



Institute for  
Innovation and  
Public Purpose

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# Rethinking Value Creation for an inclusive and sustainable economic recovery

Yusuf Sayigh Development Lecture  
Dec. 2<sup>nd</sup> 2020

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Director of the Institute for Innovation and Public Purpose  
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# Building back better?

- Green New Deal
- European Union Horizon 2020
  - **Smart** growth (better **innovation**)
  - **Sustainable** growth (more **green**)
  - **Inclusive** growth (less **inequality**)
- Sustainable Development Goals
- Return of 'industrial strategy'



# Role of Business? *Shareholder vs stakeholder maximization*

LARRY FINK'S 2018 LETTER TO CEOS

## A Sense of Purpose

"Without a sense of purpose, no company, either public or private, can achieve its full potential. It will ultimately lose the license to operate from key stakeholders. It will succumb to short-term pressures to distribute earnings, and, in the process, sacrifice investments in employee development, innovation, and capital expenditures that are necessary for long-term growth. It will remain exposed to activist campaigns that articulate a clearer goal, even if that goal serves only the shortest and narrowest of objectives. And ultimately, that company will provide subpar returns to the investors who depend on it to finance their retirement, home purchases, or higher education."

# Purpose?

The New York Times

Aug. 19, 2019

## *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.



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# Role of policy? *Just fixing markets?*

Public goods e.g.  
knowledge, clean  
air



Negative  
externalities e.g.  
pollution



Information  
failures



e.g. SME  
finance

Coordination failures

e.g. pro-cyclical  
investment



Imperfect  
competition  
e.g. monopolies



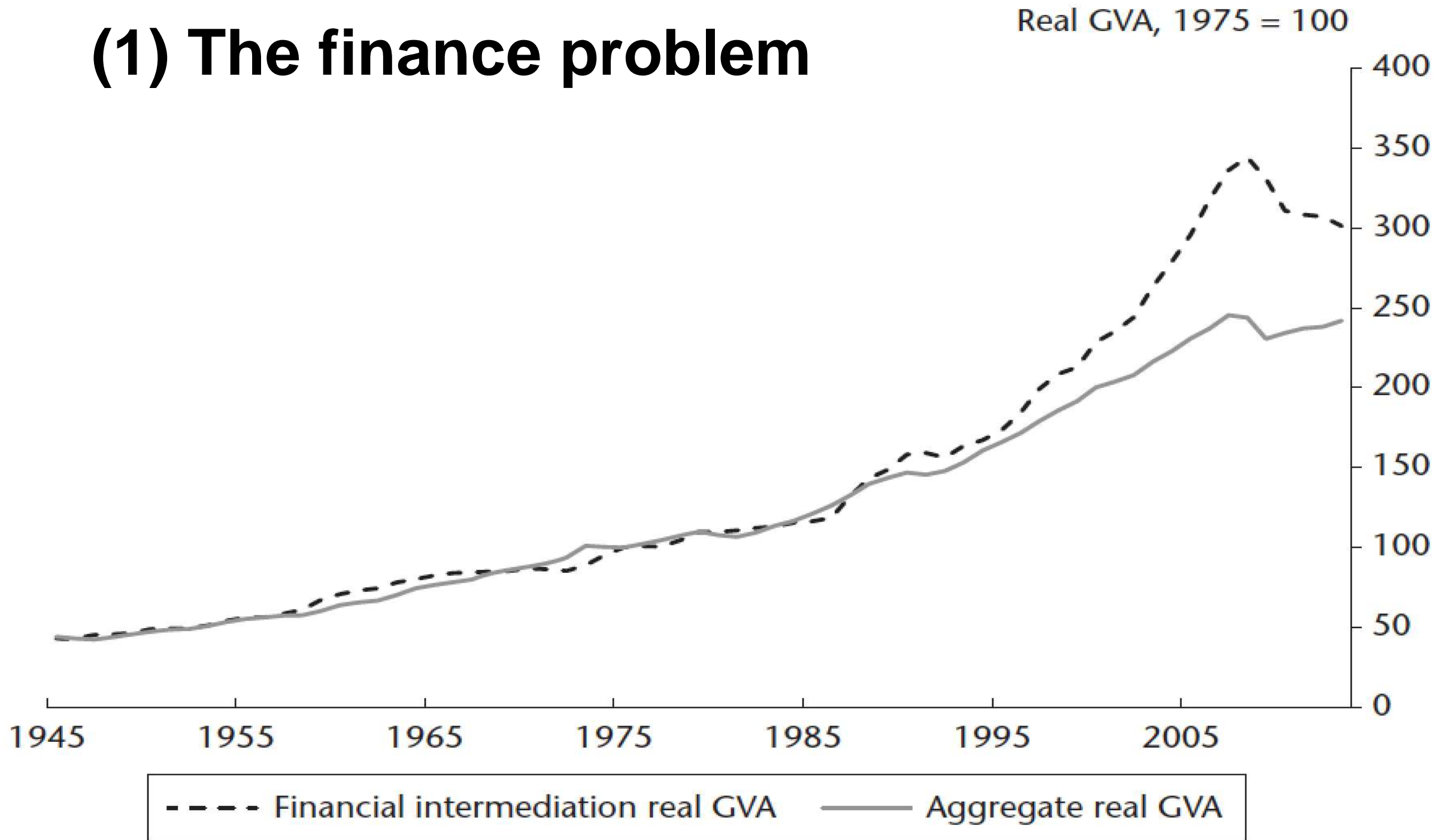
## “Fixes” to market failures

- Taxation and subsidies
- Market creation  
(e.g. carbon credits)
- Information provision
- Anti-trust (and anti-unionism)

Reality = “failure”?

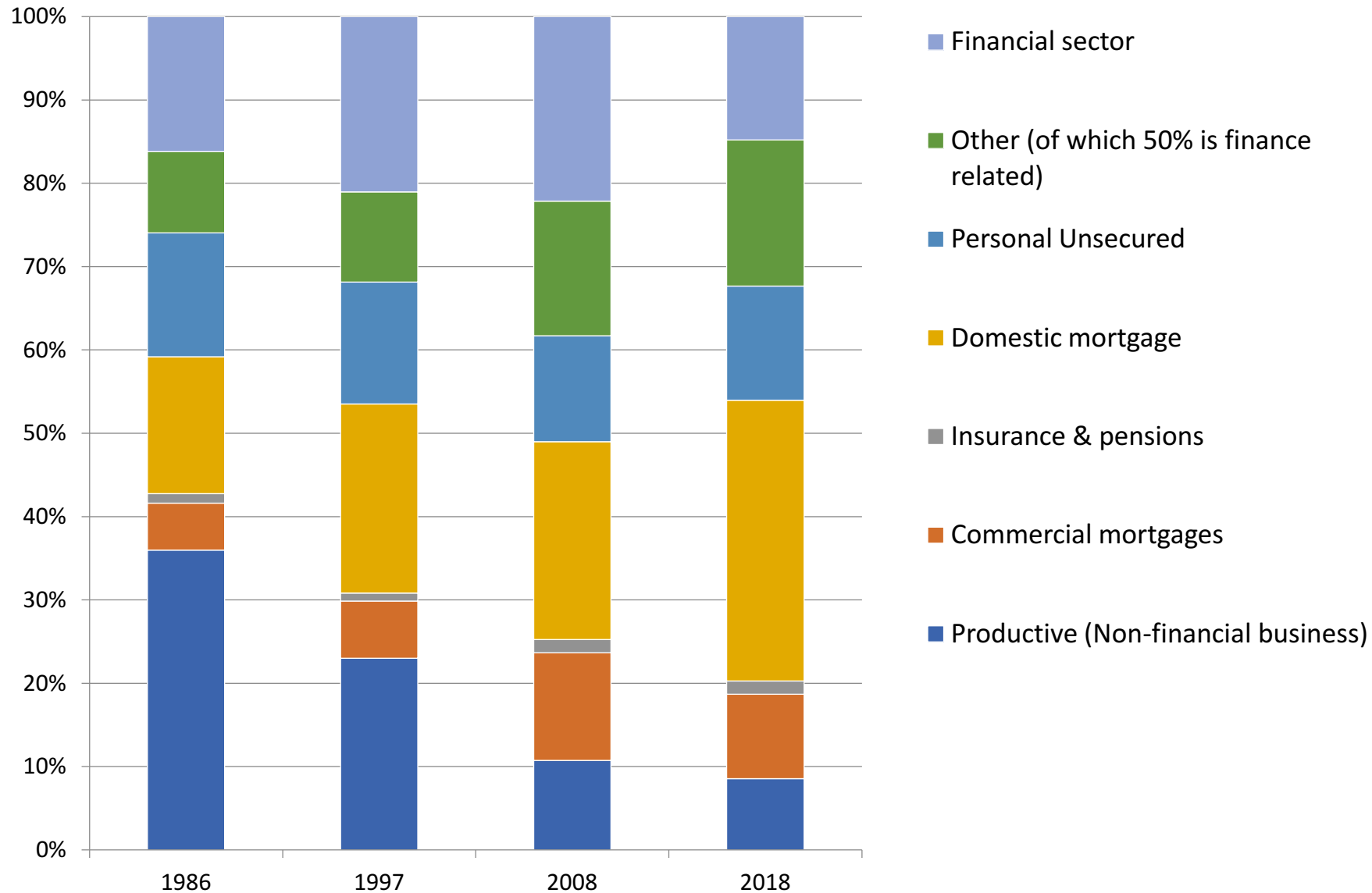
# 5 Big Global Problems

# (1) The finance problem

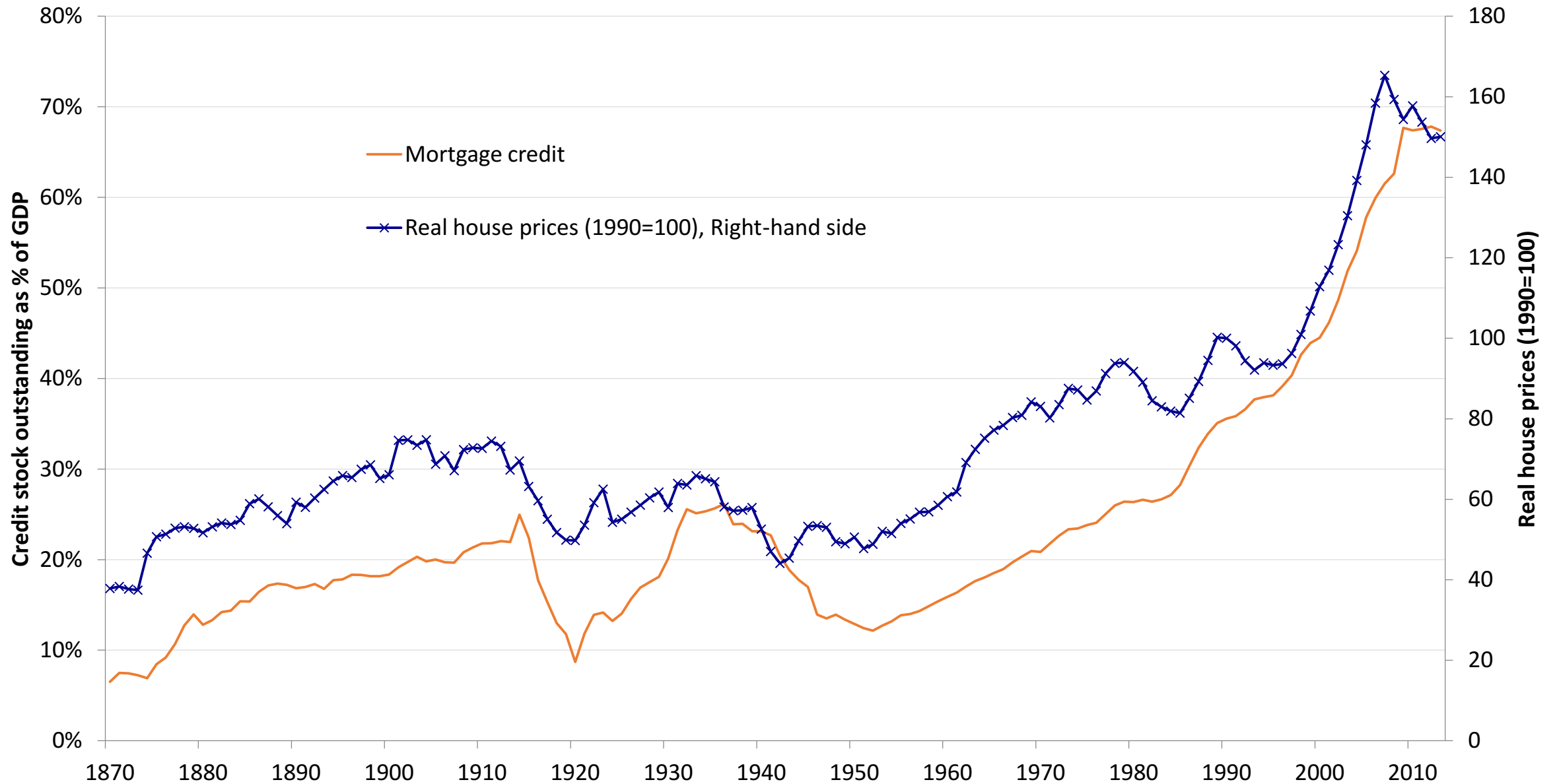


# UK domestic bank composition of net lending by industrial sector

Source: Bank of England, series RPQT, amounts outstanding at end 1st quarter and NEF calculations



# House prices and mortgage credit over 130 years in (14) advanced economies

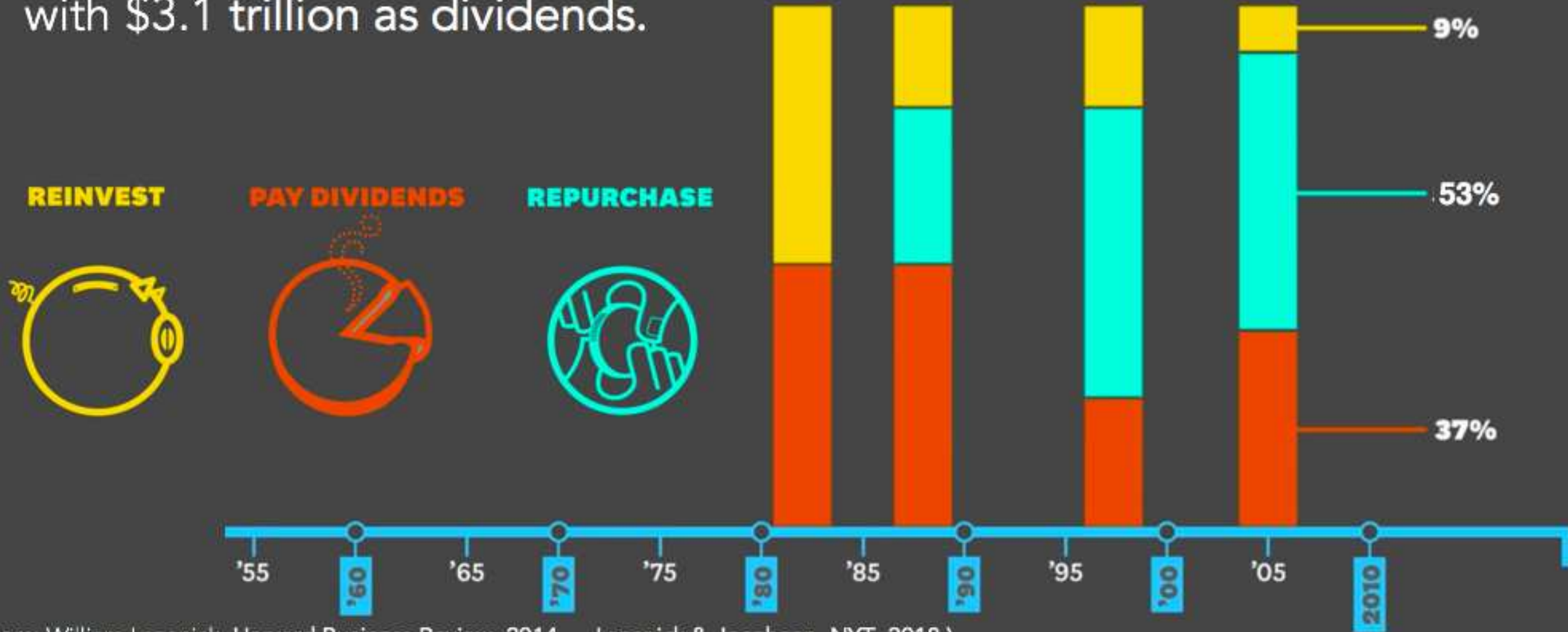


Source: Ryan-Collins (2018: 33)

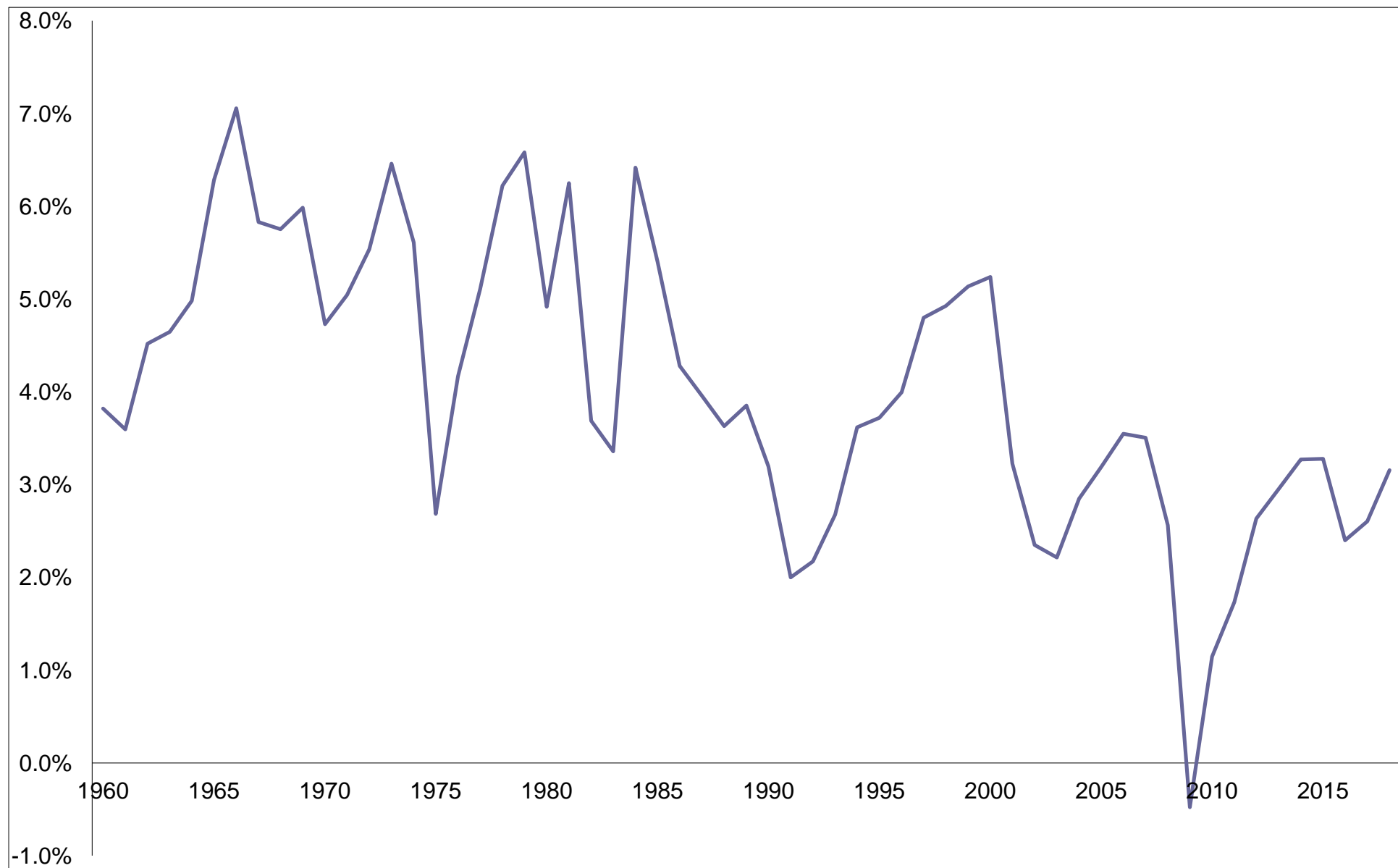


## (2) The industry problem

From 2008 to 2017, 466 S&P 500 companies distributed \$4 trillion to shareholders as buybacks, equal to 53 percent of profits, along with \$3.1 trillion as dividends.



(From: William Lazonick, Harvard Business Review, 2014---- Lazonick & Jacobson, NYT, 2018 )



US business investment as percentage of US GDP

# (3) The inequality problem

Average wages & labour productivity in 36 developed economies, 1999–2013

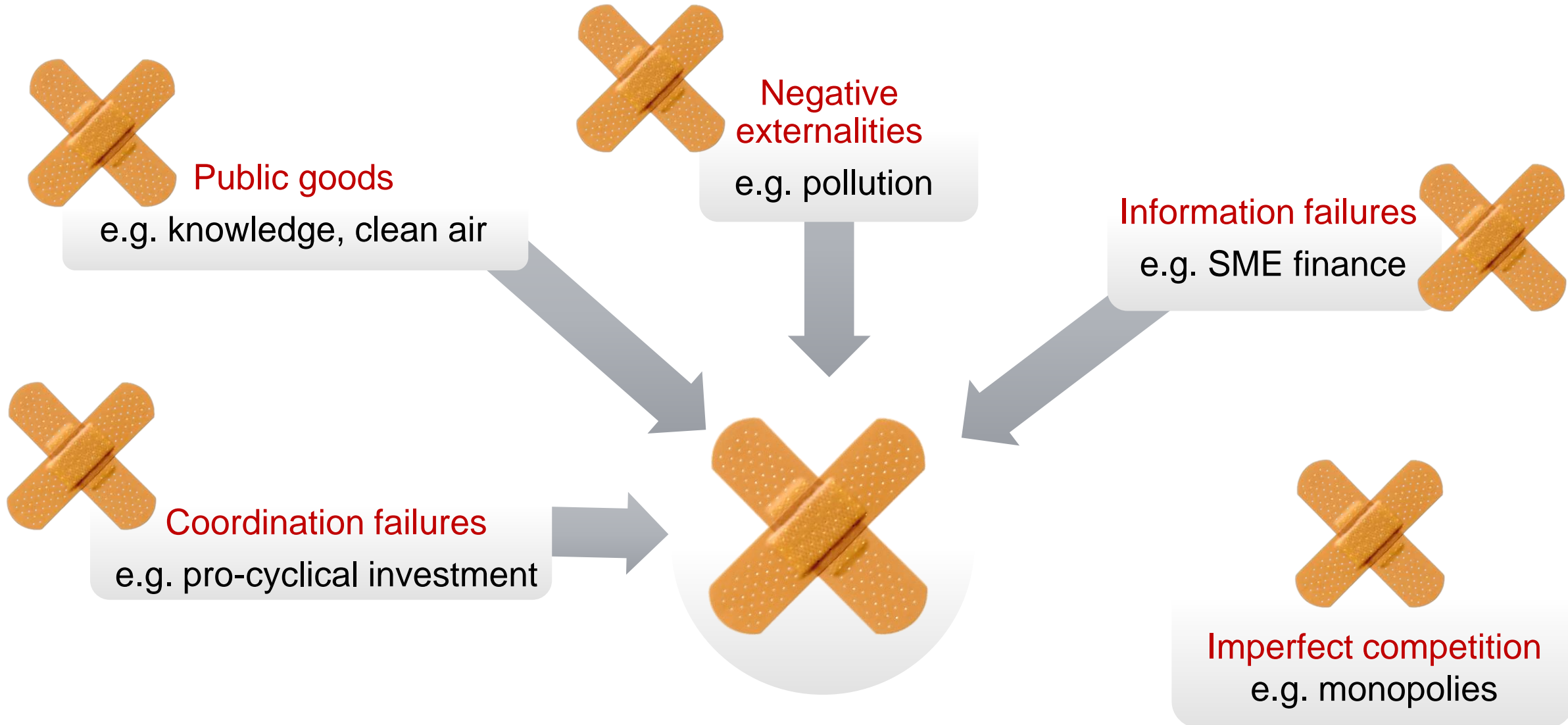


## (4) The climate problem

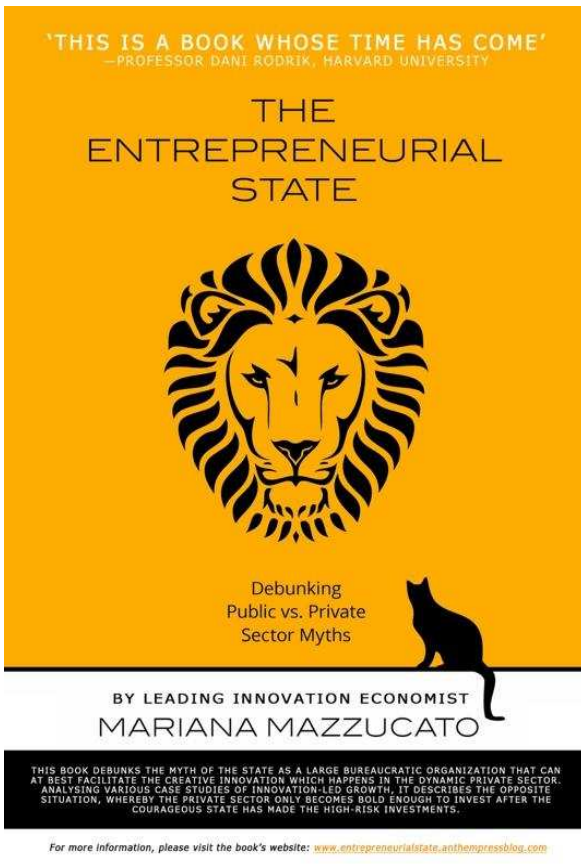
- **IPCC: 11 yrs left** for global warming to be kept to max 1.5C. Even half a degree will worsen risks of drought, floods, extreme heat and poverty for hundreds of millions of people.
- Current investment in GREEN ENERGY **only 20% of what it should be!** (and energy transition is not enough)
- In 2019, subsidies to fossil fuel companies were estimated at \$20 billion a year in the US and an enormous €55 billion a year in the European Union.

# (5) The State's problem

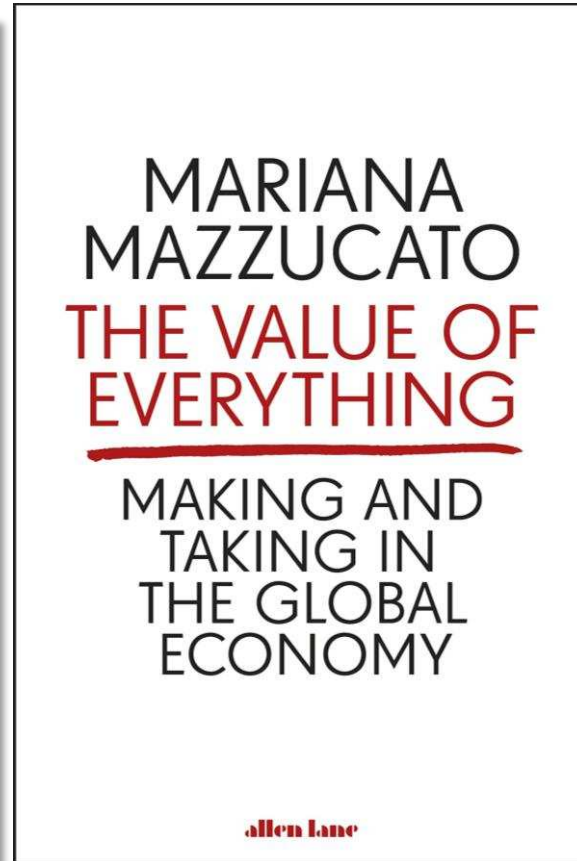
(just patching things up?)



# Rethinking the State, Value & Public Purpose



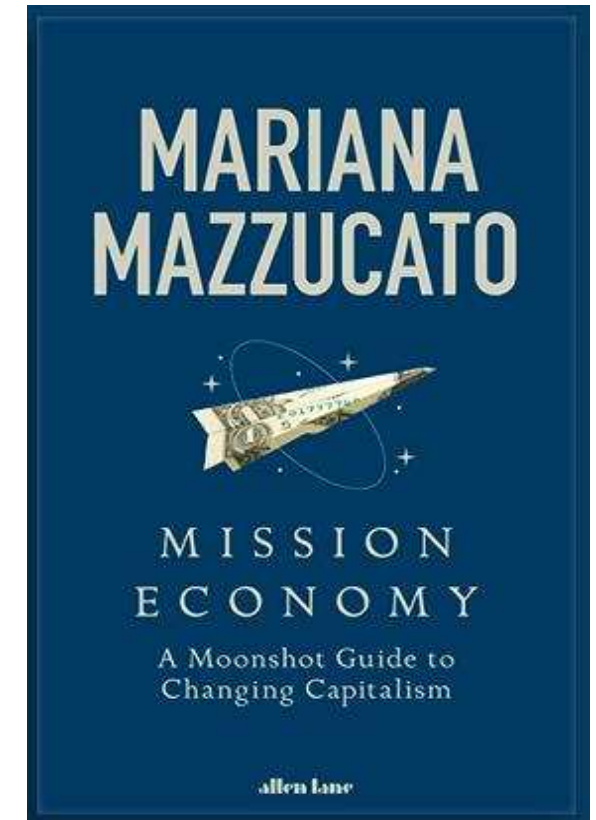
2013



2018



2018

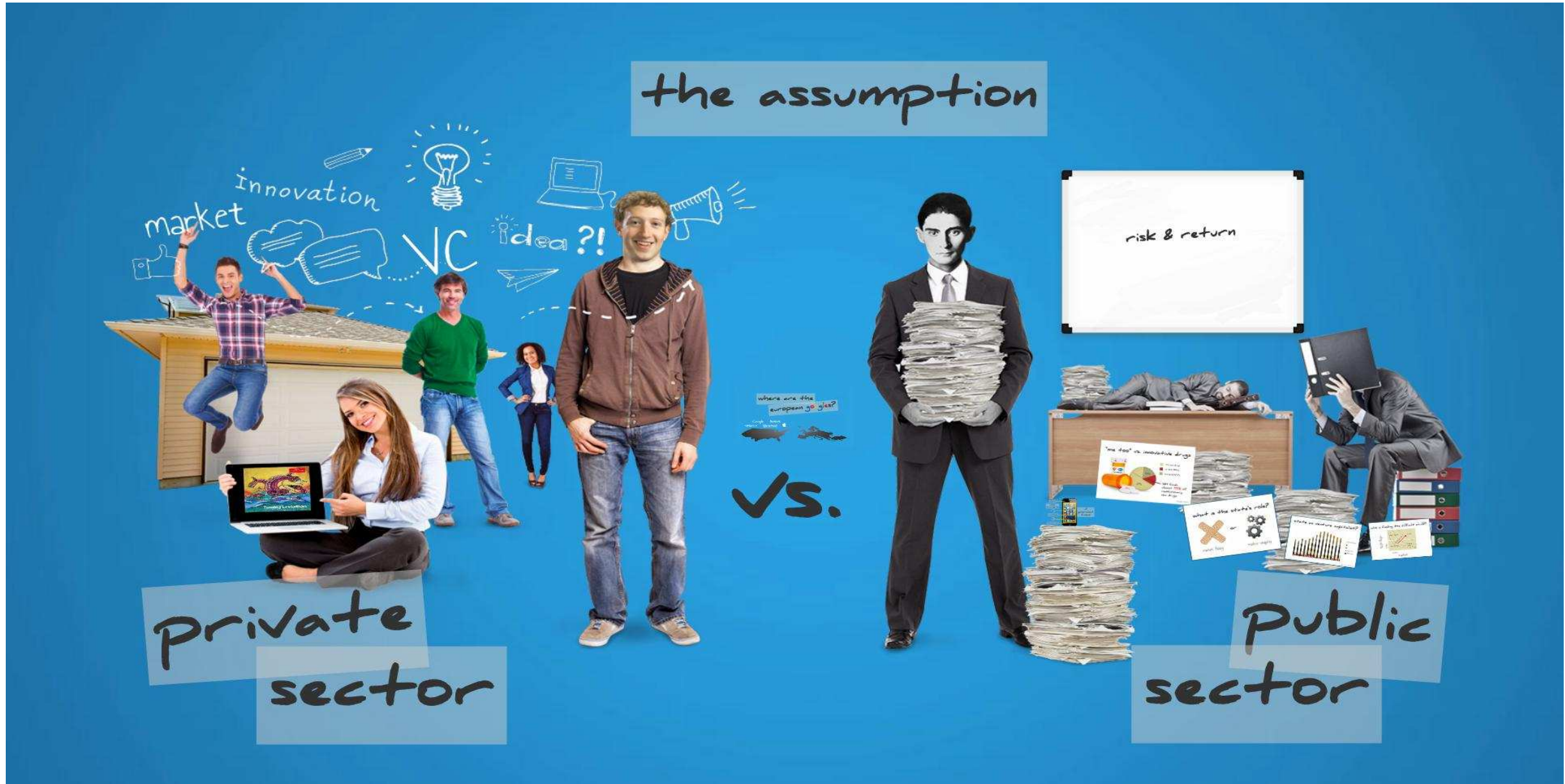


2021 (January)

# THE STATE



# Stupid assumptions get stupid answers







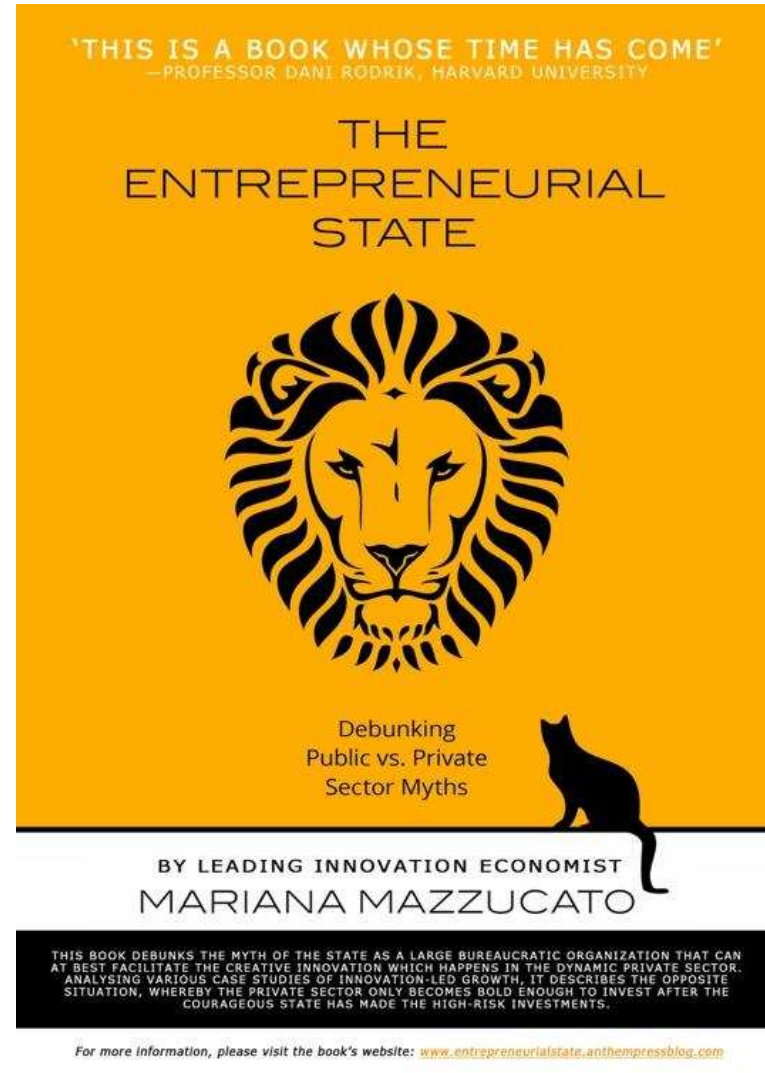
**"Governments** have always been lousy at picking winners... As the revolution rages, **governments should stick to the basics:** better schools for a skilled workforce, clear rules and a level playing field for enterprises of all kinds... **Leave the rest to the revolutionaries."**

(‘The Third Industrial Revolution’, *The Economist*, April 21, 2012).

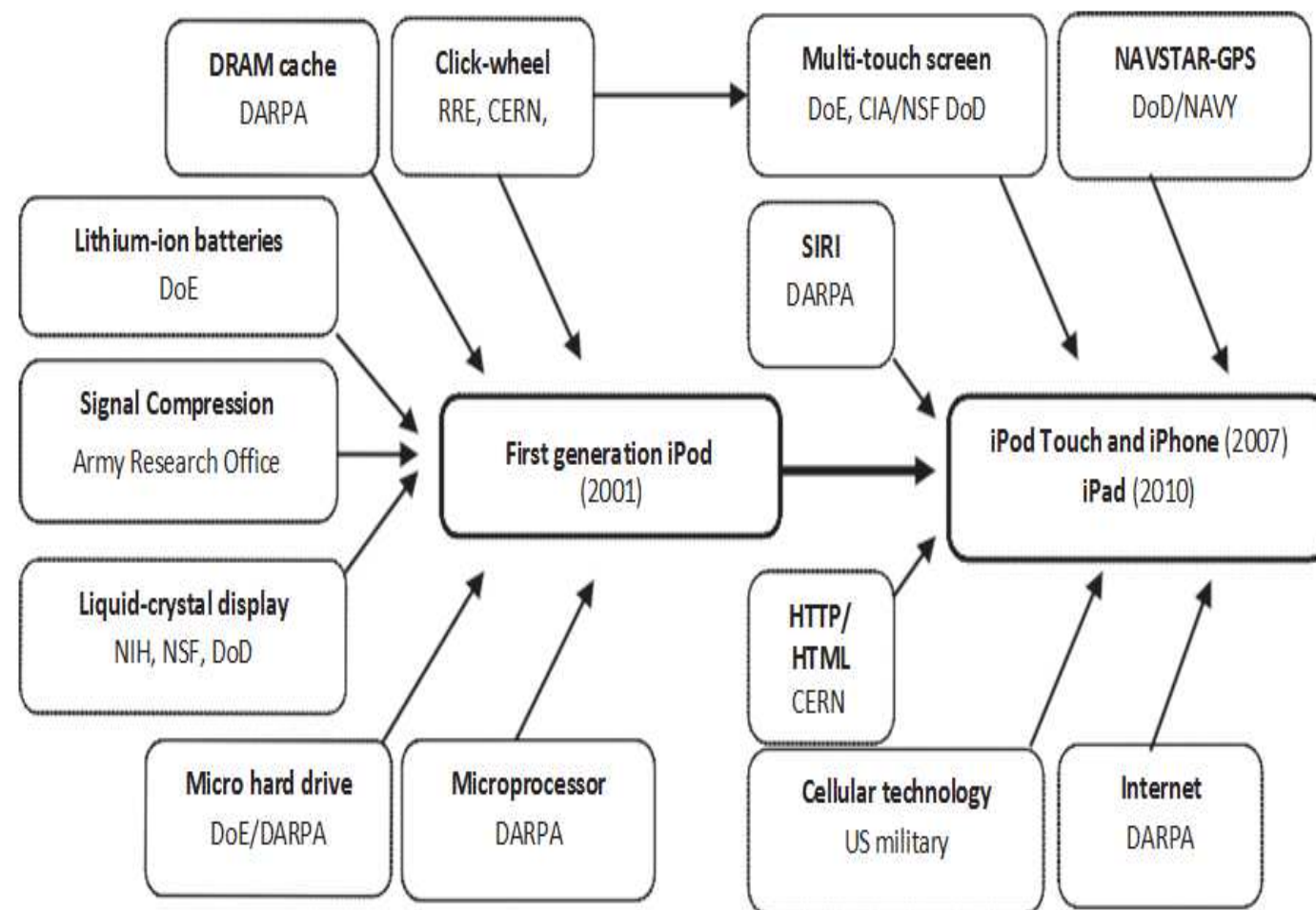
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# Market failure policies didn't get us ....

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



# What made the iPhone so 'smart'? The tax payer!



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# Co-creating markets not (only) fixing them

“*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.”

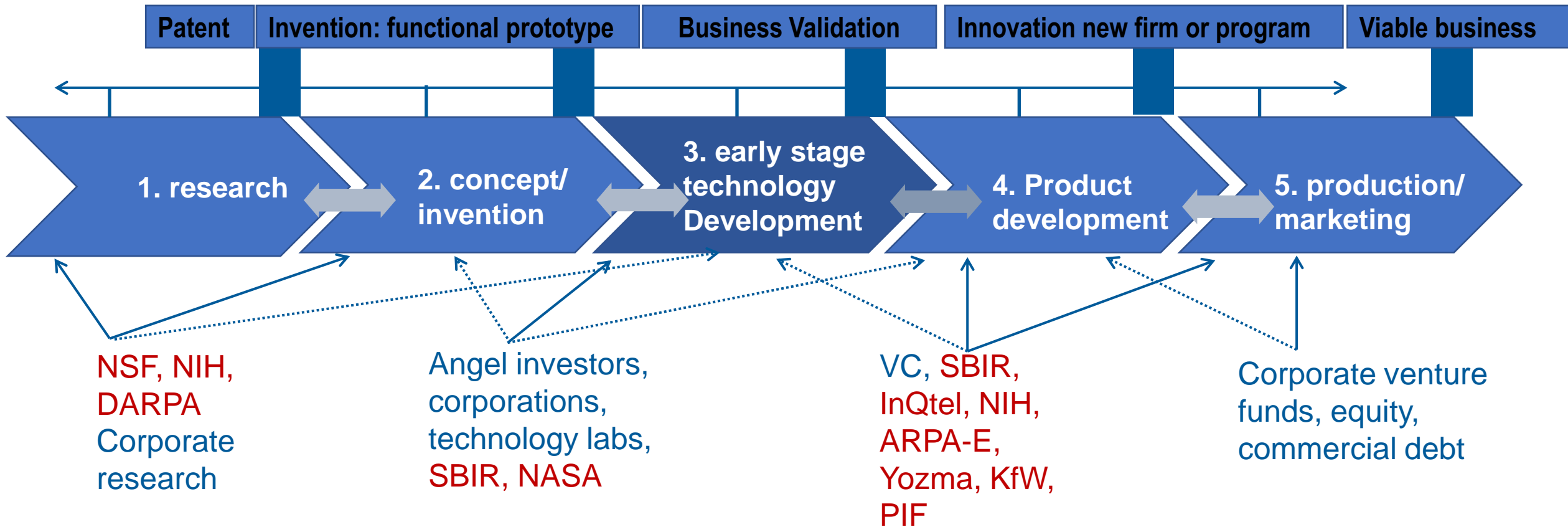
“The **mission** of the **KfW Group** is to support change and encourage *forward-looking ideas* – in Germany, Europe and throughout the world.”

“**BNDES** mission is to foster sustainable and competitive development in the Brazilian economy, generating employment while reducing social and regional inequalities.”

“The mission of the **Palestinian Investment Fund (PIF)** is to invest in and mobilize partnerships in strategic projects in vital, underserved sectors of the Palestinian economy.”



# Co-creating along entire innovation chain



# A new vocabulary (and curriculum) for governments

~~FLYING 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



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If **language** is not correct, then what is said is not what is meant; if what is said is not what is meant, then what must be done remains undone; if this remains undone, morals and art will deteriorate; if justice goes astray, the people will stand about in helpless confusion.

**Confucius**, Chinese philosopher & reformer (551 BC - 479 BC)

**VALUE**



# “Story-tellers rule the world”

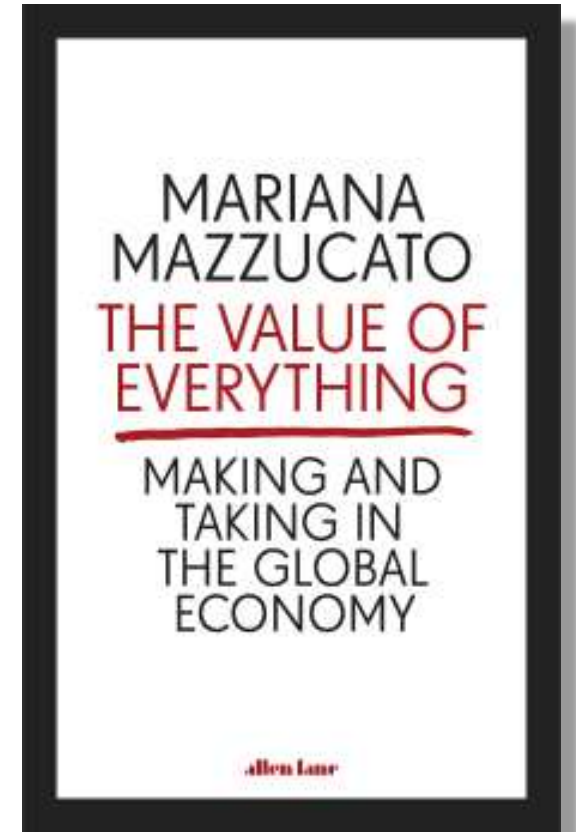
**Plato** ancient Greek philosopher (approx. 424 BC - 327 BC)

Stories about ‘who is productive? who creates value?’

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# Where does Value come from?

- 1600s Mercantilists: **TRADE!**
- 1700s Physiocrats: **FARMING!**
- 1800s Classical: **LABOUR!**
- 1900s/now Neoclassicals: **PREFERENCES!**





# François Quesnay

## 1694-1774

TABLEAU ÉCONOMIQUE.

**F**ournies par l'agriculture, prairies, pâturés, landes, marais, parcs, etc. En grains, bestiaux, viandes, bois, brêles, matériaux premiers des constructions de main d'œuvre. Sur-

Déjà quelques dimes  
taïls de dépense à la suite qu'il  
distille le revers de 500  
liv. au pari de d'auvres, ce qu'  
donne 1000 liv. de chaque  
côté — sont les avances qu'  
font les commerçans. Le Proprié-  
taire subsiste par les 500 liv.  
qu'il dépense. Les 1000 liv.  
distribués à chaque taïl  
de dépense peuvent y nour-  
rir un homme dans l'un d'  
dans l'autre c'est 500 livres  
de revenu peuvent faire sub-  
sister trois hommes chefs de  
famille. Sur ce pied 500 mil-  
lions de revenu peuvent faire  
subsister 3 millions de fami-  
les entières à 3 personnes,  
hors de bas âge, par famille.  
Les frais de la chaine des dé-  
penses postérieures qui ven-  
naient aussi chaque année,  
se sont environ la moitié d'  
un salaire pour le travail  
d'homme, ajoutés 100 mil-  
lions qui peuvent faire sub-  
sister encore un million de  
chefs de famille à 300 liv.  
chacon. Ainsi ces 100 mil-  
lions qui n'entraient annuelle-  
ment des biens fonds, pour-  
raient faire subsister 3 mil-  
lions de personnes hors de  
bas âge, indépendamment à cet  
ordre de circulation de la  
distribution des revenus an-  
nuels. Par circulation on en-  
tend ici les achats payés par  
le revenu, de la distribution  
qui partage le revenu entre  
les hommes par le paye-  
ment des achats de la pre-  
mière main, abstraction faite  
du commerce qui multiplie  
les ventes & les achats, sans  
multiplier les classes, & qui  
n'est qu'un succrès de dépen-  
ses diverses.

DEPENSES  
CHIRURGICALES.

**DISPENSAZIONE DIVORZIO.**  
 Dispensazione, in pagamento  
 per il divorzio prodotto da  
 una causa civile.

## DEFENSES

**E**n marchandises de main d'œuvre, logement, vêtements, intérêts d'argent, domestiques, frais de commerce, dettes étrangères, etc. Les chanceliers posent d'une classe de dépenses à l'autre d'où il leur revient de subtilité.

Les deux chaffes dépendent en partie les unes des autres, & en partie réciproquement l'une sur l'autre.

La coquille porte son  
lieu à cette colonne, sur quoi  
il faut rendre les quatre, des  
autres années, cette loi  
non loi, sous le filaire.

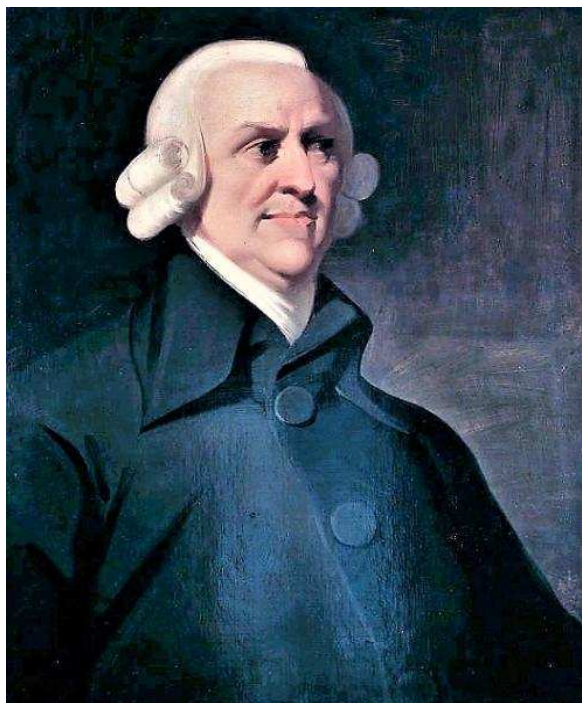
L'impôt qui doit être reporté à cette classe, est pour faire le revenu qui s'élève par les dépenses réproductives, & le vient de perdre dans cette classe-ci, à la réserve de ce qui rentre dans la circulation, ou il rentre dans le même ordre que le revenu, & de difficulté de même aux deux classes. Mais il est toujours au préjudice du revenu des propriétaires, ou des avances des cultivateurs, ou de l'épargne sur les consommations. Dans les deux derniers cas il est destructif, parce qu'il diminue d'autant la reproduction; dans le premier de ce qu'il en faut à l'étranger pour venir, & de ce qui en est arrêté par les formes pénuieuses des traités chargés de la perception de ces dépenses; car ces parties du produit démontrent ou détachées par l'épargne aux dépenses productives, ou portées les avances des cultivateurs, dirigées la reproduction, retournent évidemment en perte aux propriétaires, & devraient enfin la moitié du revenu qui forme l'impôt, lequel ne doit porter que sur les propriétaires, & sur les dépenses réproductives, ou le cultivateur, le Propriétaire, & l'État.



REPRODUCTION totale-----600 de cerveres & les faies parais  
d'agriculture de 600 terres que la Terre refuse. Ainsi la  
réproduction est de 1200 livres.

	Productive class		Proprietors		Sterile class	
Steps	Money	Products	Money	Products	Money	Products
<b>Circulation</b>						
0 (start)	0	4 food 1 raw material	2	nothing	0	2 goods
1	1	3 food 1 raw material	1	1 food	0	2 goods
2	1	2 food 1 raw material	0	1 food 1 goods	1	1 goods
3	2	2 food 1 raw material	0	1 food 1 goods	0	1 goods 1 food
4	1	2 food 1 raw material 1 goods	0	1 food 1 goods	1	1 food
5	2	2 food 1 goods	0	1 food 1 goods	0	1 food 1 raw material
6	0	2 food 1 goods	2	1 food 1 goods	0	1 food 1 raw material
<b>Production</b>						
		2 food + 1 goods consumed produce: 4 food 1 raw material		1 food + 1 goods consumed produce: nothing		1 food and 1 raw material consumed product: 2 goods
<b>New circulation → start at the top</b>						





Adam Smith  
1723-1790

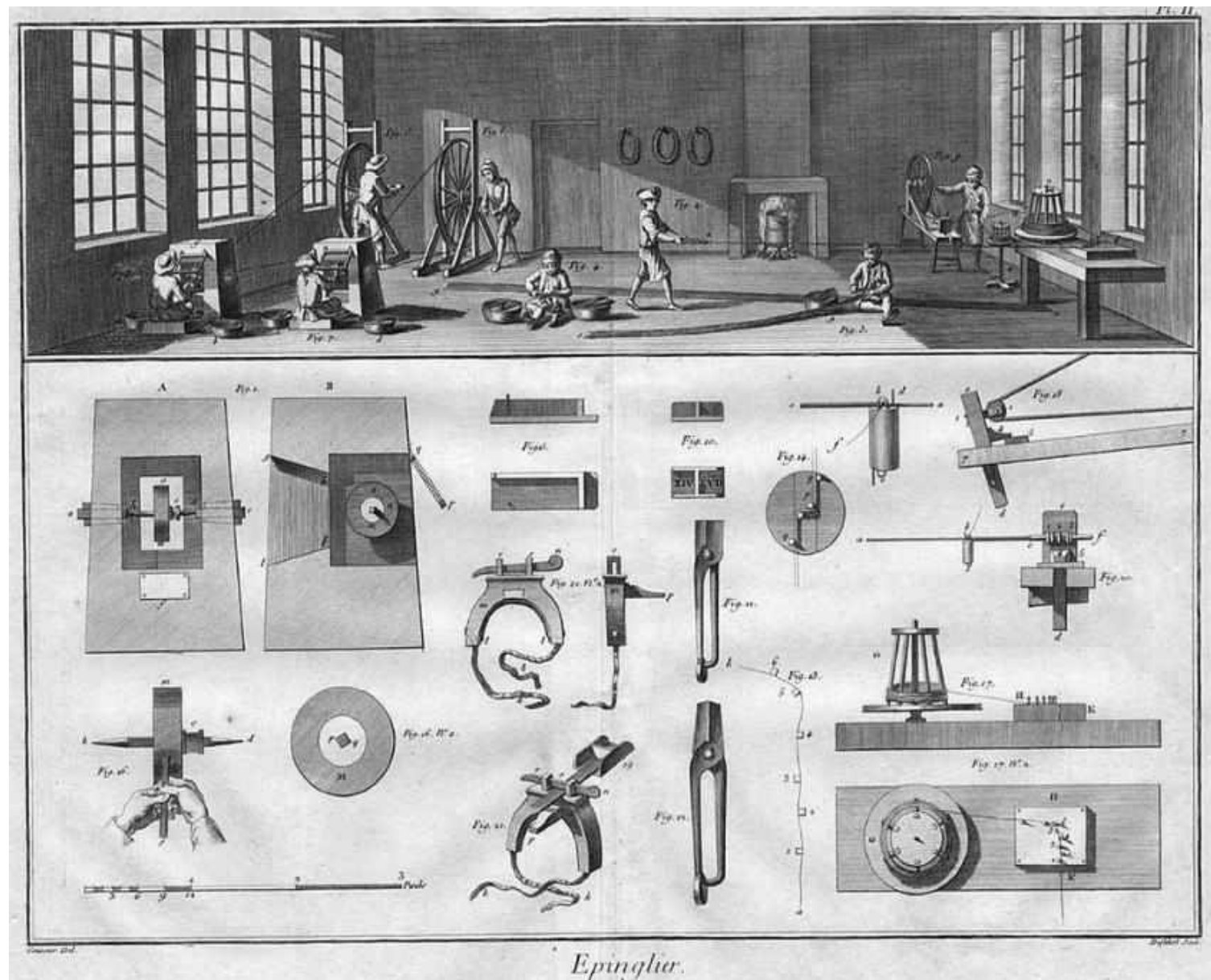


Plate on pin-making, from Diderot's Encyclopédie (1762)

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# Rent is robbery

“Landlords’ right has its origin in robbery. The landlords, like all other men, love to **reap where they never sowed**, and demand a rent even for the natural produce of the earth.” (**Adam Smith**)

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# Implications from Classicals


Relationships between value, prices and income tied to **objective** conditions of (changing) production.

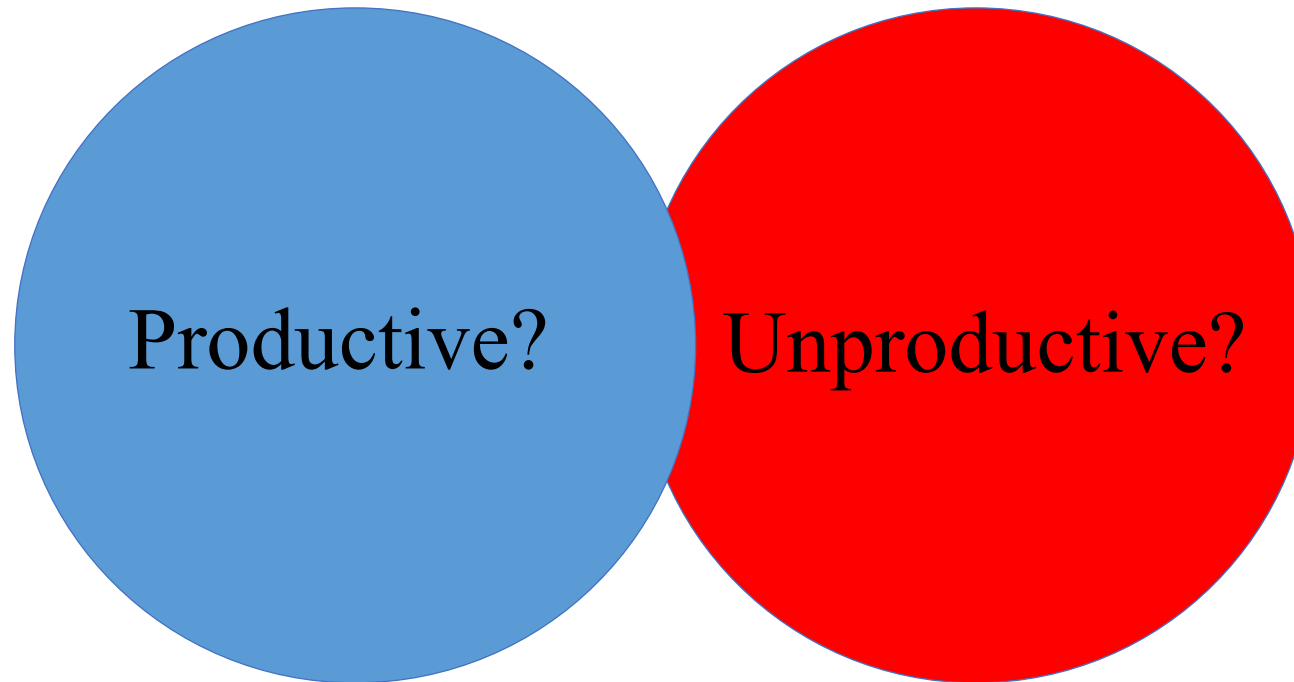
Relationship between production and **income mediated through power issues**: who owns the means of production.

**Reproduction** of the system is the focus.

Rent is about **unearned income**.

# What happens when value debate disappears?

**Price**  **Value**





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# Why value theory matters

- **Inequality** (who earns what and why?)
- **GDP** (what is counted?)
- **Governance of organisations** (how is it produced?)
- **Pricing of medicines** (is it accessible?)
- **Digital/platform capitalism** (who owns it?)
- **Role of the state** (how is it governed?)

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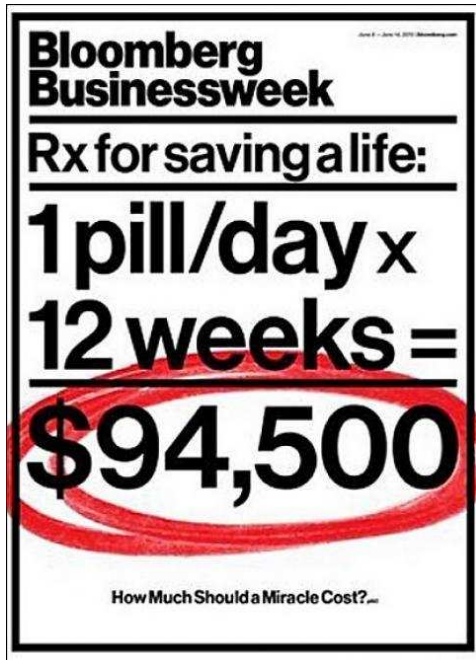
# Unproductive government?

GDP sees government only as 'spender' not producer.

Policy is only about 'fixing' market failures.

Public Choice theory trains civil servants to think that government failure even worse than market failure.

Private sector creates value public sector only redistributes it.

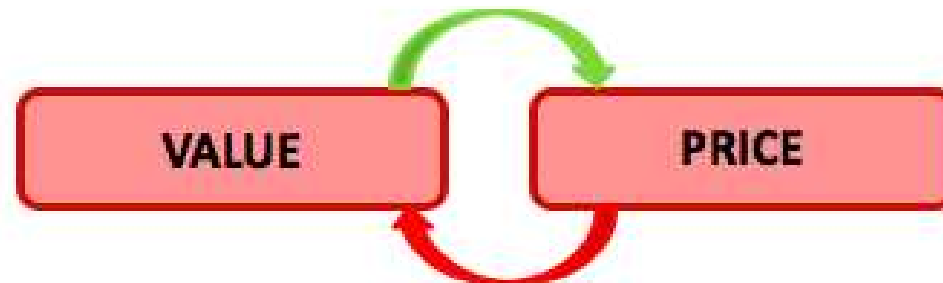


# Big Pharma Pricing

\$40 bn/year



Value based pricing (perceived value)



**PUBLIC PURPOSE**





# From challenges (SDGs), through missions, across sectors, to projects

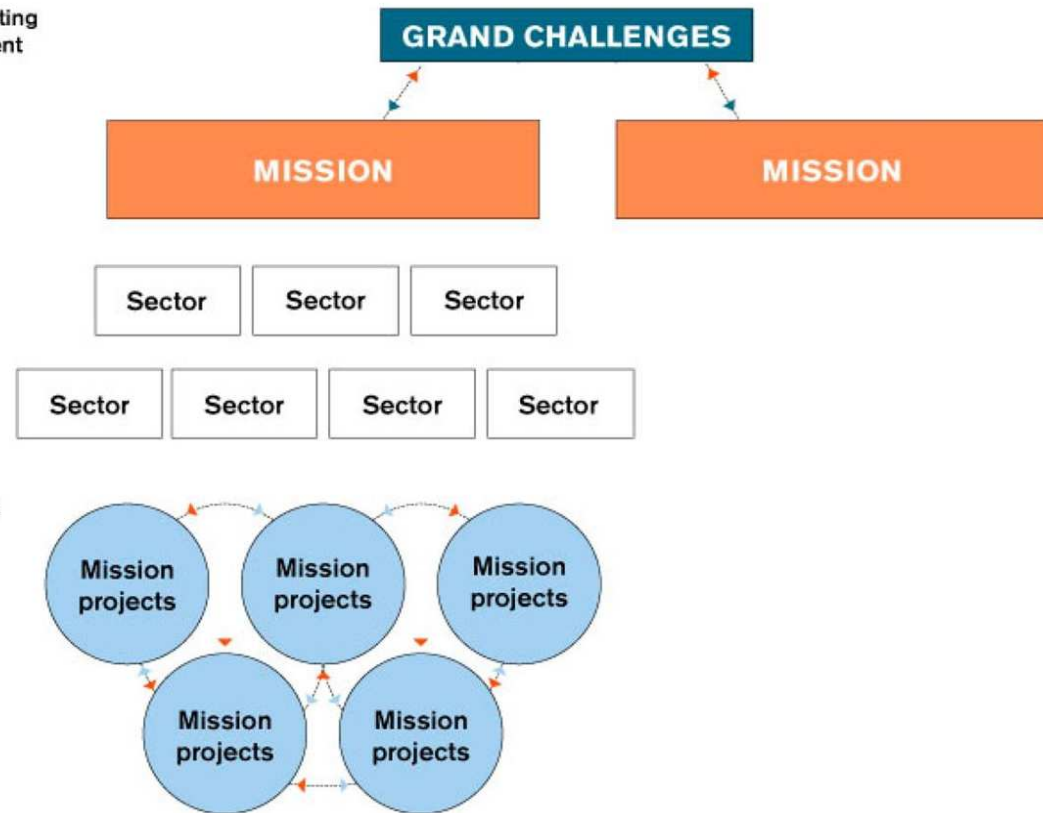


Political agenda setting  
and civic engagement

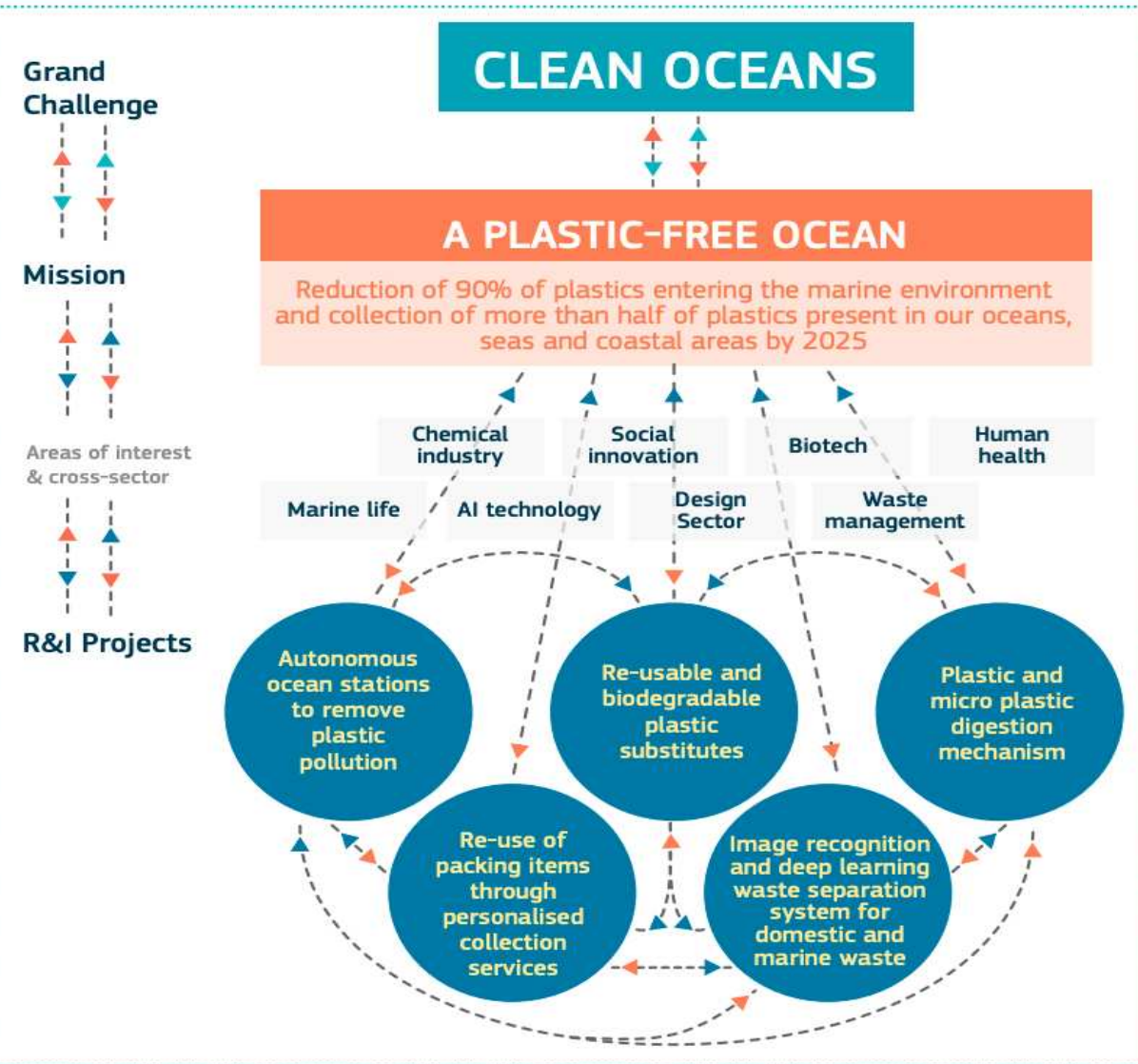
Clear targeted  
missions

Cross-sectoral  
innovation

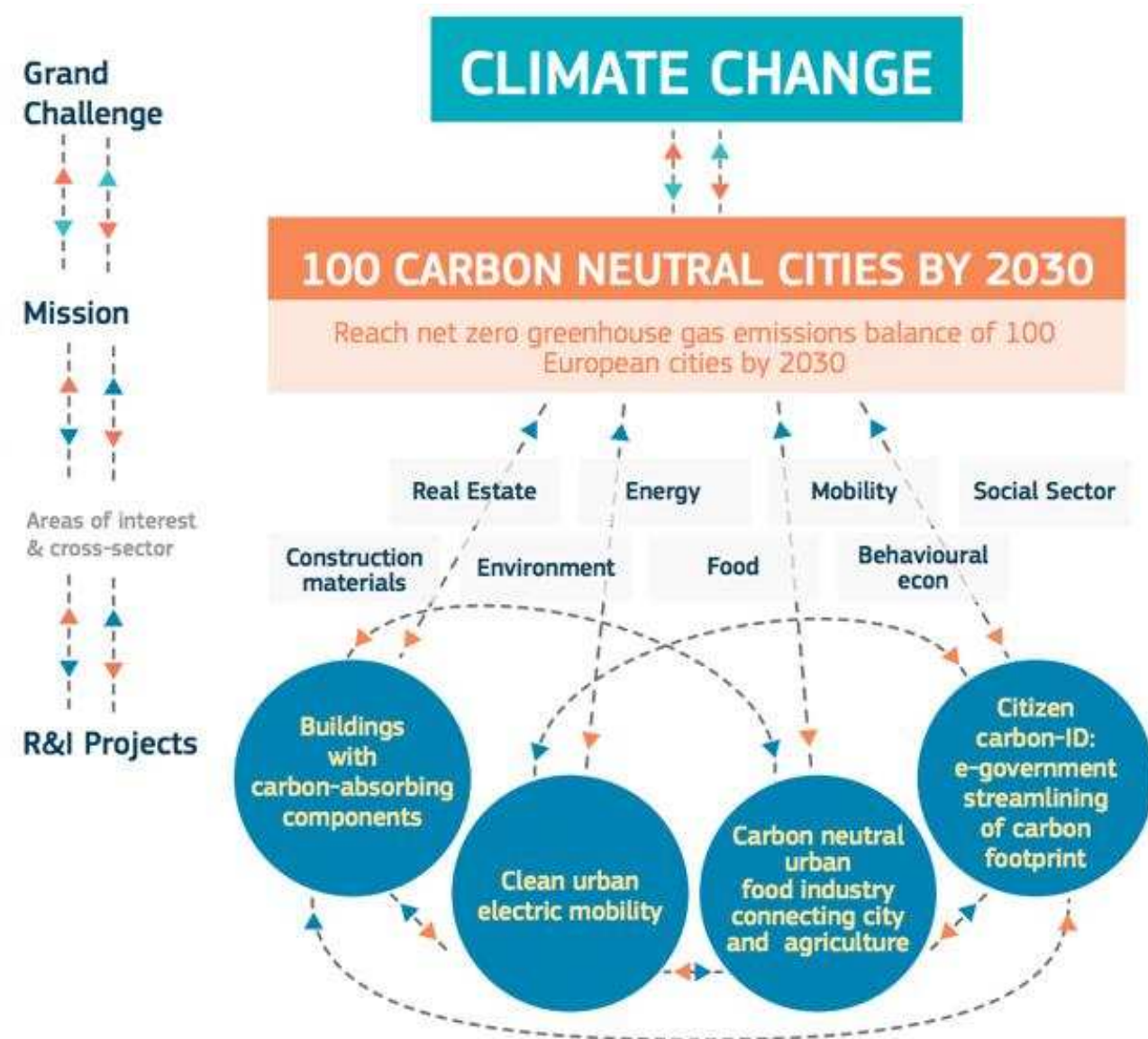
Portfolio of projects  
and bottom-up  
experimentation



# SDG 13



# SDG 14



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## 5 criteria for missions

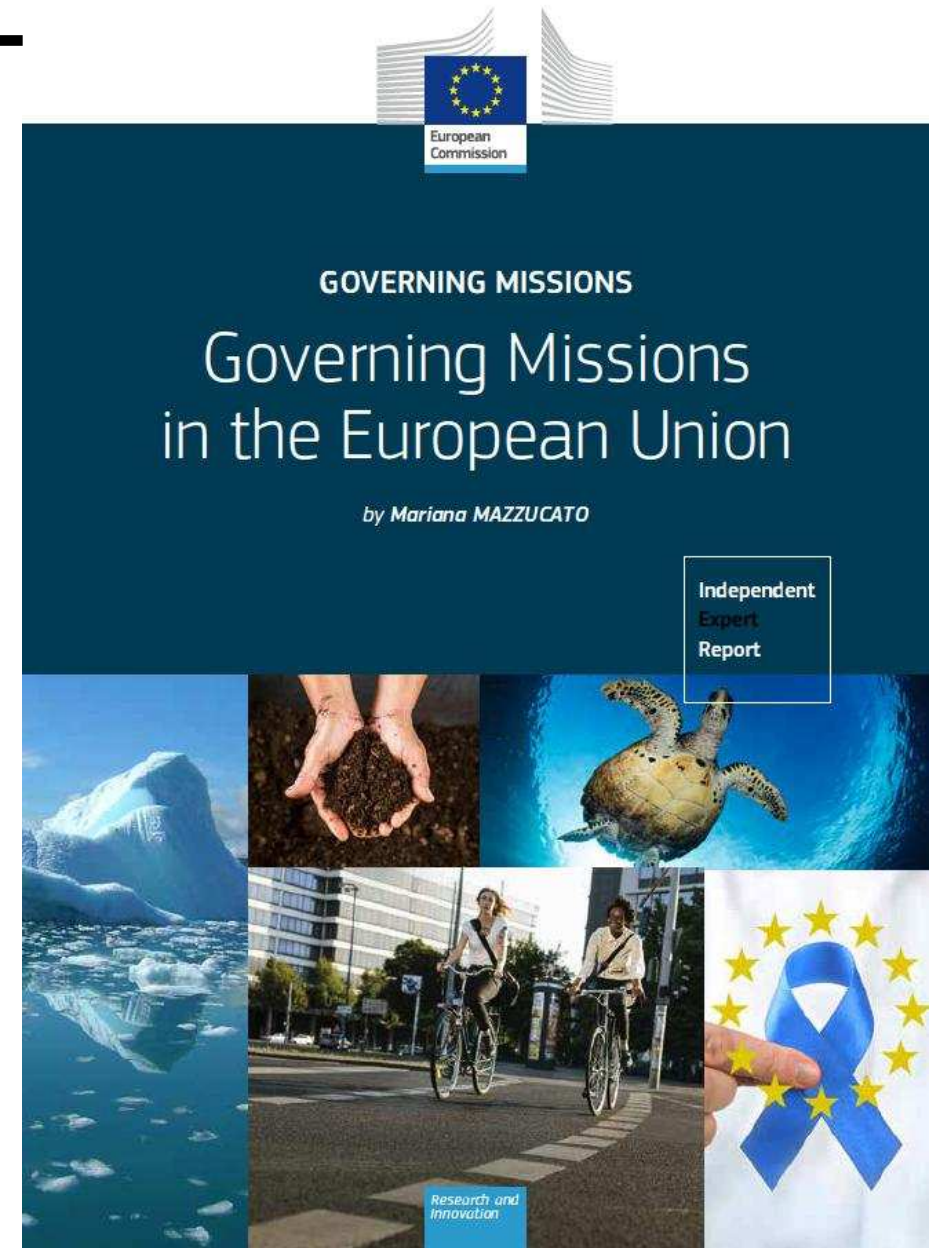
- Be bold, inspirational, with wide societal relevance
- Have a clear direction: targeted, measurable, and time-bound
- Be ambitious but realistic research and innovation actions
- Be cross-disciplinary, cross-sectoral, and cross-actor innovation
- Drive multiple, bottom-up solutions.





# How to *implement* missions

- Selection (who decides?)
- Impact-driven targets / milestones
- Pro-active portfolio management
- Flexibility and adaptability
- Accountability
- Connecting and engaging citizens
- Financing and ‘crowding-in’
- Public sector capabilities



# Guiding the UK industrial strategy



## AI & Data Economy

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



## Clean Growth

We will maximise 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

*"We have seen throughout our history that setting ambitious and clearly-defined missions motivates human endeavour. There is huge potential in a missions-based approach to drive faster solutions – and it is an approach being pioneered here in the UK, by University College London's Commission on Mission-Oriented Industrial Strategy."*



## A Mission-Oriented UK Industrial Strategy

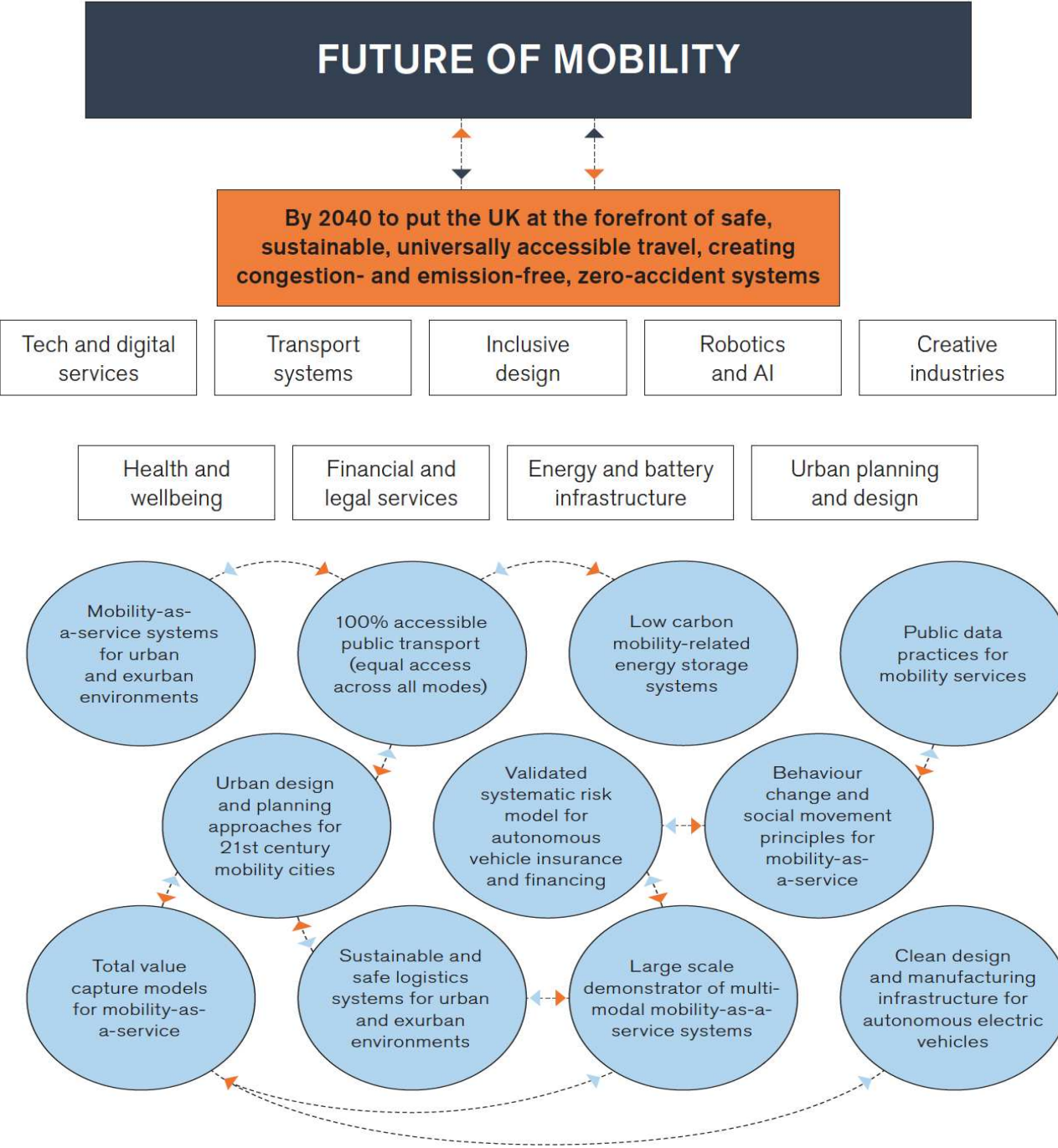
UCL Commission for Mission-Oriented Innovation and Industrial Strategy (MOIIS)

May 2019

**UCL**  
**IIPP** Institute for  
Innovation and  
Public Purpose



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





# a new mission-oriented public bank for Scotland

FINANCIAL TIMES

UKCOMPANIESMARKETSOpinionWORK & CAREERSLIFE & ARTS

Scottish economyAdd 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, 201839

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 Government<sup>14</sup>

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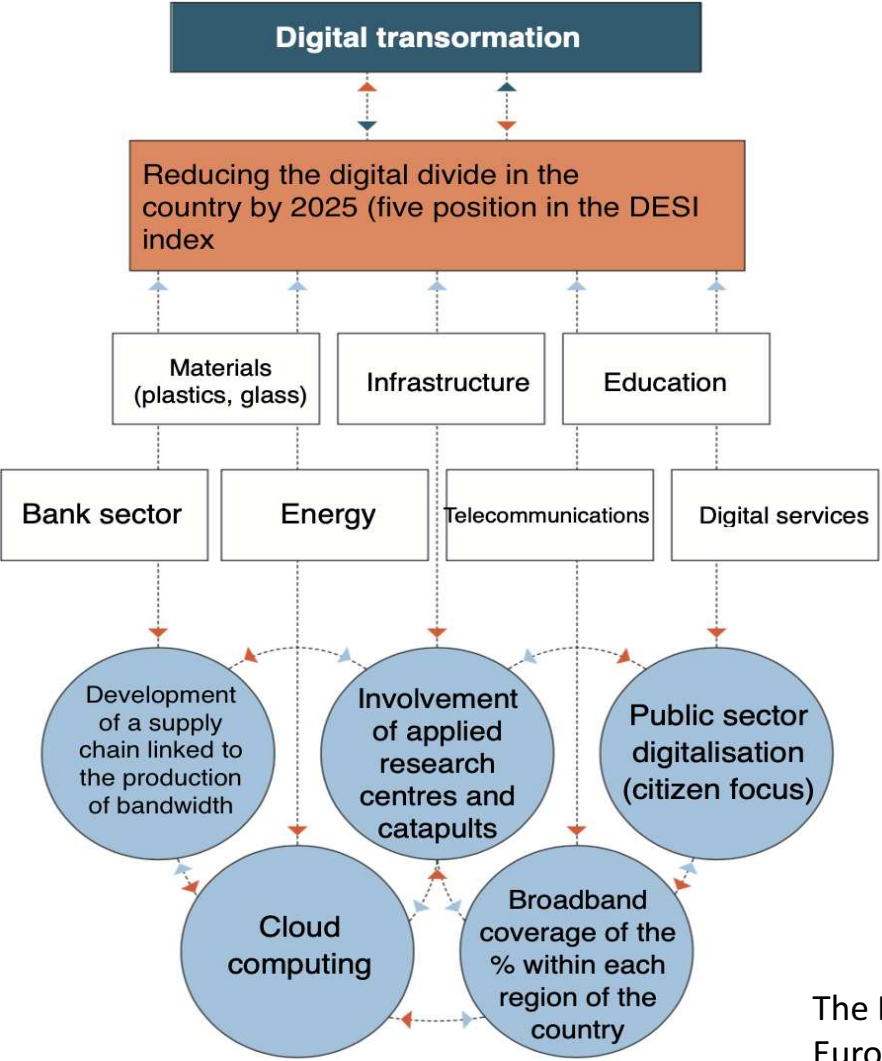
# The European Investment Bank

**Patient long term risk finance.** 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. Missions require patient, long-term finance, willing to take on higher risks for the public interest.



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

# Missioni Italia



The Digital Economy and Society Index (DESI) is a composite index that summarises relevant indicators on Europe's digital performance and tracks the evolution of EU Member States in digital competitiveness.



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# Cross-cutting themes in Mission Italia

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5.1. Industrial transformation and systems of innovation

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5.2. A strategic use of public procurement

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5.3. A dynamic public administration

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5.4. The strategic role of state-owned enterprises

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5.5. Conditionalities, risks and opportunities

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Mission-oriented  
public procurement:  
esempi internazionali

Rapporto per  
il Presidente del Consiglio dei Ministri

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di Mariana Mazzucato

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Ottobre 2020

 Institute for  
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# Evaluating dynamic public investments

	Market fixing	Market shaping
Justification for the role of government	Market or coordination failures: <ul style="list-style-type: none"><li>• Public goods</li><li>• Negative externalities</li><li>• Imperfect competition/information</li></ul>	All markets and institutions are co-created by public, private and third sectors. Role of government is to ensure markets support public purpose, also by involving users in co-creation of policy
Business case appraisal	Ex-ante cost benefit analysis (CBA) – allocative efficiency assuming static general relationships, prices etc.	Focused on systemic change to achieve mission-dynamic efficiency (including innovation, spillover effects and systemic change)
Underlying assumptions	Possible to estimate reliable future value using discounting. System is characterised by equilibrium behaviour	Future is uncertain because of potential for novelty and structural change; system is characterised by complex behaviour
Evaluation	Focus on whether specific policy solves market failure and whether government failure avoided (Pareto efficient)	Ongoing and reflexive evaluation of whether system is moving in direction of mission via achievement of intermediate milestones and user engagement. Focus on portfolio of policies and interventions, and their interaction
Approach to risk	Highly risk averse; optimism bias assumed	Failure is accepted and encouraged as a learning device

Source: Kattel, R, Mazzucato, M, Ryan-Collins, J., and Sharpe, S. (2018), "The economics of change: Policy and appraisal for missions, market shaping and public purpose", (Institute for Innovation and Public Purpose WP- 2018-06)

# New questions for a market shaping approach

ROAR

## Routes

How to overcome the fear of 'picking winners', focussing the question not on *whether* to 'pick' but on *how* to make strategic choices around societal and technological missions, which can 'tilt' the playing field around transformative change.

## Organisations

What are the enablers for the *type of public sector institutions* that welcome the uncertainty — and hence risk-taking — inherent in the innovation process, becoming learning institutions. Viewing 'policy as process' and building learning organisations.

## Assessment

How to develop new tools to *measure and assess* the dynamic impact of different types of public policies that aim to create markets, not only fix them. A dynamic approach to the assessment of policies to replace, or at times complement, the more static cost-benefit approaches.

## Risk and Reward

How to develop mechanisms so that the public and private sectors share the risks and also the rewards. Ways to allow smart, innovation-led growth to also be inclusive growth.



\*For details on the ROAR framework see Mazzucato, M. (2016) ["From Market Fixing to Market-Creating: A new framework for innovation policy"](#), *Industry and Innovation*, and IIPP first working paper [Mission-Oriented Innovation Policy: Challenges and Opportunities](#)

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# Policy as Process

## Organizational Experimentation

“The design of a good policy is, to a considerable extent, the design of an organizational structure capable of learning and of adjusting behavior in response to what is learned”

**Dick Nelson and Sydney Winter, 1982**

## Policy as Process

“shift from total confidence in the existence of a fundamental solution for social and economic problems to a more questioning, pragmatic attitude –from ideological certainty to more open-ended, eclectic, skeptical inquiry”

**Albert Hirschman, 1987**

## The Hiding Hand (Serendipity)

history’s generous tricks, silver linings and “felicitous and surprising escapes from disaster”

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# Sharing both risks and rewards

- Reinvesting profits
- Retaining golden share of IPR
- Capping prices (Bayh Dole act allows it)
- Negotiating conditions (generics)
- Income contingent loans
- Equity
- % of payback into an 'innovation fund'
- State investment banks and portfolio methods

(discussed in Mazzucato, 2013;2018)



*“I expect to see the State...taking an ever greater responsibility for directly organizing investment’ and ‘I conceive, therefore, that a somewhat comprehensive **socialization of investment** will prove the only means of securing an approximation to full employment”*

**JM Keynes, 1936**



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## **The COVID19 moment**

**‘Government has the upper hand for the first time in a generation. It must seize the moment to build a new public-private partnership that is symbiotic’**

# Putting public VALUE at the heart of health innovation

UCL Institute for Innovation and Public Purpose



## The people's prescription

Re-imagining health innovation  
to deliver public value

October

## THE PEOPLE'S VACCINE

Available to all. In all countries. Free of charge.

**STOP  
AIDS.**

just TREATMENT

## ELIZABETH WARREN

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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

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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



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# 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**

**AIRFRANCE** 

American Airlines 

**Austrian** 

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

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# How to govern the data commons?

Barcelona, govern digital  
de codi obert, àgil i participatiu





# Just Transition in Mondragon, Spain: a 'cooperative' approach

## CLIMATE BUSINESS MODEL DISRUPTION



**SOCIAL MEANING  
AND VALUES**

**MONDRAGON  
TRILEMMA**

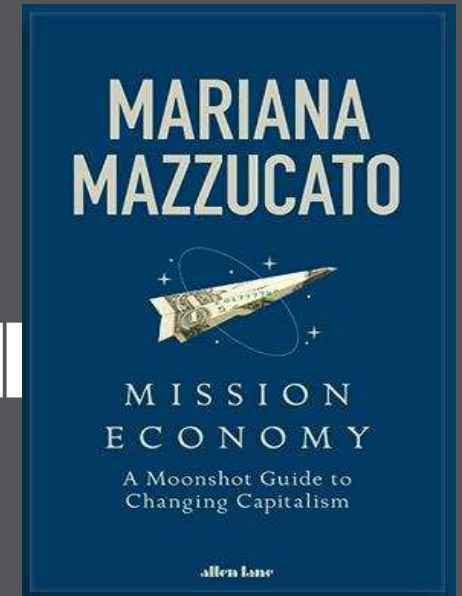
**DEMOGRAPHIC AND  
LABOUR SHIFTS**



- moment to **do capitalism differently!**
- start with the **talk** turn the talk into a real walk
- challenge **old mission oriented** thinking
- different approach to **fiscal stimulus** (and budgeting)
- stronger **state capacity** and long term patient finance
- new **social contract** between state, business and citizens
- **redistribution** to share both risks and rewards
- govern **innovation** for the **common good**



Thank you  
...and stay tuned



January 2020

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