





Inclusive and Sustainable Growth: Building public sector capabilities and a mission oriented approach to industrial strategy

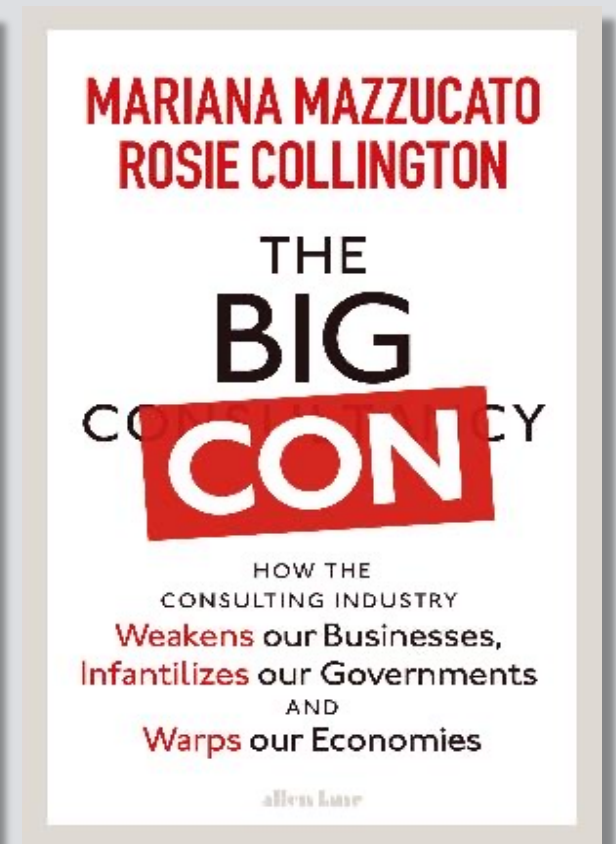
 Institute for Innovation
 and Public Purpose

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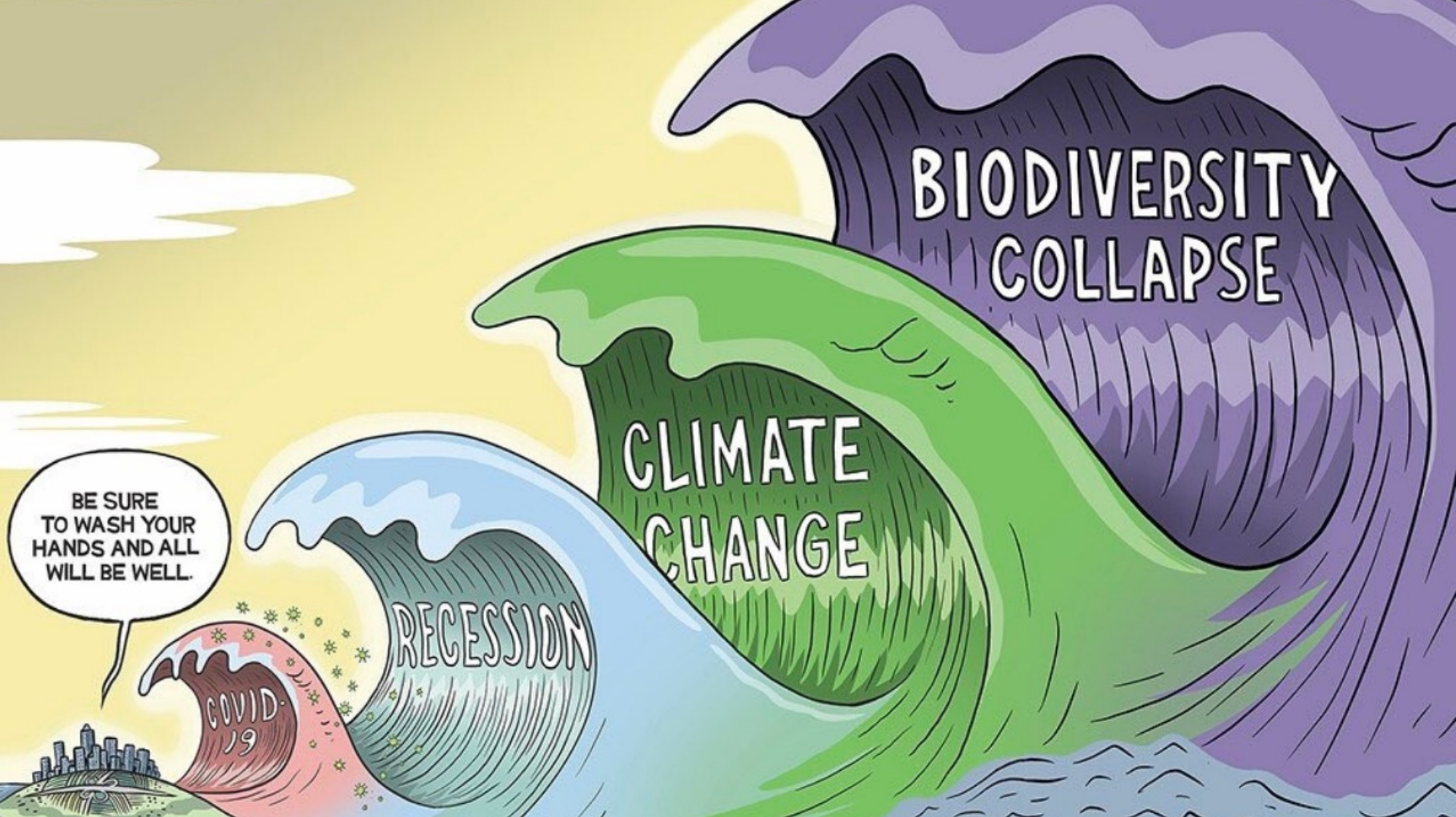
Directing innovation led growth: inclusive and sustainable



The COVID-19 wake-up call



From crisis to crisis



Structural challenges in Brazil

- 1. Burdensome tax system:** Brazilian companies allocate on average 38% more of their profits towards tax payments than companies in the OECD.
- 2. De-industrialization and dependence on commodity-led development:** in 2021 manufacturing contributed its lowest percentage to GDP since the 1940s, while agrobusiness contributed 27%.
- 3. High internal and external debt:** In 2022 Brazil's federal public debt increased by 6% and reached R\$ 5.951 trillion.
- 4. Social vulnerability and inequality:** Brazil ranks in the top 10% in terms of income inequality.
- 5. Trust and institutional capacity:** 25% of Brazilians believe that all or almost all the public servants are involved in corruption schemes.

Time for a new approach to industrial strategy:
for an *economy-wide* green industrial transformation
that shares both risks and rewards



Directing economic growth: purpose and missions

Policy design

To shift from market fixing to market shaping requires new policies - cross-sectoral, outcomes-oriented, working with the willing

Institution/tool design

Mission oriented procurement, IPR contracts and financial tools: outcomes oriented with risk/reward sharing

New social contract

Sharing both risks and rewards. Capital and Labour, Public and Private. Public and Public. Conditionalties can be built into the relationships between public and private (such as those from a public bank or innovation agency)

Co-creation and participation

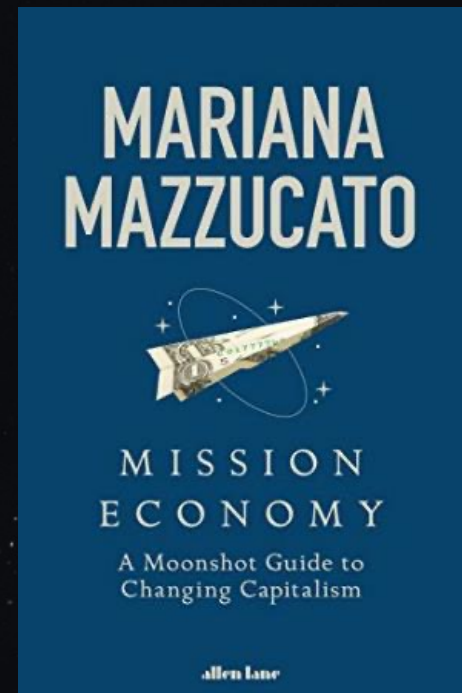
Community engagement and stakeholder relationships play a central role – listening with empathy must be incorporated into this process

Dynamic capabilities

To shift from market fixing to market shaping, dynamic capabilities are needed in the public service - for mission oriented thinking, risk taking, and experimentation



**New Policy Design:
from market fixing to market shaping**



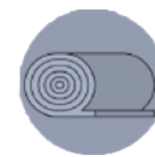
Spillovers: 20 things we wouldn't have without space travel



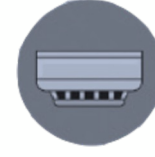
Camera Phones



Athletic Shoes



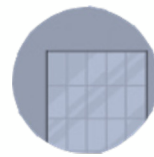
Home Insulation



Adjustable Smoke Detectors



Scratch-resistant Lenses



Foil Blankets



Joys of Life



Baby Formula



CAT Scans



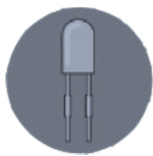
Water Purification Systems



Wireless Headsets



Artificial Limbs



LEDs



Dust Busters



Memory Foam



Computer Mouse



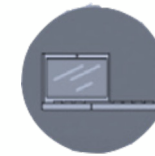
Land Mine Removal



Ear Thermometers



Freeze-dried Food

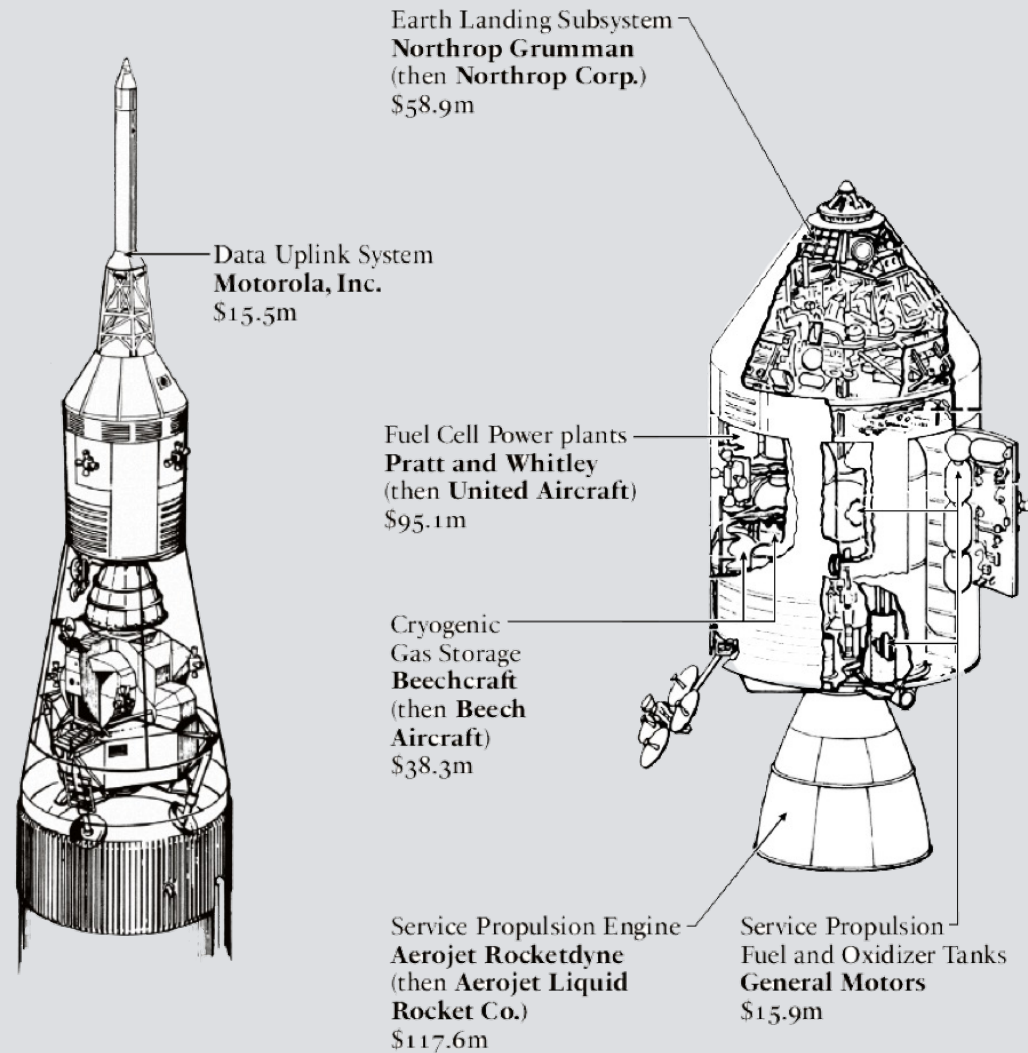


Portable Computer

Public-Private 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
From cost-plus contracts (easily gamed) to fixed price with incentives.

“No excess profits” clause!



©Mariana Mazzucato

Spillovers: 20 things we wouldn't have without space travel



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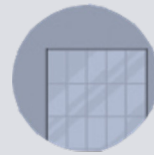
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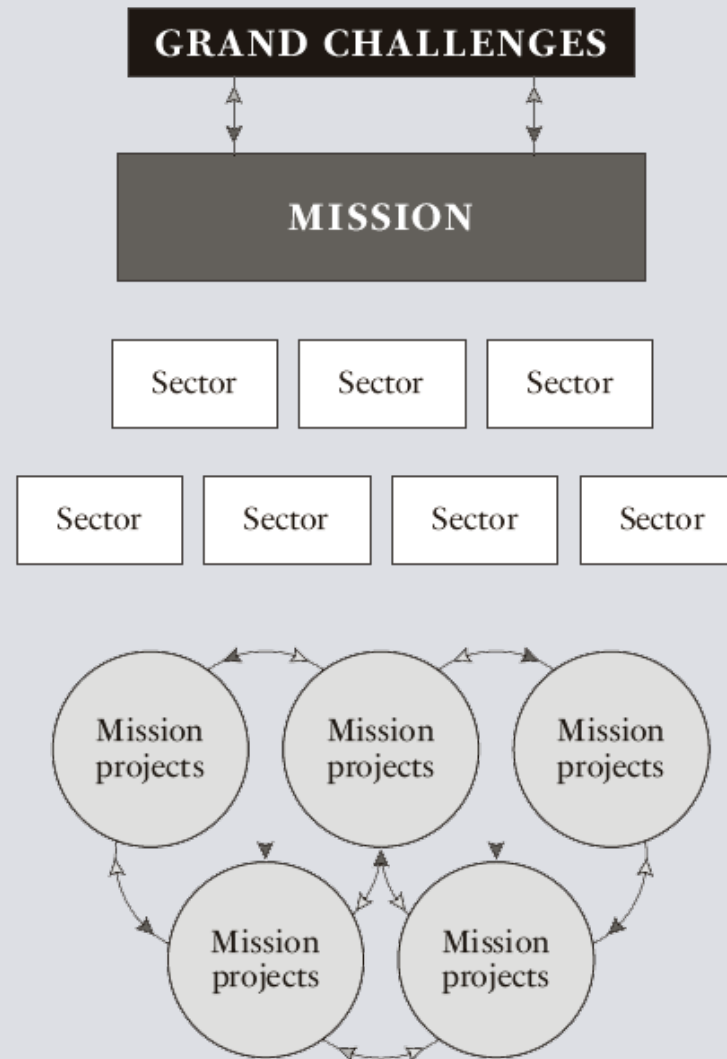


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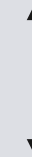
Mission-oriented policies



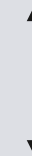
Political agenda setting
& civic engagement



Clear targeted mission



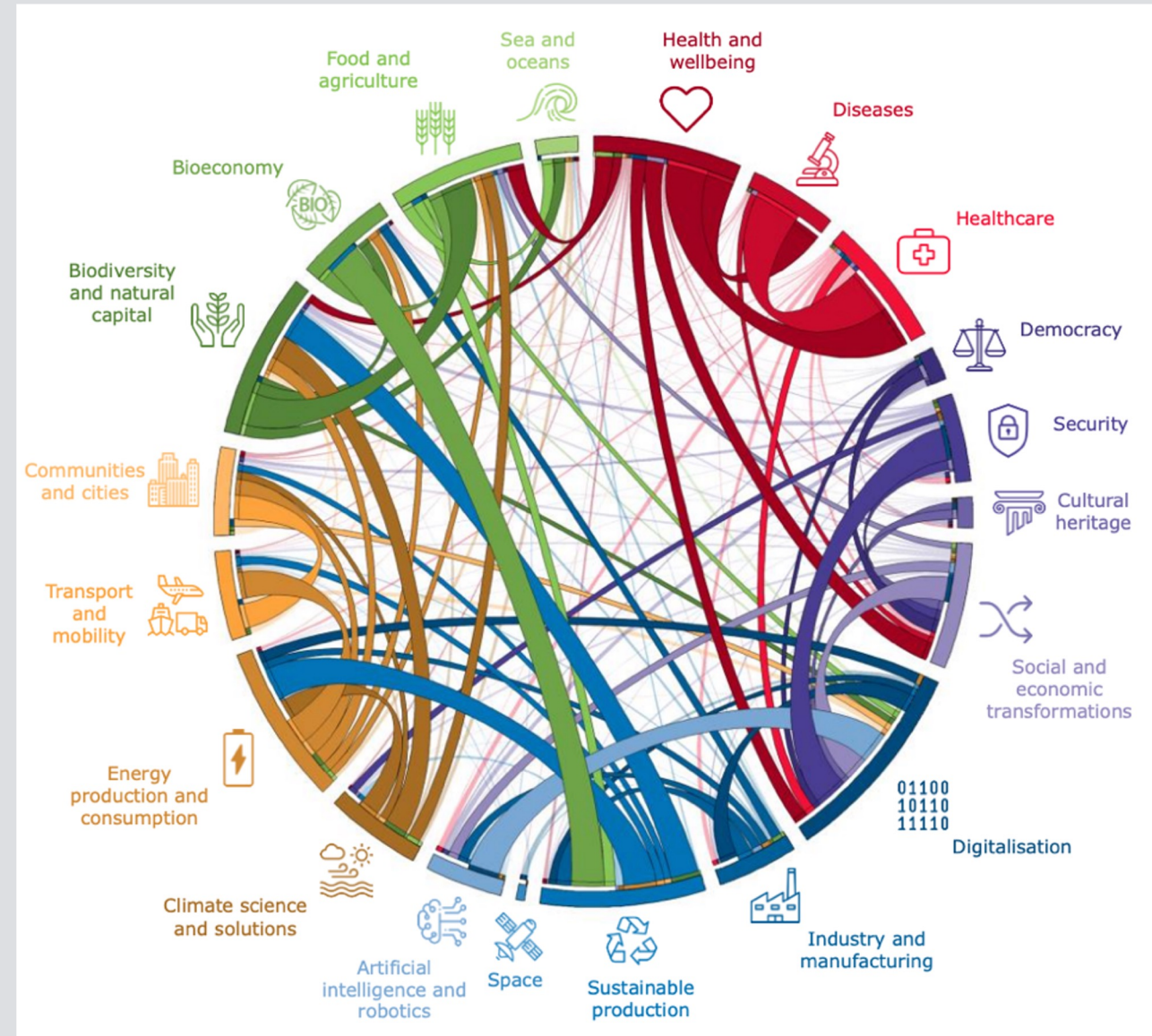
Cross sectoral
innovation



Portfolio of projects
and bottom-up
experimentation



- Adaptation to **climate change** including societal transformation;
- **Cancer**;
- **Healthy oceans**, seas, coastal and inland waters;
- Climate-neutral and **smart cities**;
- **Soil health and food**.



Climate change

100 carbon-neutral cities in Latin America and the Caribbean by 2030

Infrastructure and transport

Recycling

Agriculture and cattle raising

Digital

Energy

Manufacturing

Education

Buildings with carbon-neutral components

Sustainable energy matrix

Carbon-neutral agriculture and connection to urban spaces

Clean urban and rural electric mobility

Carbon-neutral agriculture and cattle raising

Transformational change in Latin America and the Caribbean

A mission-oriented approach

Mariana Mazzucato



UNITED NATIONS
ECLAC



Institute for
Innovation and
Public Purpose



german
cooperation
DEUTSCHE ZUSAMMENARBEIT

**5 criteria for
missions**

BOLD, INSPIRATIONAL

A CLEAR DIRECTION

AMBITIOUS WHILE REALISTIC

CROSS-SECTORAL & INTER-DISCIPLINARY

DRIVE MULTIPLE BOTTOM-UP SOLUTIONS

Guiding Industrial Strategy



AI & Data Economy

We will put the UK at the forefront of the artificial intelligence and data revolution.



Clean Growth

We will maximize the advantages for UK industry from the global shift to clean growth.



Future of Mobility

We will become a world leader in the way people, goods and services move.



Ageing Society

We will harness the power of innovation to help meet the needs of an ageing society.

UK Industrial Strategy

A Mission-Oriented UK Industrial Strategy

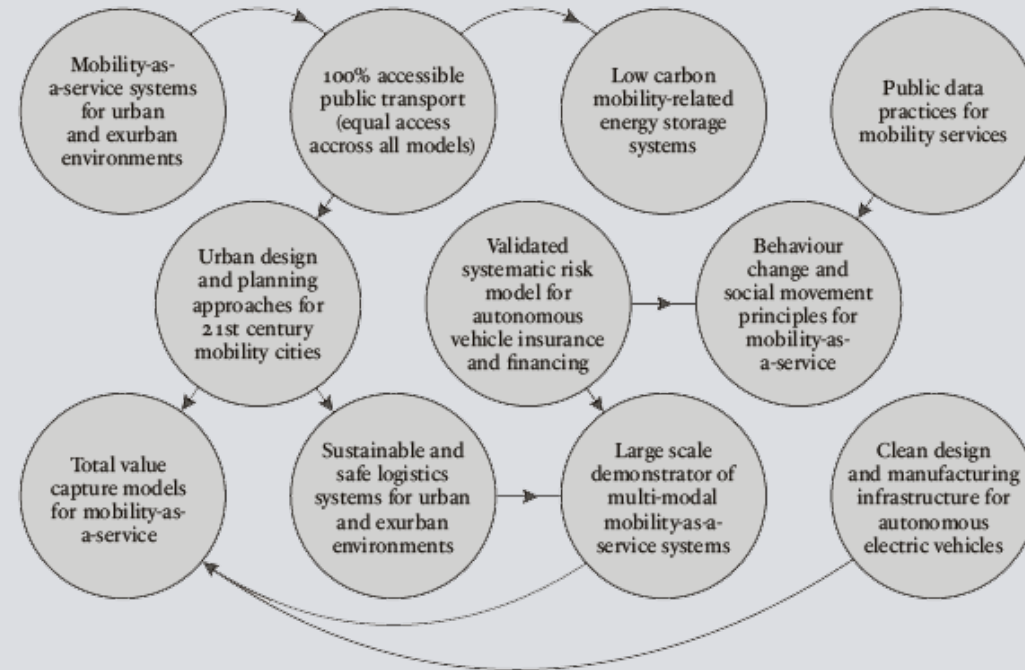
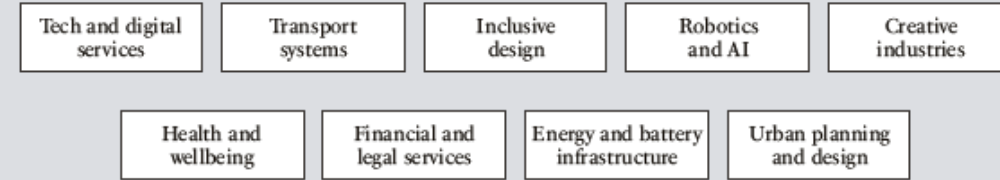
UCL Commission for Mission-Oriented Innovation and Industrial Strategy (MOIIS)

May 2019



FUTURE OF MOBILITY

By 2040 to put the UK at the forefront of safe, sustainable, universally accessible travel, creating congestion and admission-free, zero-accident systems



Commission chaired by [M. Mazzucato & Lord D. Willetts](#)

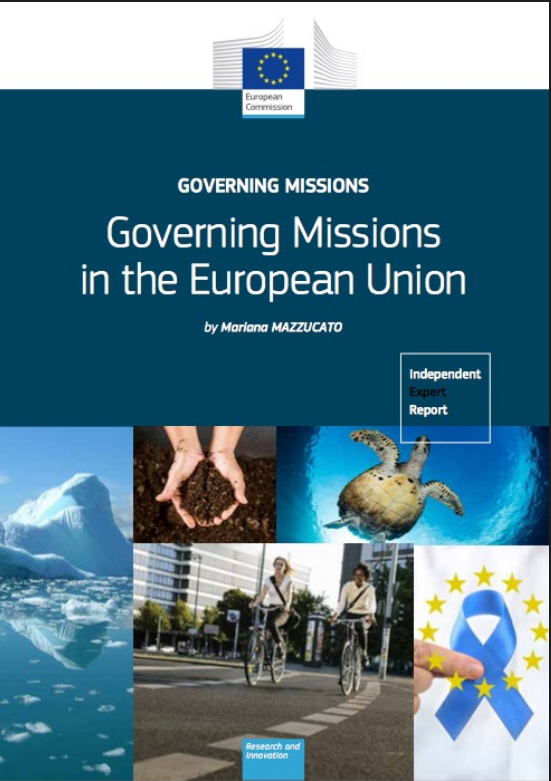
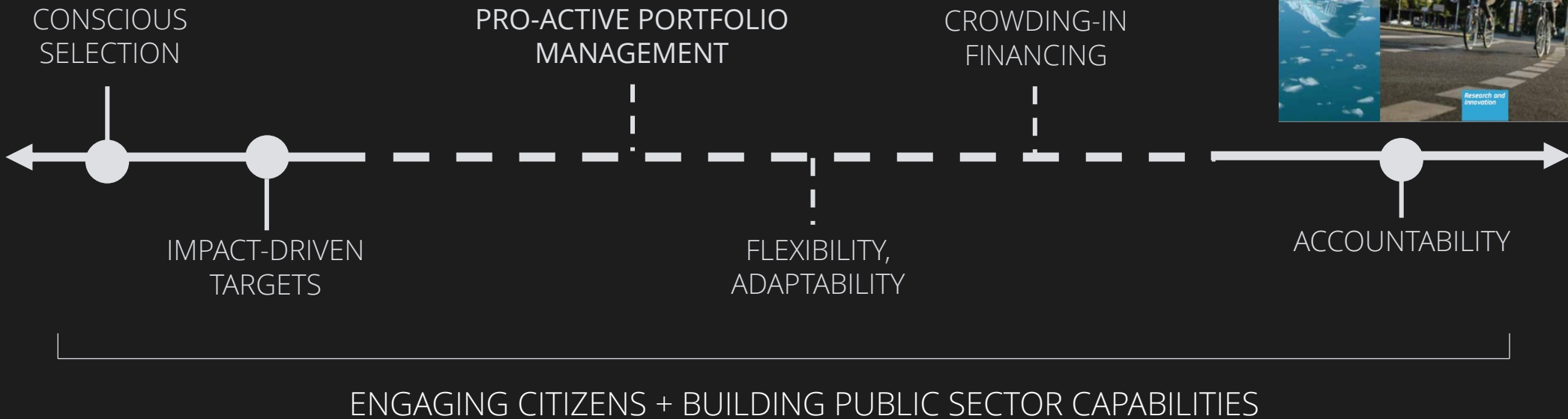
Old industrial strategy vs. new industrial strategy

Old	New
Focus on sectors or technologies	Challenge-driven and cross-sectoral
Levelling the playing field	Tilting towards a direction
Fixing markets	Co-creating markets
Picking winners	Picking the willing
Top-down	Top-down <i>and</i> bottom-up



New Tools and Institutions

How to implement missions

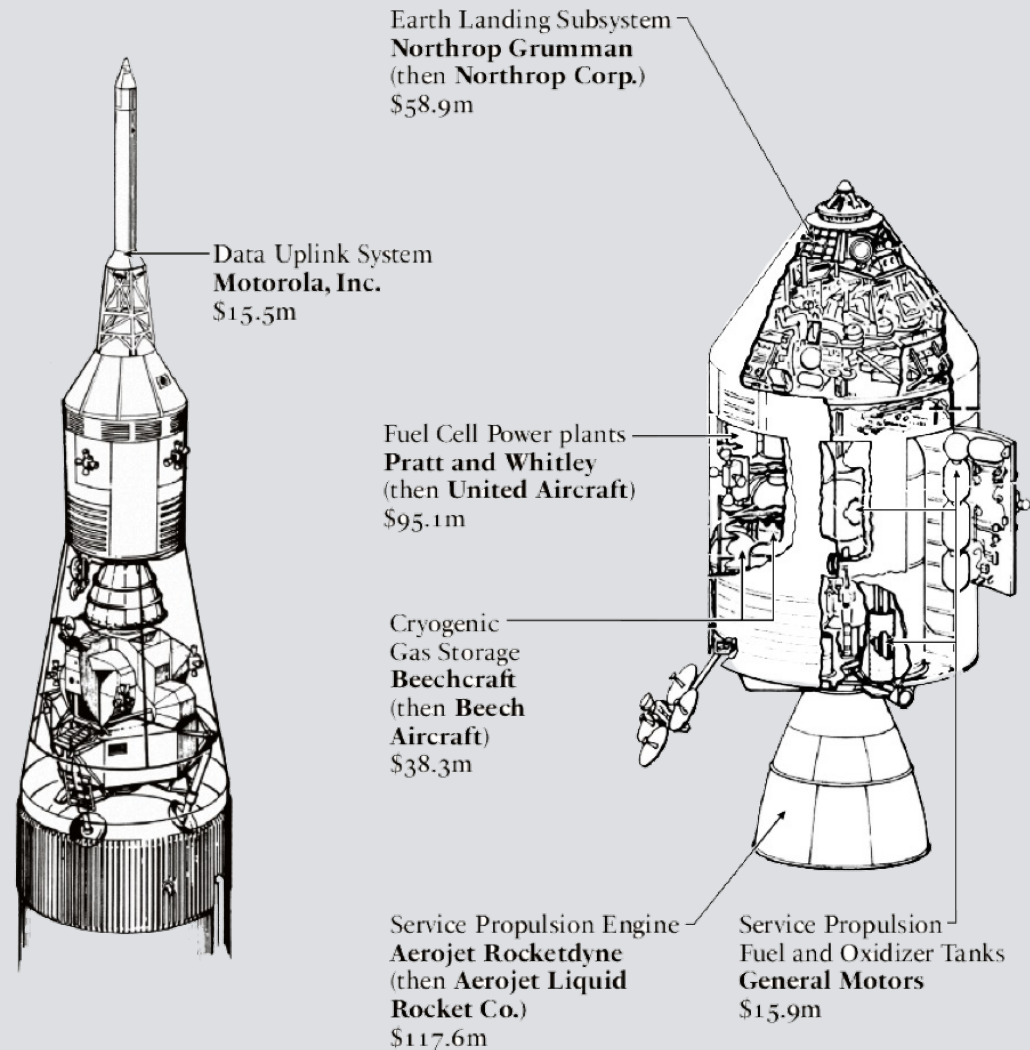


Public-Private Partnership with a common purpose

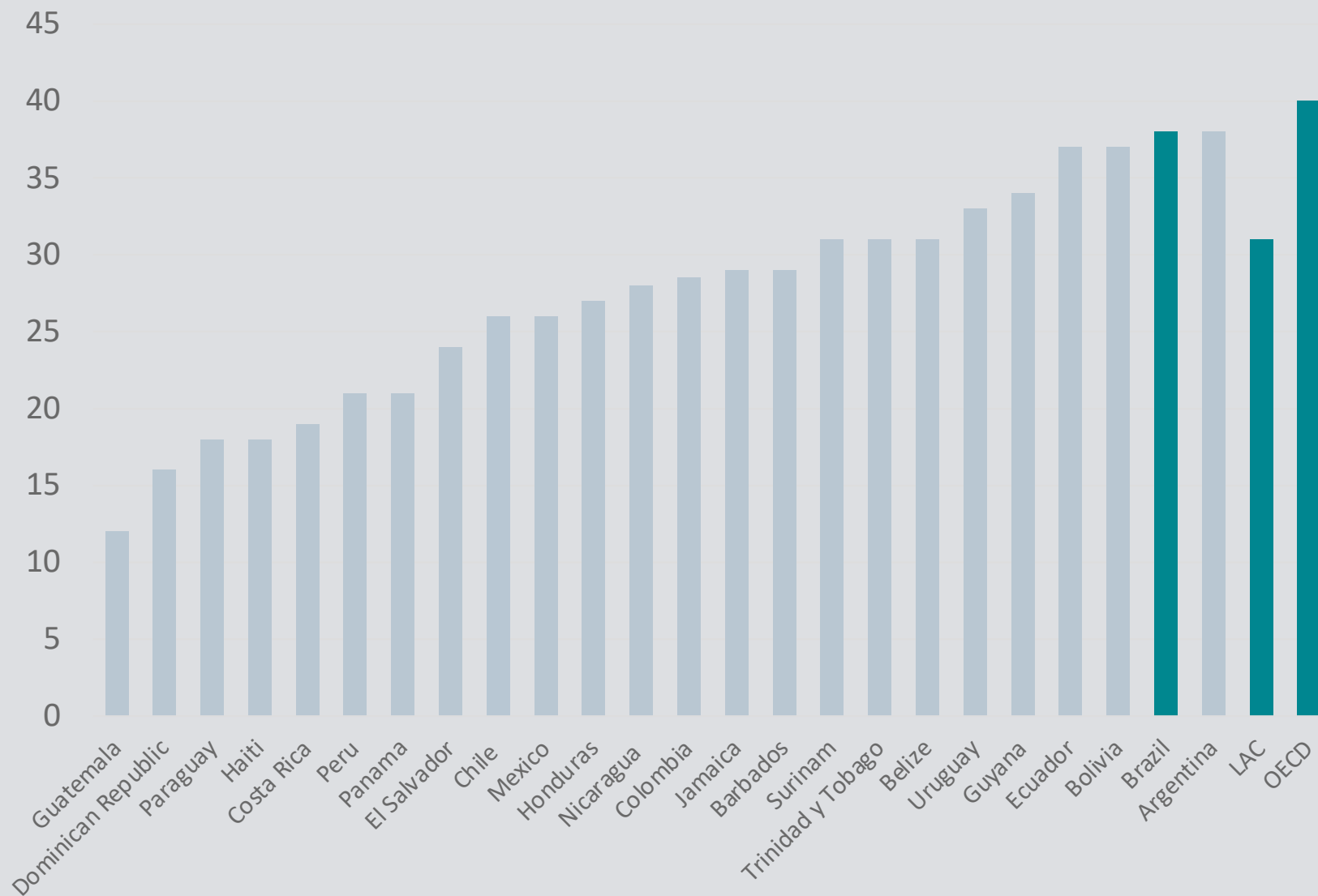
NASA sought to work in partnership with innovative businesses, showing relevant capabilities and experience, searching for the best partners possible not just the least expensive ones

From cost-plus contracts (easily gamed) to fixed price with incentives.

“No-excess profits” clause!



Public procurement in LAC (% of GDP 2018)



Source: OECD (2020)


A green mission-oriented bank for Scotland

Institute for Innovation and Public Purpose

A mission-oriented framework for the Scottish National Investment Bank

by Mariana Mazzucato and Laurie Macfarlane

March 2019



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

Mare 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."



The EIB and circular economy missions



BNDES and conditional finance

Through the use of conditionalities, the bank has in the past **succeeded in crowding in business investment.**

Investment multiplier: between 2003 and 2011 has shown that the bank successfully generated crowding-in effects in the private sector, **drastically increasing private investment in innovation.**



A mission-oriented wealth fund in Camden

A mission-oriented community wealth fund for Camden



Governing finance with public purpose

By Mariana Mazzucato, Laurie Macfarlane, Olga Mikheeva
and Ryan Bellinson

November 2022



Institute for
Innovation and
Public Purpose

1 Wealth Funds as a way to direct value creation and re-distribution

A CERN for Biodiversity



GLOBAL ECONOMIC RESILIENCE:
BUILDING FORWARD BETTER

The Cornwall Consensus and Policy Recommendations
By
The G7 Panel on Economic Resilience

September 2021



Mariana
Mazzucato



O
**ESTADO
EMPREENDEDOR**

Desmascarando o mito do
setor público vs. setor privado



“Mazzucato argumenta que o investimento governamental, paciente e de longo prazo, é um pré-requisito indispensável para a inovação de impacto. [...] Mesmo se discordar do ponto de vista dela, você deve ler o seu livro. Vai desafiar seu modo de pensar.”

Forbes

- Establishing a 'CERN (European Organization for Nuclear Research) for climate technology', to pool investment into specific innovation leaps, or 'missions', required to meet net-zero goals, including innovations to remove CO₂, and zero carbon solutions for 'hard-to-decarbonise' industries like shipping, aviation, steel and cement;



mariana
mazzucato
**o valor
de tudo**
Produção e
apropriação
na economia
global



**A New Social Contract:
socializing risks and rewards**

COVID19: A moment for bold conditionalities



“Air France will have to cut its carbon emissions and domestic flights as conditions for government financial support”
France’s finance minister Le Maire

- Reuters



“The Scottish parliament has voted to block companies based in tax havens from using millions of pounds in coronavirus relief funding, in emergency legislation.”

- The Guardian



How can bold government work with the private sector to create the markets of tomorrow?

APRIL 2022

- **Introducing conditionalities for public investments, subsidies, guarantees and bailouts** to shift practices and behaviours within companies towards lower carbon emissions, better working conditions and fewer share buybacks
- **Establishing a new legal blueprint for patents and other intellectual property (IP) rights** that better balances private incentives and public interest for transparency and diffusion of knowledge
- **Rebalancing risks and rewards** in specific cases where the government provides support for research, such as through equity stakes or golden shares of IP rights
- **Developing initiatives that can diffuse knowledge and IP** necessary to address specific challenges, through pools, pledges and mandatory licensing
- **Increasing scrutiny of anti-competitive practices**, most notably patent trolls, through dedicated legislation and changes in the breadth of coverage granted to IP

Source: M. Mazzucato and R. Shah (Rockefeller Foundation) co-chairs of WEF Market Creators Alliance

Building conditionalities into the US CHIPS and Science Act

Conditionalities:

1. National security
2. No dividends or stock buybacks
3. Highly-skilled and diverse workforce
4. Access to childcare for workers

Rethinking the social contract between the state and business: A new approach to industrial strategy with conditionalities

Mariana Mazzucato

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Founding Director | UCL Institute for Innovation and Public Purpose (IIPP)

Brazil/s Health Economic-Industrial Complex

- Brazil's success in becoming a **regional producer of vaccines** in Latin America is the result of a **long-term, broad investment in the common good**.
- The Health Economic-Industrial Complex (HEIC) has developed the health sector's technological base
- Brazil's Executive Group of the Health Economic-Industrial Complex GECIS is part of a **whole-of-government strategy** to increase coordination and communication among all stakeholders.
- It brings together: ministries of health, finance, science, innovation and technology, and foreign relations, with the private sector, academia and development banks





Participation and Co-Creation

Participatory budgeting in Porto Alegre



- Institutionalizing citizen participation
- Building social cohesion
- Ensuring transparency and accountability

Participatory missions in Camden



Missions:

- By 2030, those holding positions of power in Camden are as diverse as our community - and the next generation is ready to follow;
- By 2025, every young person has access to economic opportunity that enables them to be safe and secure;
- By 2030, everyone eats well every day with nutritious, affordable, sustainable food;
- By 2030, Camden's estates and their neighbourhoods are healthy and sustainable.

How to govern the data commons?

Barcelona, govern digital de codi obert, àgil i participatiu





**Dynamic capabilities:
Reinvigorating the public service**

Apollo's head of procurement:

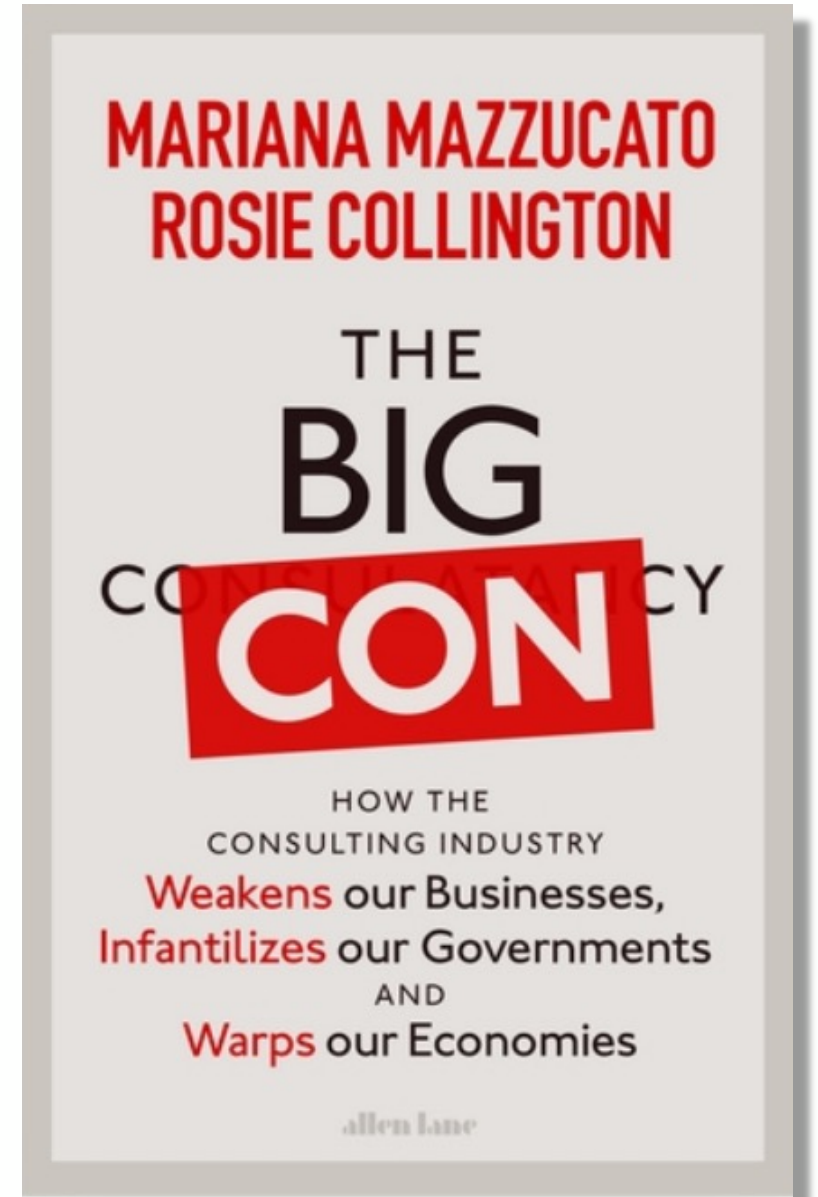
“... we need capabilities, not brochuremanship”



An infantilized public sector?

“Whitehall has been ‘infantilised’ by an ‘unacceptable’ reliance on expensive management consultants, a government minister has claimed in a leaked letter by Lord Agnew.”

- The Guardian



Out in February 2023!

CNDI's 7 missions

- 1 - Sustainable and digital agro-industrial chains to eradicate hunger**
- 2 - Resilient health complex for the prevention and treatment of diseases**
- 3 - Sustainable infrastructure for productive integration**
- 4 - Digital transformation of industry**
- 5 - Decarbonisation of Industry, enabling the energy transition and bioeconomy**
- 6 - Critical technologies for national sovereignty and defence**
- 7 - Sustainable housing and mobility for well-being in big cities**

**Where
should
missions
sit?**

“All of government approach”

Mission-oriented policies

Ministries



Public sector capabilities matter!

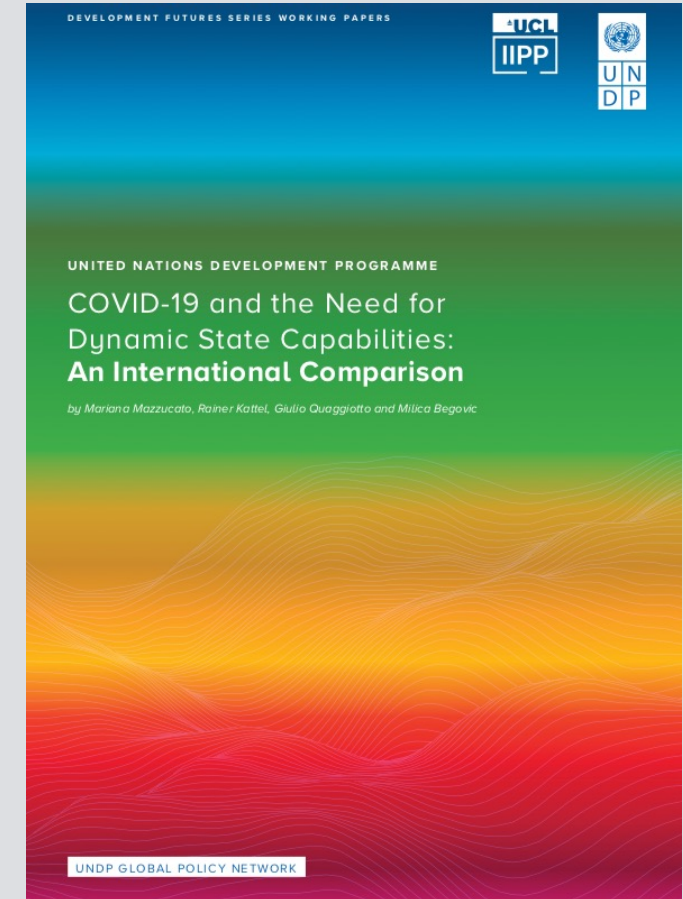
Adapting and learning

Aligning public services with needs

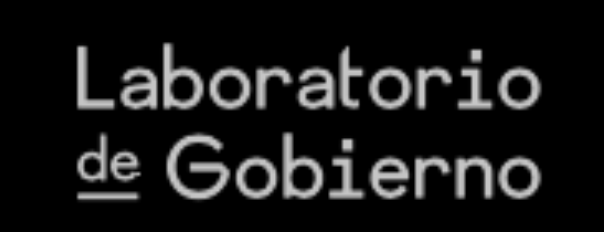
Governing data and digital platforms

Inter and intra-governmental learning and coordination

Governing resilient production systems



We need more Gov Labs



Laboratorio
de Gobierno

CHILE



G'NOVA

BRAZIL



ADP AGENCIA DIGITAL DE
INNOVACIÓN PÚBLICA

MEXICO CITY



CENTRO DE INNOVACIÓN
PÚBLICA DIGITAL

COLOMBIA

A new
vocabulary
and
narrative

~~FIXING MARKETS~~ CO-CREATING & CO-SHAPING

~~DE-RISKING~~ WELCOMING UNCERTAINTY

~~PICKING WINNERS~~ PICKING THE WILLING

~~LEVELLING THE PLAYING FIELD~~ TILTING TOWARD A DIRECTION

~~OUTSOURCING~~ CAPACITY BUILDING

~~COST-BENEFIT~~ DYNAMIC SPILLOVERS

VALUE – COLLECTIVELY CREATED

MARKETS – CO-CREATING, NOT FIXING

ORGANIZATIONS – DYNAMIC CAPABILITIES

FINANCE – OUTCOMES-BASED BUDGETING

(PRE)-DISTRIBUTION – SHARED RISKS & REWARDS

PARTNERSHIP – PURPOSE & STAKEHOLDERS VALUE

PARTICIPATION – OPEN SYSTEMS TO CO-DESIGN FUTURE

**Rethinking
economics**

Thank you!

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