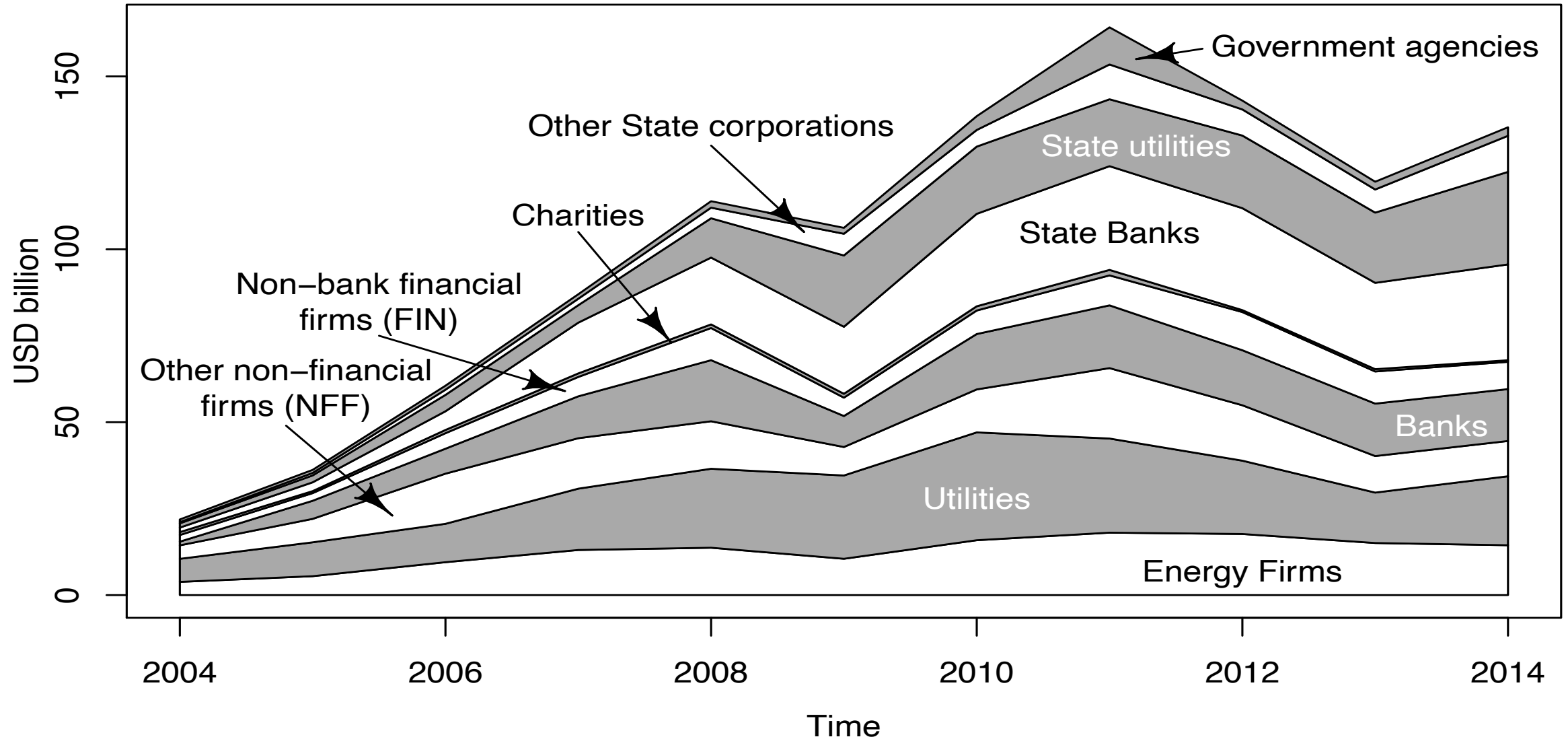
“*Creating breakthrough technologies for national security is the mission of the Defense Advanced Research Projects Agency (DARPA).*”

“The **ARPA-E mission** is to *catalyze* the development of transformational, high-impact energy technologies.”

“**NIH's mission** is to seek fundamental knowledge about the nature and behavior of living systems and the *application* of that knowledge to enhance health, lengthen life, and reduce illness and disability.”

“The **mission** of the **KfW Group** is to support change and encourage *forward-looking ideas* – in Germany, Europe and throughout the world.”

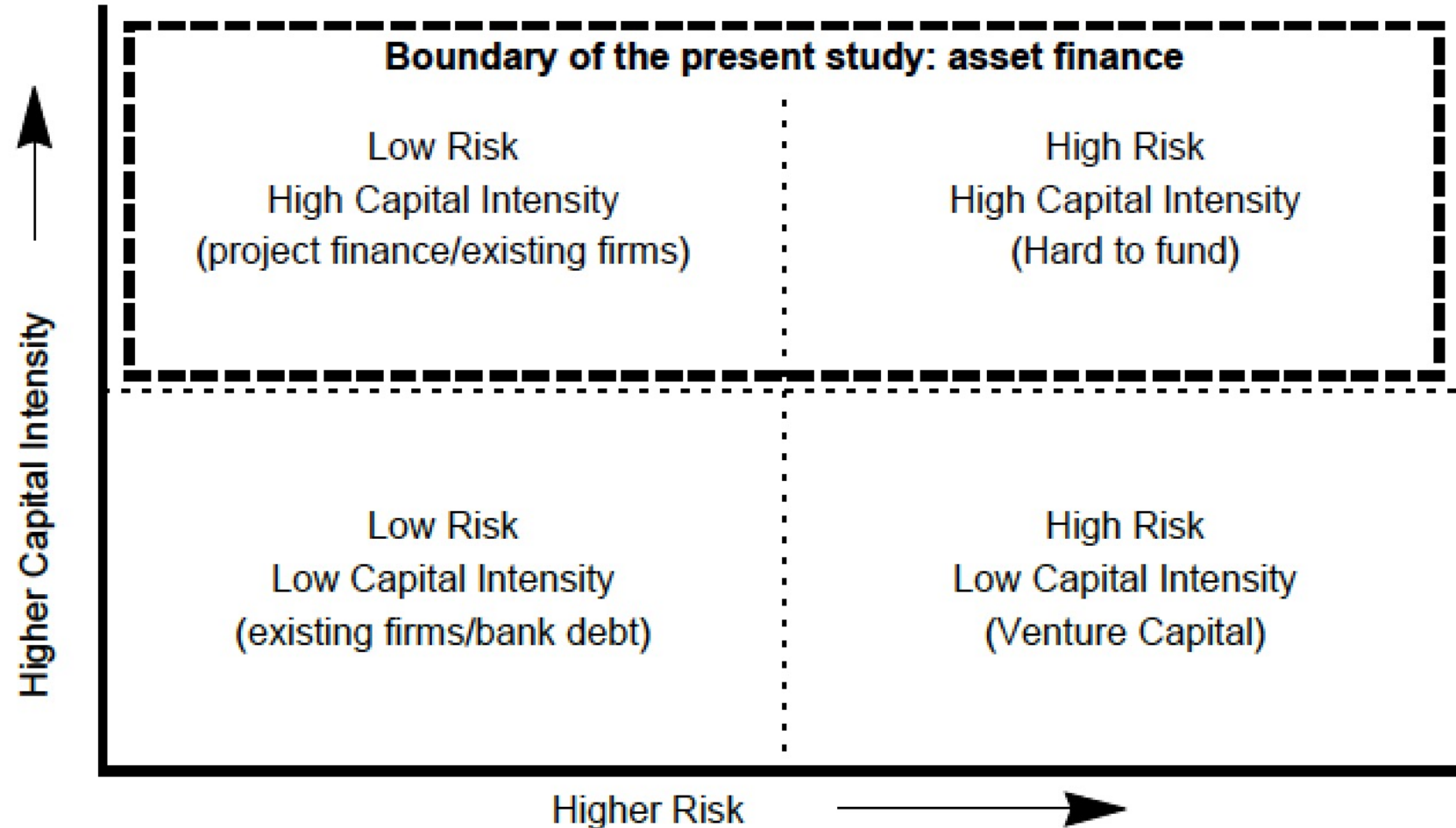
Heterogeneous actors in renewables



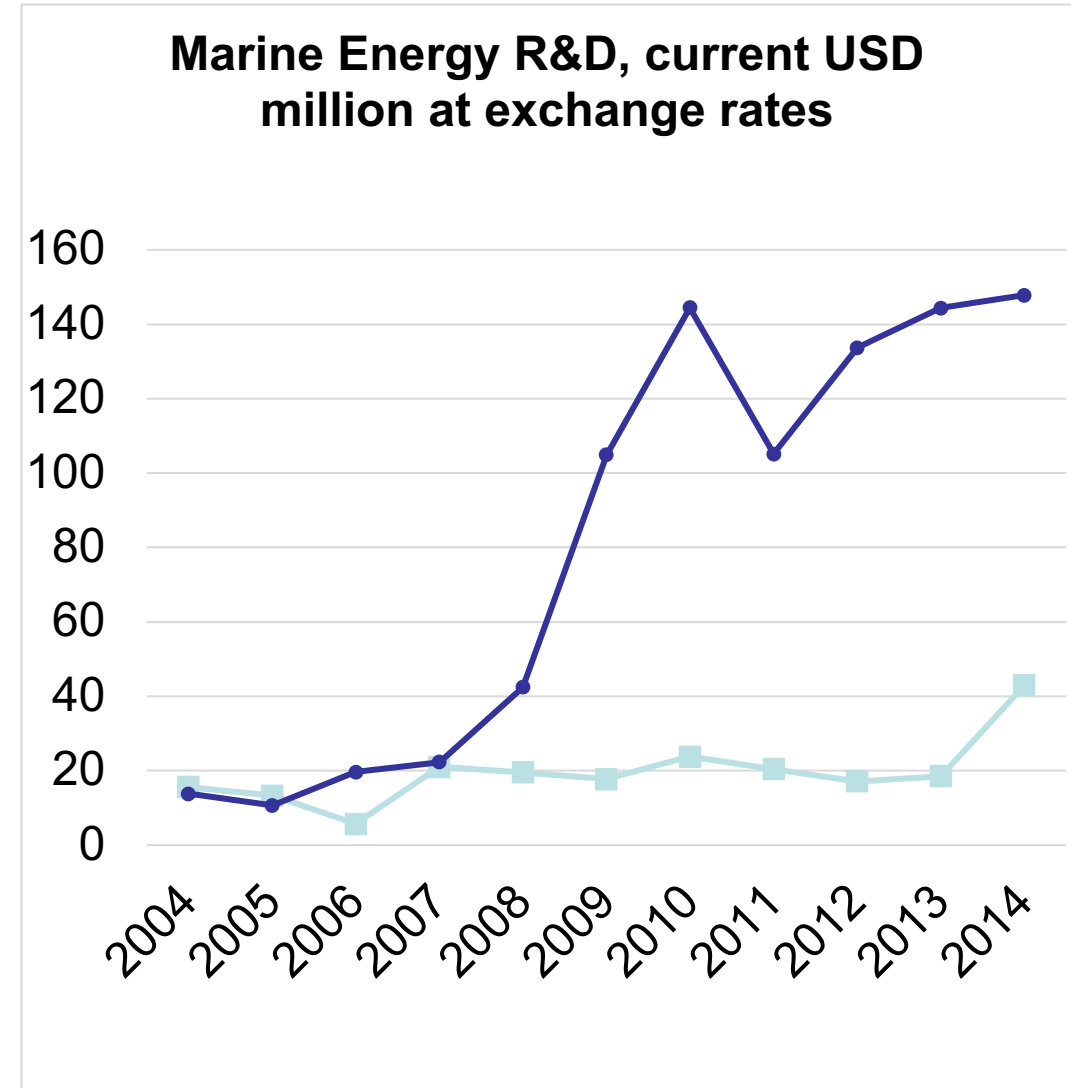
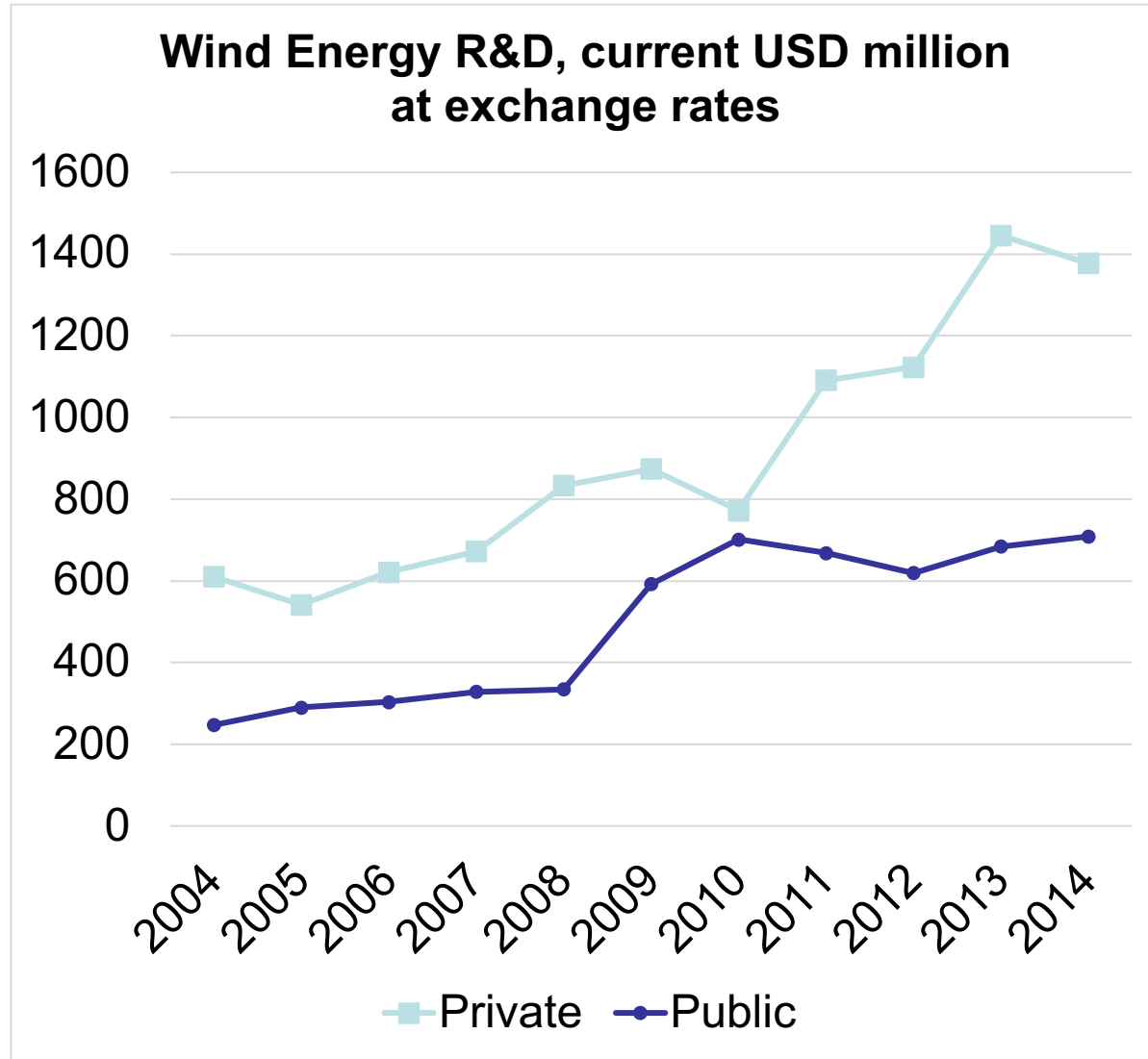
Source: Mazzucato and Semieniuk (2016), based on data by Bloomberg New Energy Finance.

Green tech: government leads business follows

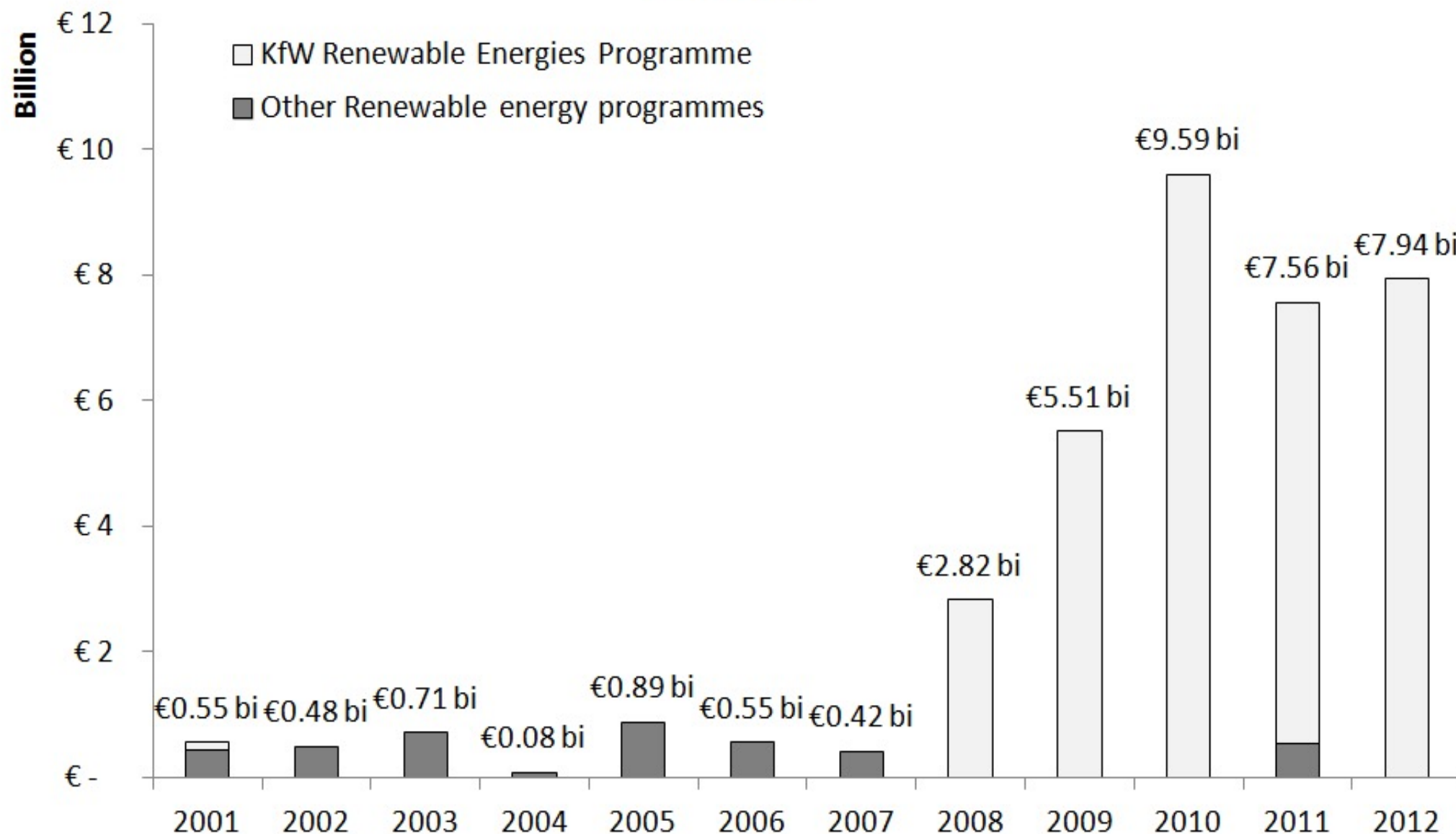
Figure 4: Risk-capital intensity classification of RE finance



Global R&D: wind & marine

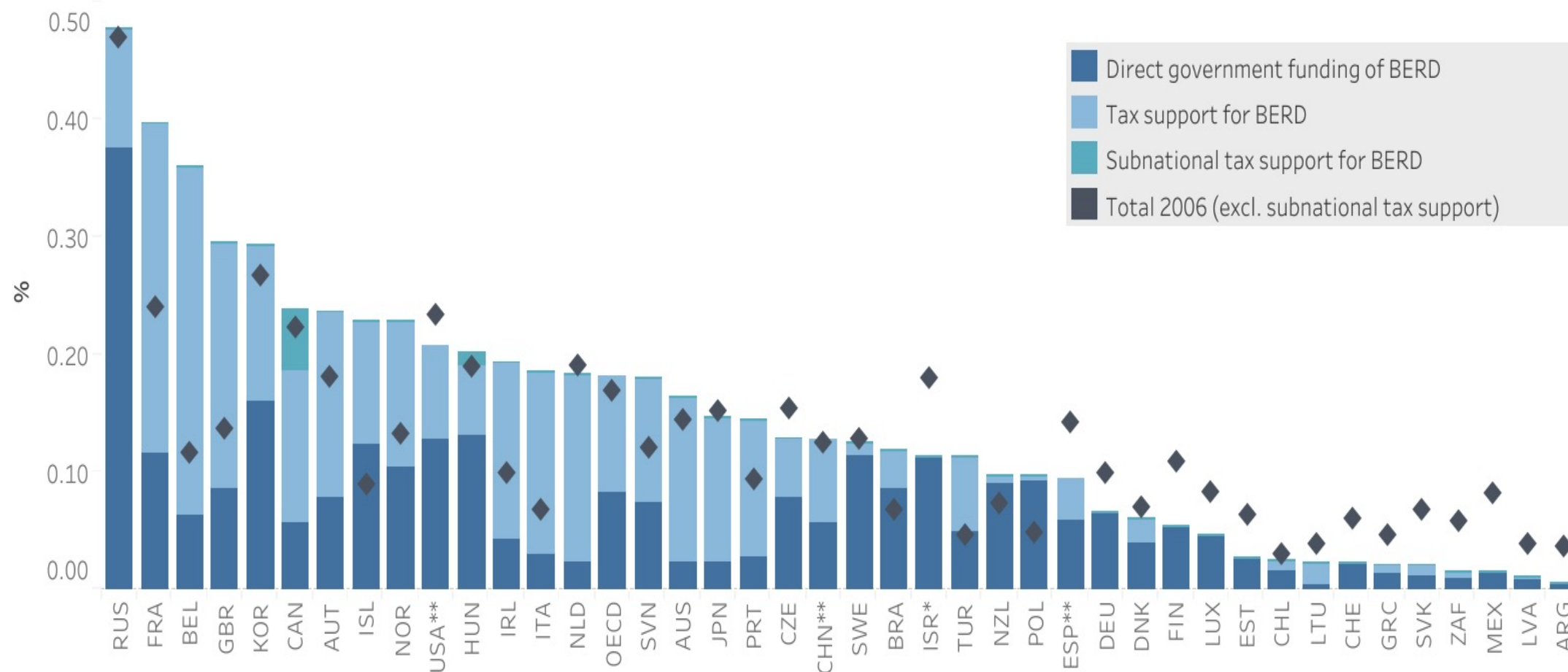


KfW funding for industrial environmental and climate protection projects in Germany 2001-2012



Direct government funding and government tax support for business R&D, 2017 and 2006

As a percentage of GDP

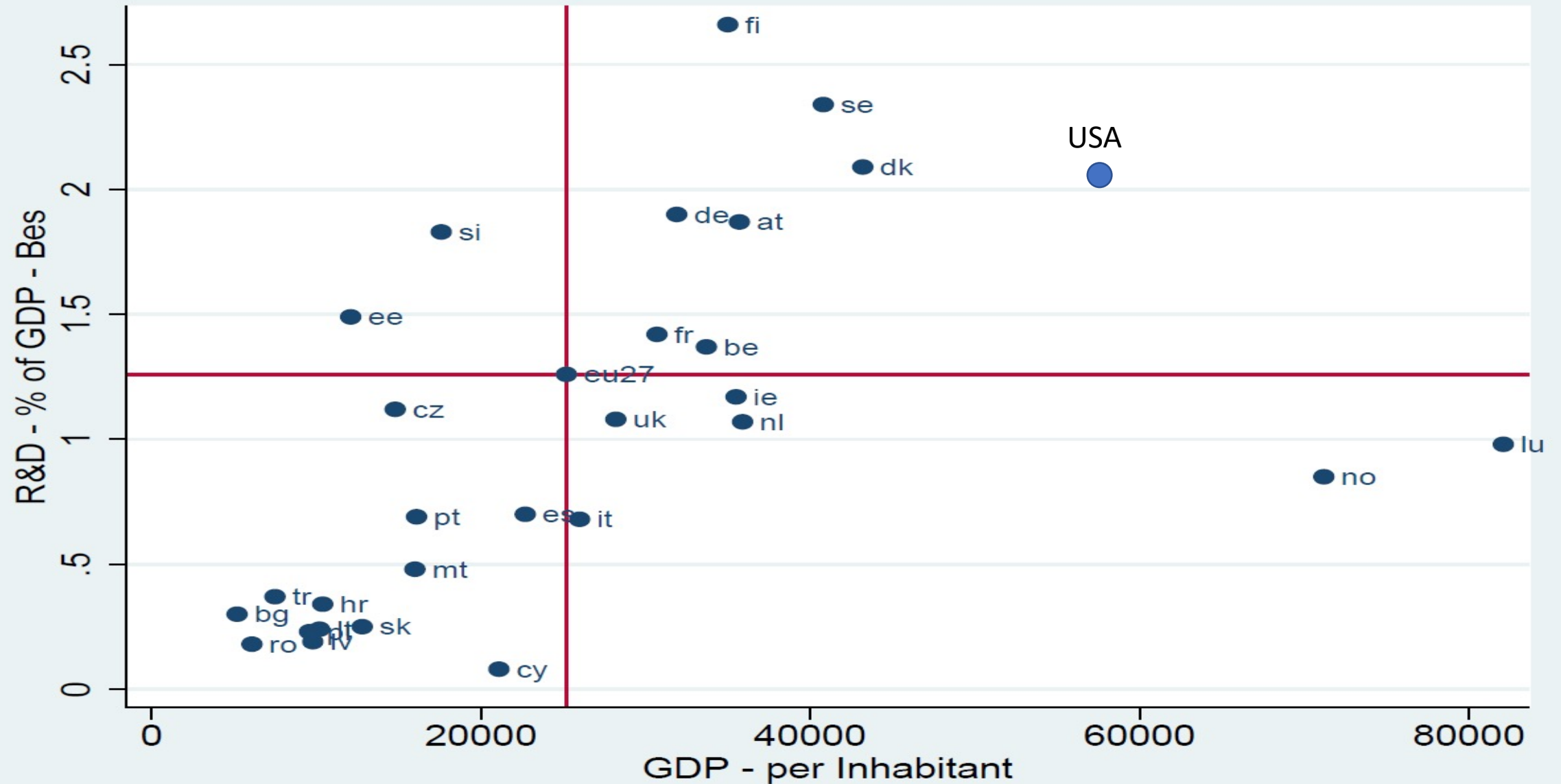


*: Data on tax support not available

** : Data on subnational tax support not available

Source: OECD, R&D Tax Incentive Database, <http://oe.cd/rdtax> , June 2020. Data & notes: <https://oe.cd/ds/rdtax>

Business R&D spending (BERD)



MARIANA
MAZZUCATO



MISSION
ECONOMY

A Moonshot Guide to
Changing Capitalism

allen lane

From challenges, through missions, across sectors, to projects

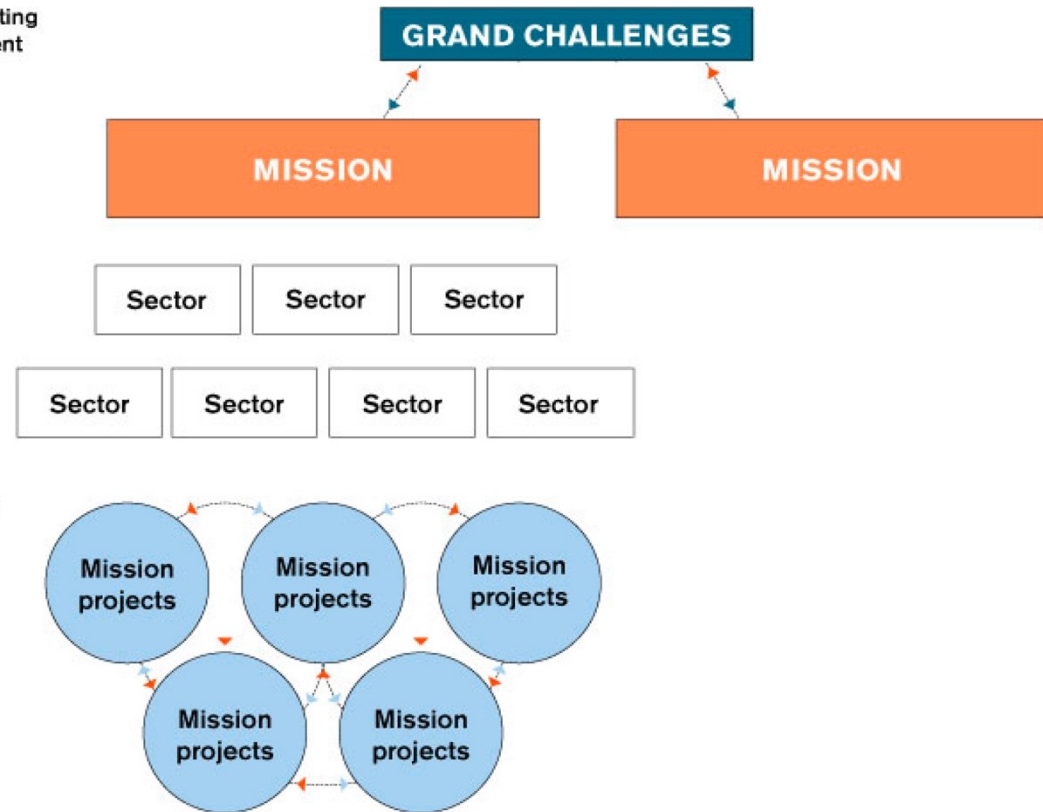


Political agenda setting
and civic engagement

Clear targeted
missions

Cross-sectoral
innovation

Portfolio of projects
and bottom-up
experimentation

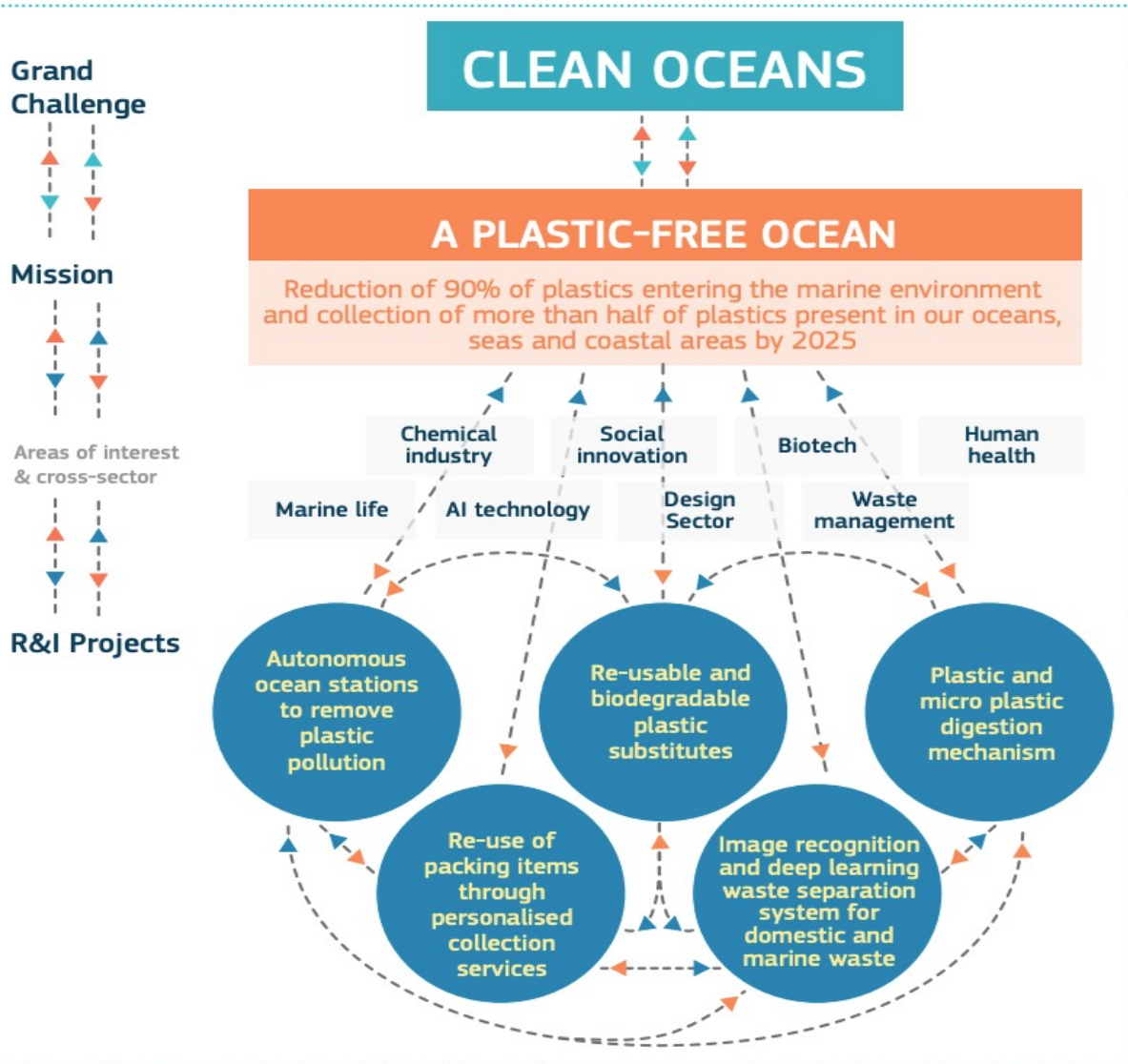


Five criteria for missions

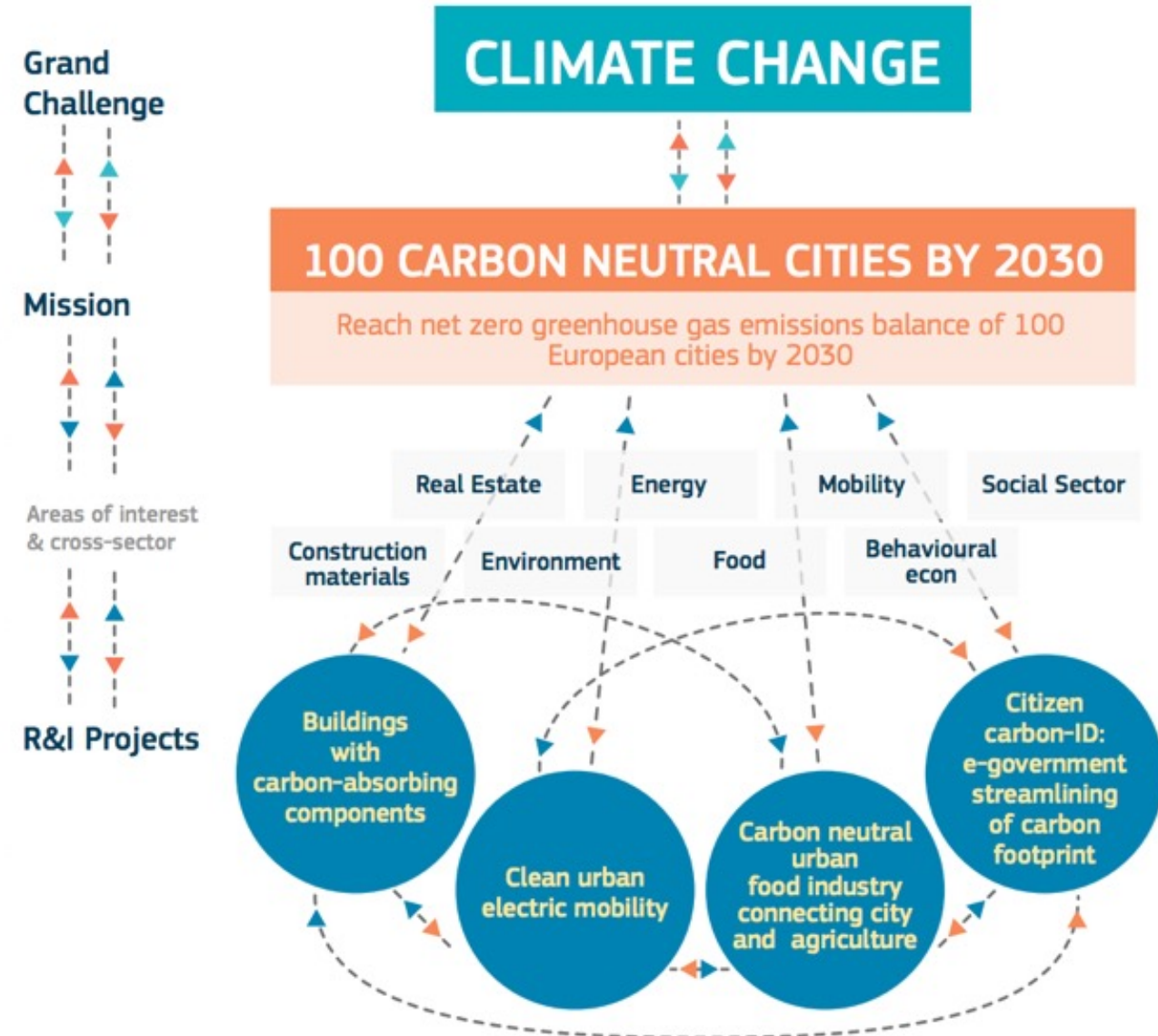
- Be bold, inspirational, with wide societal relevance
- Have a clear direction: targeted, measurable, and time-bound
- Be ambitious but realistic with research and innovation actions
- Be cross-disciplinary, cross-sectoral, and cross-actor innovation
- Drive multiple, bottom-up solutions.



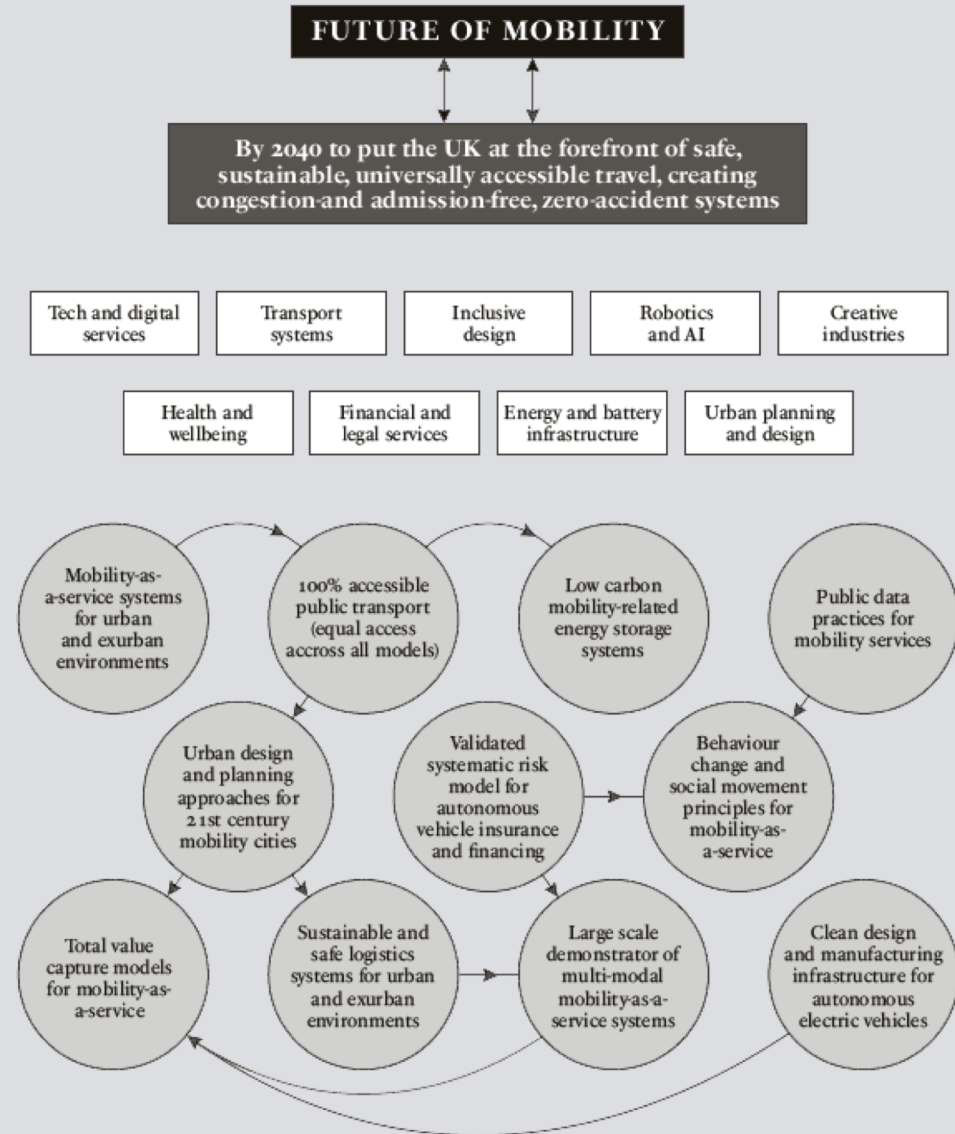
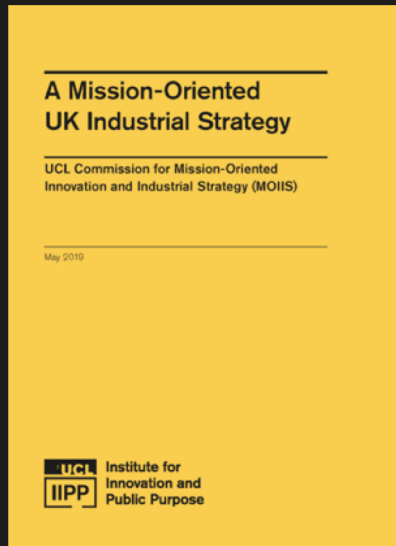
SDG 14



SDG 13



UK Industrial Strategy



A new mission-oriented public bank for Scotland

FINANCIAL TIMES

UK COMPANIES MARKETS OPINION WORK & CAREERS LIFE & ARTS

Scottish economy + Add to myFT

Scotland plans £2bn national investment bank

Sturgeon welcomes proposal that would help fund SMEs and strategic projects



Scottish first minister Nicola Sturgeon: "The time for debating whether or not this is a good idea has passed, it is now time to get on with making it happen" © EPA

Mure Dickie in Edinburgh FEBRUARY 28, 2018



Scotland has announced plans for a £2bn national investment bank to support smaller businesses and strategic projects with "patient" long-term funding.

Nicola Sturgeon, first minister, welcomed proposals on Wednesday for a government-owned bank to be in operation by 2020.

"The time for debating whether or not this is a good idea has passed, it is now time to get on with making it happen," Ms Sturgeon said. "We are determined now to move at pace."

Institute for Innovation and Public Purpose

A mission-oriented framework for the Scottish National Investment Bank

by Mariana Mazzucato and Laurie Macfarlane

March 2019



Figure 2: Scotland's National Performance Framework



Source: Scottish Government¹⁴

The European Investment Bank

Missions take directionality of innovation head on and consider how to govern the process so as to develop dynamic capabilities of public institutions. This means redesigning instruments like grants, loans and procurement policy to fuel bottom-up innovation to target challenge-oriented missions, across a multitude of economic sectors and firm sizes. Such directionality is also enabled by a strategic take on financing policies. Missions require patient, long-term finance, but also finance that is willing to take on higher risks: while some innovations are successful, many are not.

Asking what forms risk finance should take, in order to steer a transition towards mission completion is key.

Mazzucato, M. and Mikheeva, O. (2020). The EIB and the new EU missions framework, UCL Institute for Innovation and Public Purpose, IIPP Policy Report (IIPP WP 2020-17). Available at: <https://www.ucl.ac.uk/bartlett/public-purpose/wp2020-17>



Key lessons for missions (Mazzucato 2018)

Missions should be:

- 1 Picking the willing
- 2 Co-shaping markets
- 3 Welcoming experimentation
- 4 Focusing on the quality of finance
- 5 Conducting proper engagement
- 6 Sharing risks and rewards

Walk the talk of stakeholder value

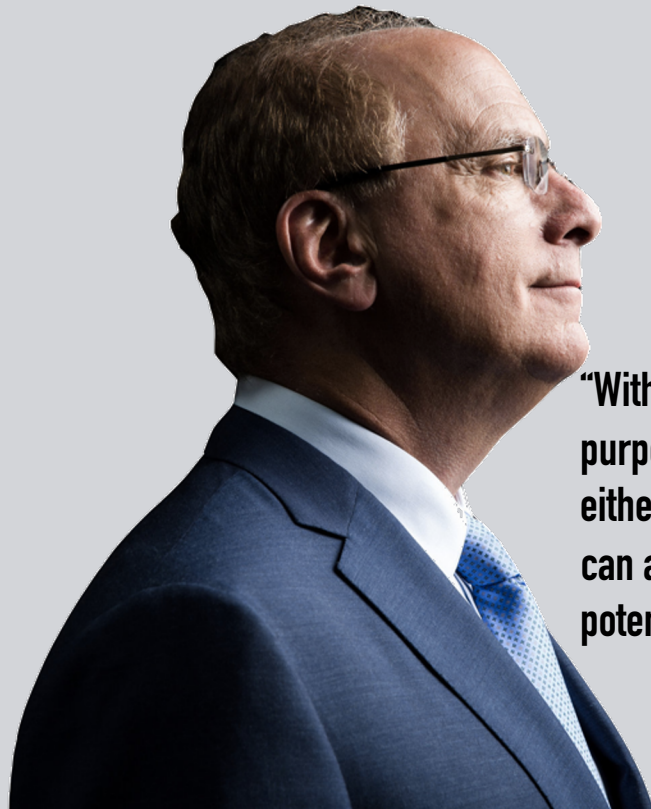
The New York Times

Shareholder Value Is No Longer Everything, Top C.E.O.s Say

Chief executives from the Business Roundtable, including the leaders of Apple and JPMorgan Chase, argued that companies must also invest in employees and deliver value to customers.



Aug. 19, 2019



“Without a sense of purpose, no company, either public or private, can achieve its full potential.” — Larry Fink.

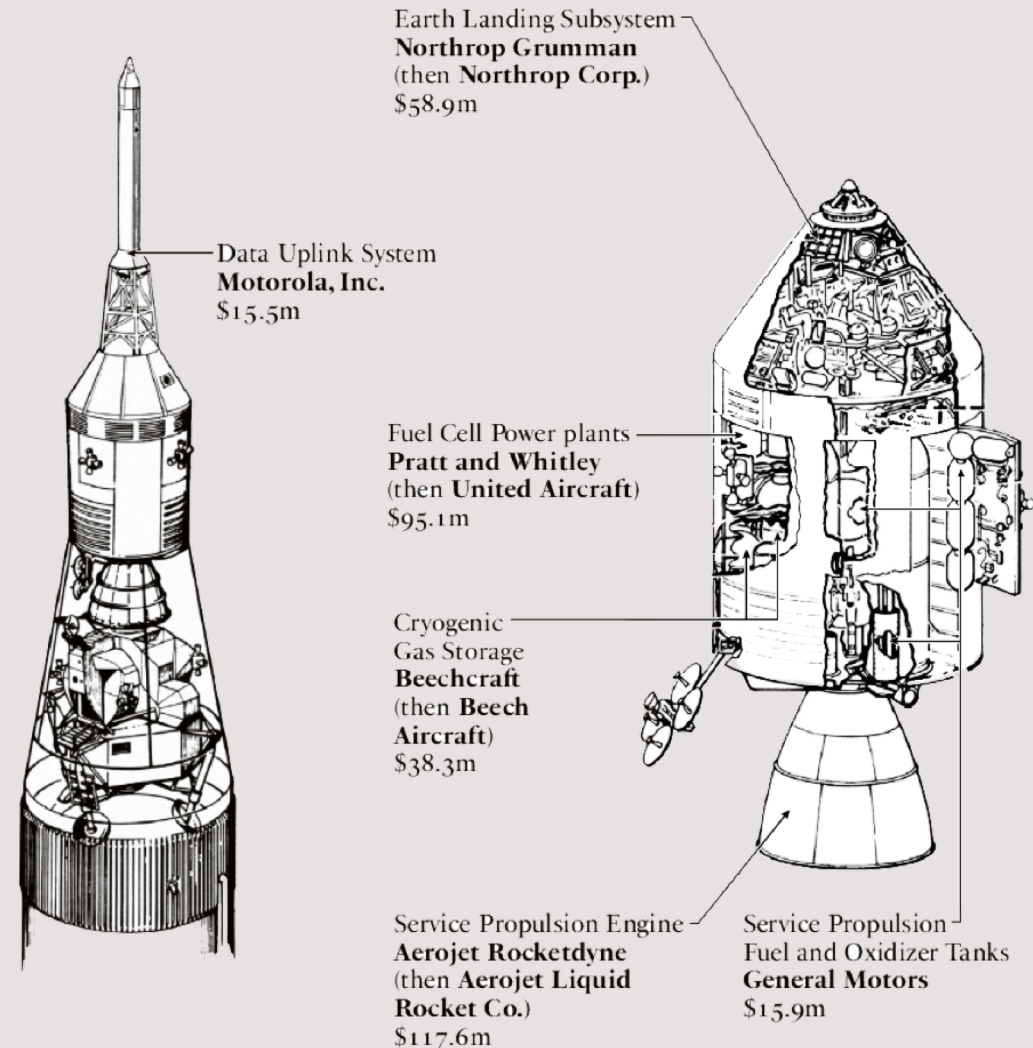


Partnership with a common purpose

NASA sought to work in partnership with innovative businesses, showing relevant capabilities and experience, searching for the best partners possible not just the least expensive ones

Procurement: from cost-plus contracts (easily gamed) to fixed price with incentives.

“No-excess profits” clause.



Putting public VALUE at the heart of health innovation

UCL Institute for Innovation and Public Purpose

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The people's
prescription

Re-imagining health innovation
to deliver public value

October

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AIDS.

just TREATMENT

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NEWSROOM / PRESS RELEASES

DECEMBER 18, 2018

Warren, Schakowsky Introduce Bicameral Legislation to Radically Reduce Drug Prices Through Public Manufacturing of Prescription Drugs

Warren, Schakowsky Introduce Bicameral Legislation to Radically Reduce Drug Prices Through Public Manufacturing of Prescription Drugs

would address market failures and increase competition in the generic drug market by establishing new Office of Drug Manufacturing

so calls

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Alexandra Ocasio-Cortez takes on greedy drug companies: Taxpayers fund drug research, Big Pharma takes all the profits

Last updated Feb 2, 2019




Photo courtesy of facebook.com/shadirahimi07

The COVID19 moment for bold conditionalities

American Airlines, United, and other carriers have agreed to bailout terms with the US Treasury that will avoid layoffs until October

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Scotland bans Covid-19 support to firms based in tax havens

A new vocabulary for governments and institutions

~~FIXING MARKETS~~

CO-CREATING
AND SHAPING

~~DE-RISKING~~

WELCOMING
UNCERTAINTY

~~LEVELLING THE
PLAYING FIELD~~

TILTING TOWARDS
A DIRECTION

~~PICKING WINNERS~~

PICKING THE
WILLING

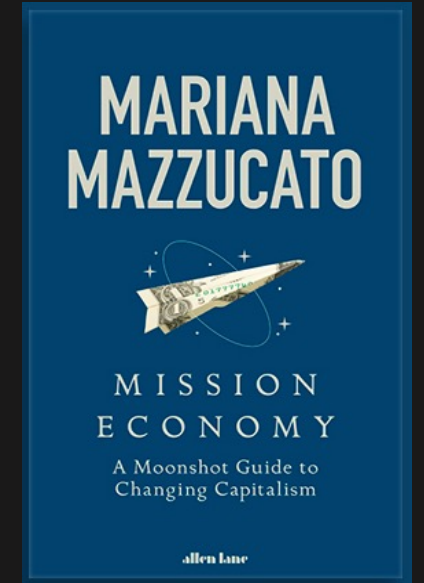
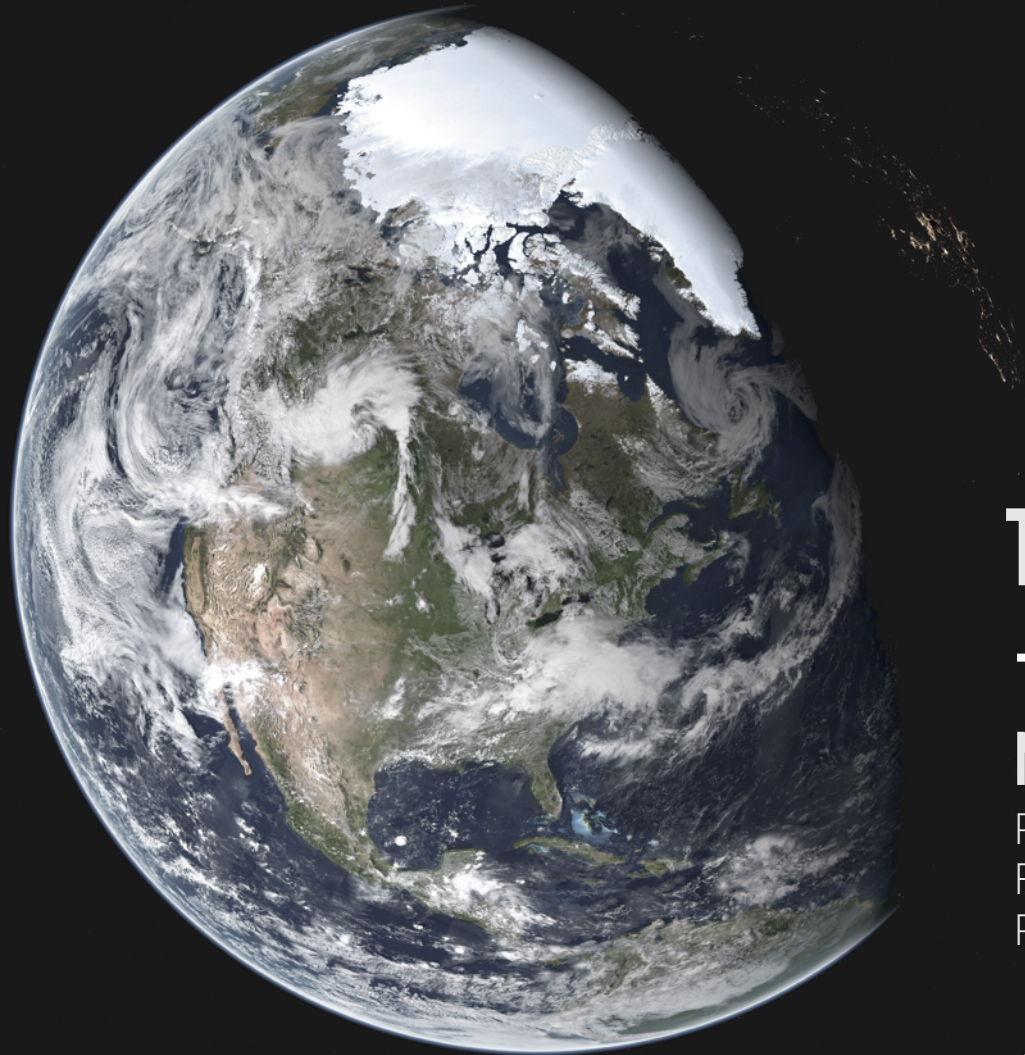
~~OUTSOURCING~~

CAPACITY
BUILDING

~~COST BENEFIT~~

DYNAMIC
SPILLOVERS





Thank you!

Mariana Mazzucato

Professor of Economics of Innovation and Public Value
Founding Director, UCL Institute for Innovation and Public Purpose



@MazzucatoM & @UCL_IIPP

