



Rethinking Capitalism: sharing both risks and rewards

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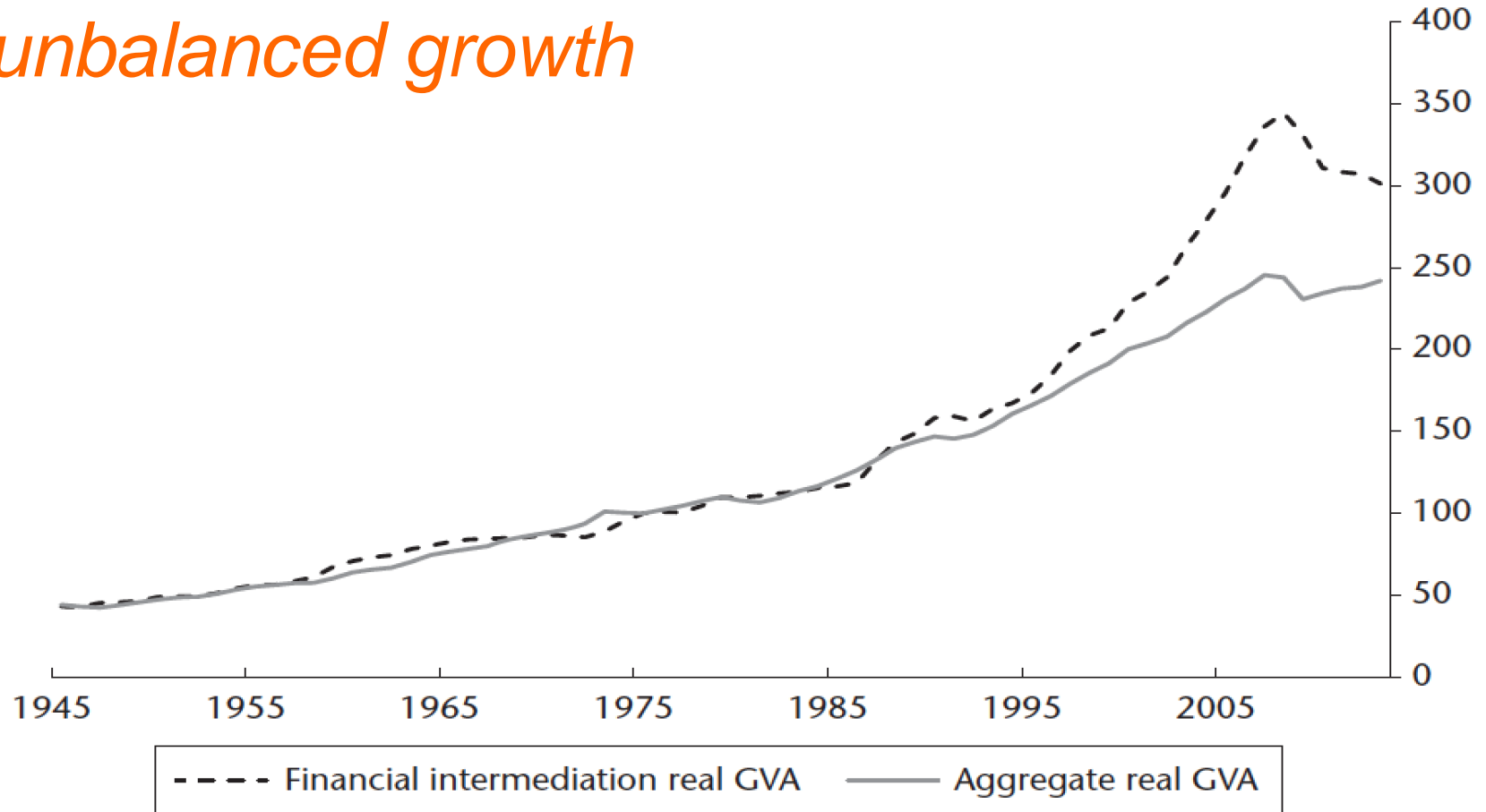
<https://www.ucl.ac.uk/bartlett/public-purpose/>

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Financialisation has led to *unbalanced growth*

Real GVA, 1975 = 100



And the real economy is sick too.

THE BIG IDEA PROFITS WITHOUT PROSPERITY

THE TOP 10 STOCK REPURCHASERS

2003-2012

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(Lazonick, HBR 2014)

At most of the leading U.S. companies below, distributions to shareholders were well in excess of net income. These distributions came at great cost to innovation, employment, and—in cases such as oil refining and pharmaceuticals—customers who had to pay higher prices for products.

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Climate getting sicker & can't wait much longer

International Energy Agency estimates that an additional USD 1.1 trillion in low-carbon investments is needed every year on average until 2050, in the energy sector alone, to keep global temperature rise below 2 degrees Celsius.

This implies current investment IN GREEN ENERGY is only 20% of what it should be!

Yet...exciting context to *rethink*

- Rebalancing economies
- Directed growth
 - **Smart** growth (better innovation)
 - **Sustainable** growth (more green)
 - **Inclusive** growth (less inequality)
- Sustainable Development Goals
- Industrial policies to rebalance economy



Economics and policy
for Sustainable and
Inclusive Growth

RETHINKING CAPITALISM

Edited by
MICHAEL JACOBS and
MARIANA MAZZUCATO

WILEY Blackwell

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Michael Jacobs and Mariana Mazzucato
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Stephanie Kelton
- 3 The theory of money and macroeconomic policy**
Randall Wray and Yeva Nersisyan
- 4 The costs of short-termism**
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- 7 Investment-led growth: a solution to the EU crisis**
Stephany Griffith-Jones and Giovanni Cozzi
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- 10 Innovation and the economics of climate change**
Dimitri Zenghelis
- 11 Capitalism, technology and a green golden age**
Carlota Perez

But...very boring view of State

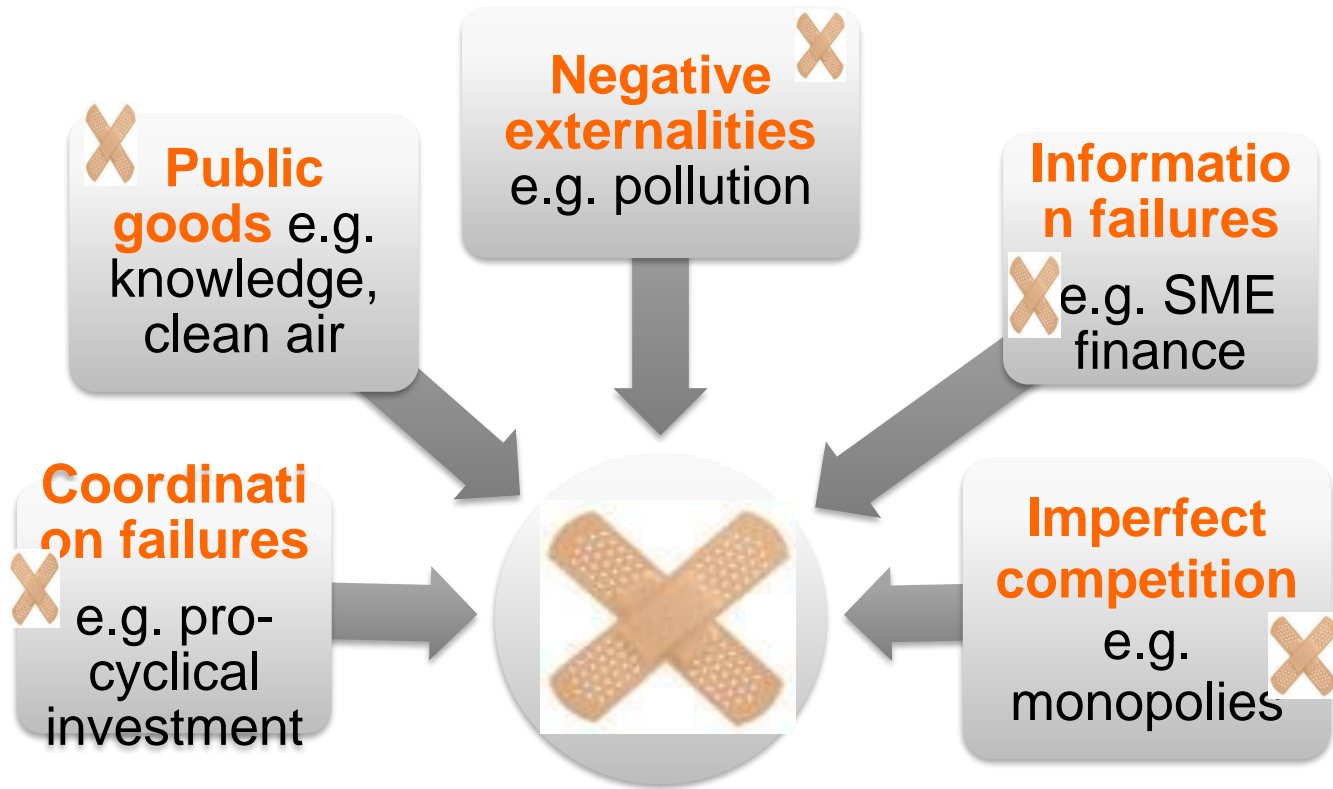
Set rules of the game and 'level' the playing field

De-risk, enable, incentivise, 'facilitate' private sector

Solve market and system 'failures'

or....something more interesting?

Fixing failures



the assumption



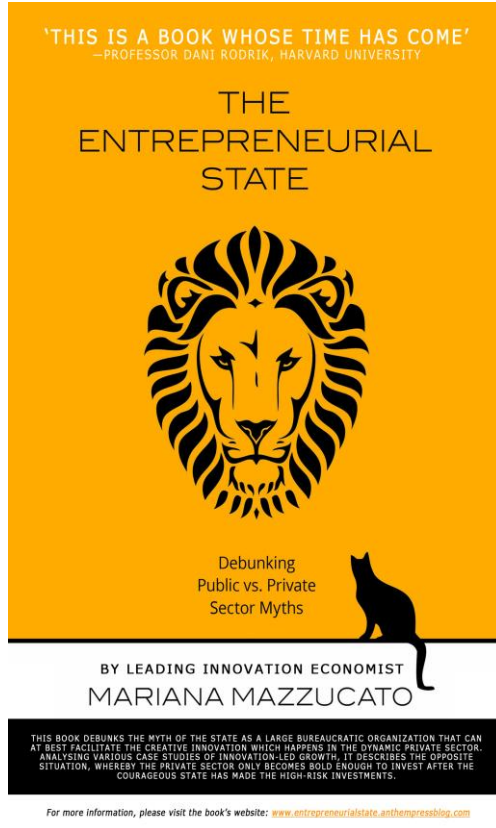
private sector

where are the european go-gos?
vs.



public sector

investor of first resort



markets are built.

markets are designed.

markets are outcomes..

boring theory of state leads to markets with:

- less innovation
- more rent-seeking
- more hoarding & financialisation
- more inequality

ROAR

ROUTES & DIRECTIONS. How to use policy to set direction of change and enable bottom up experimentation?

ORGANIZATIONS. How to build explorative public sector organizations that learn-by-doing, and welcome trial and error?

ASSESSMENT. How to evaluate public sector market creating investments (pushing market frontiers beyond 'crowding in')?

RISKS AND REWARDS. How to form new deals between the public and private sectors, socializing both risks and rewards?

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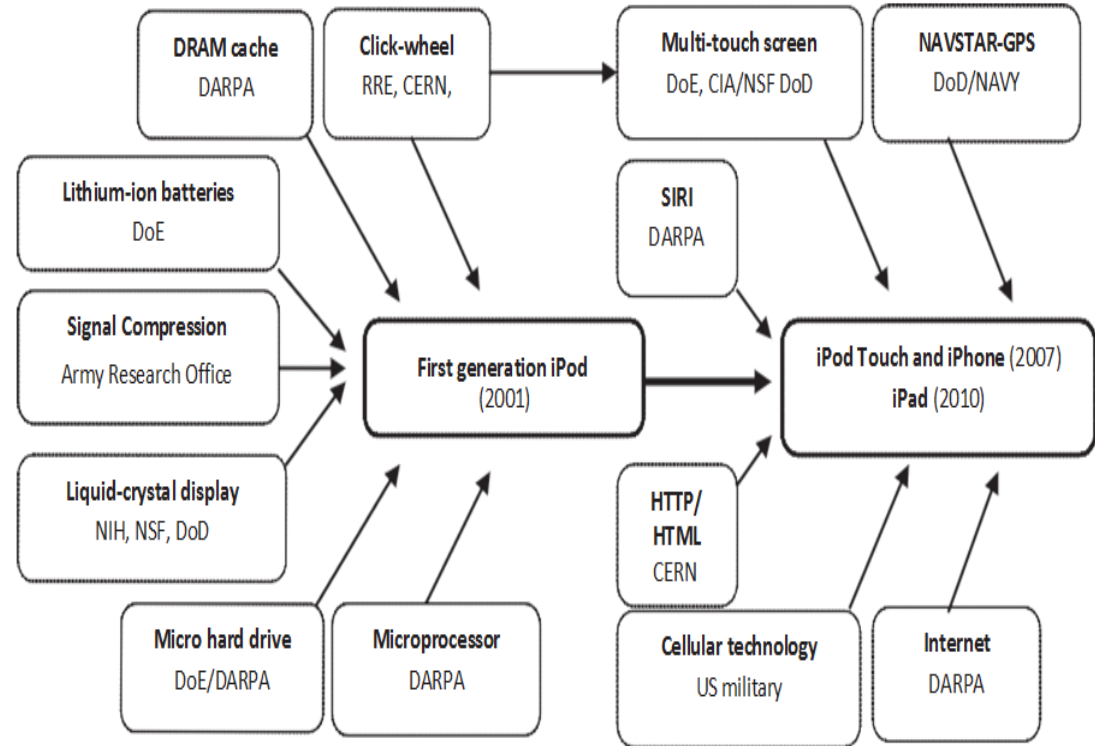
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market failure policies don't explain GPTs

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

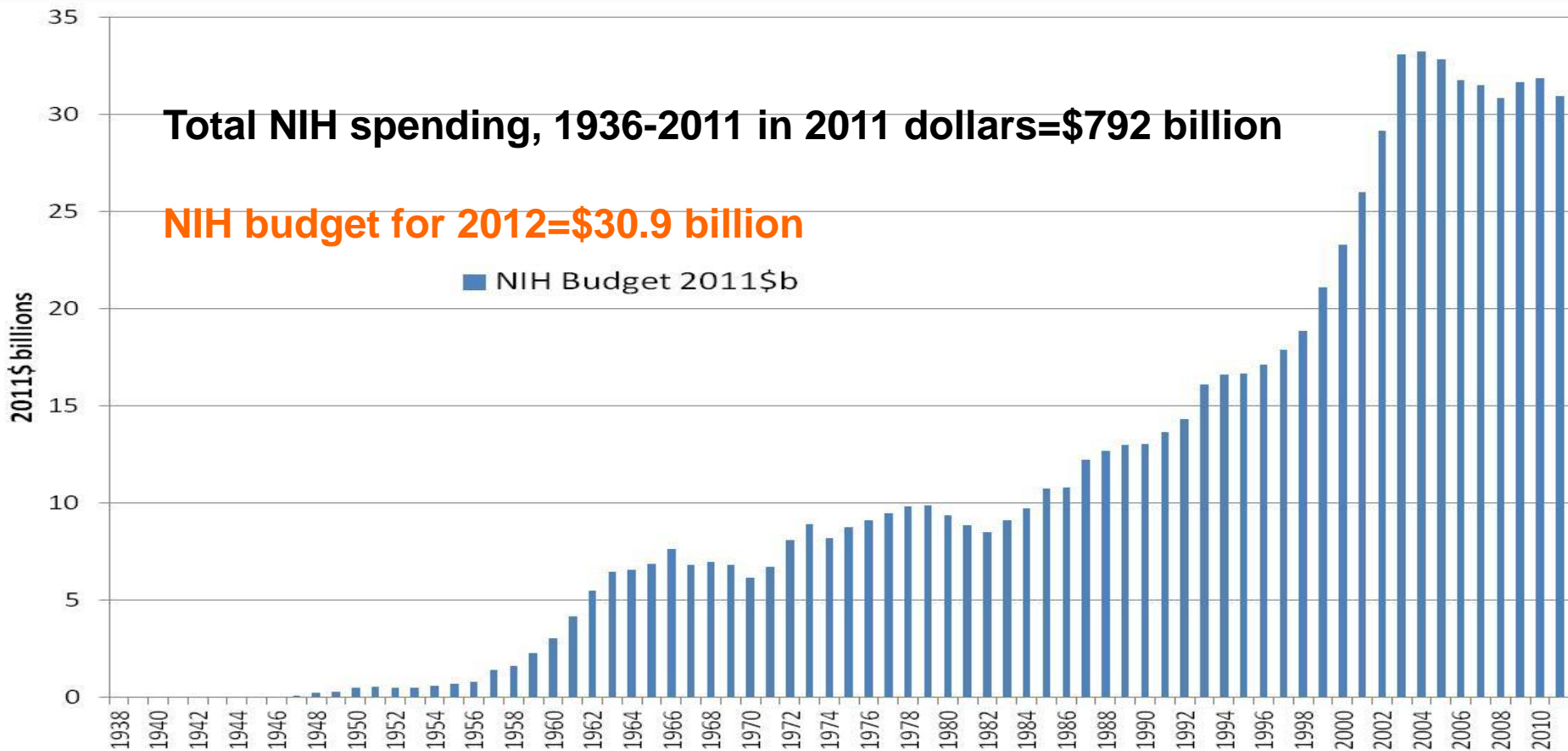
what makes the iPhone so 'smart'?



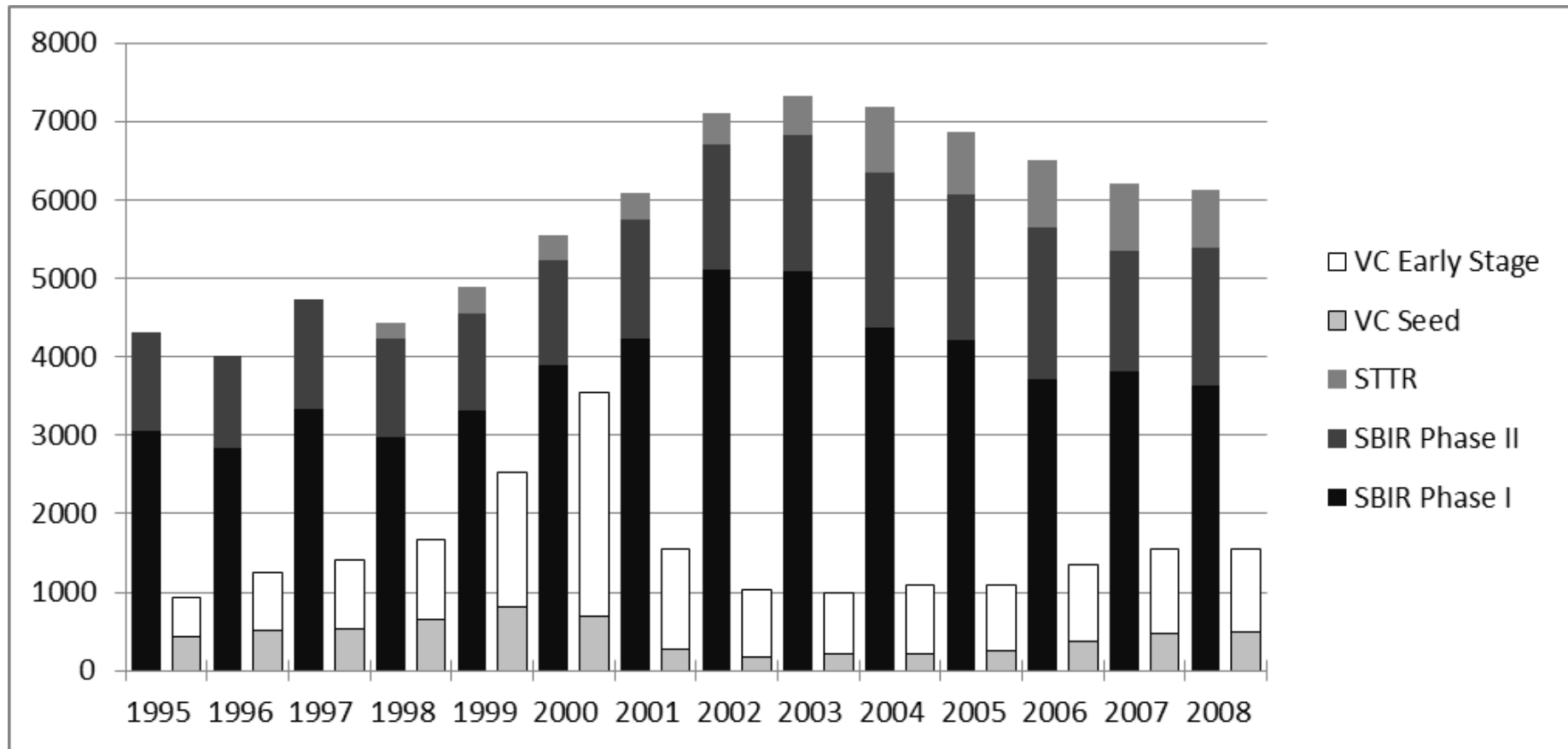
National Institutes of Health budgets 1936-2011

Total NIH spending, 1936-2011 in 2011 dollars=\$792 billion

NIH budget for 2012=\$30.9 billion



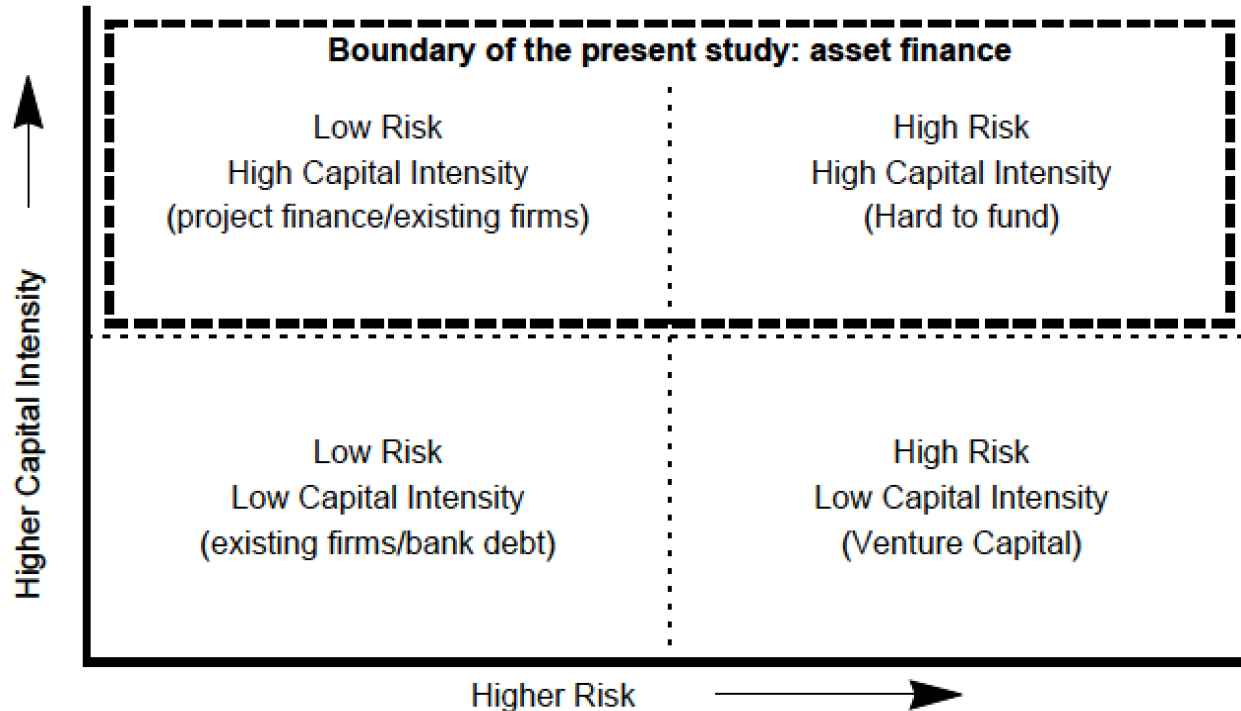
Private and Public (SBIR) Venture Capital



Source: Block and Keller, 2012

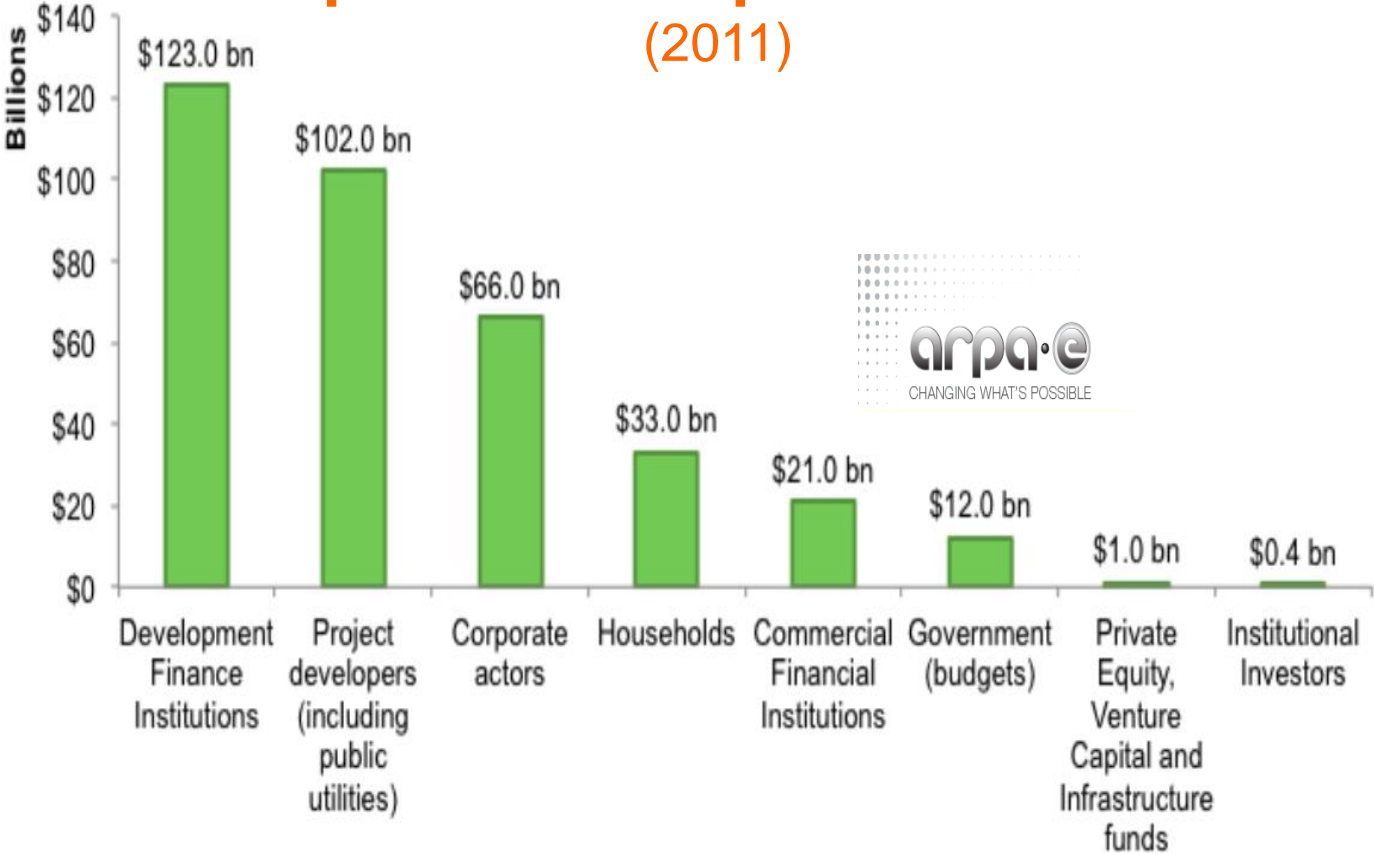
Green tech: state leads government follows

Figure 4: Risk-capital intensity classification of RE finance



green tech public & private investments

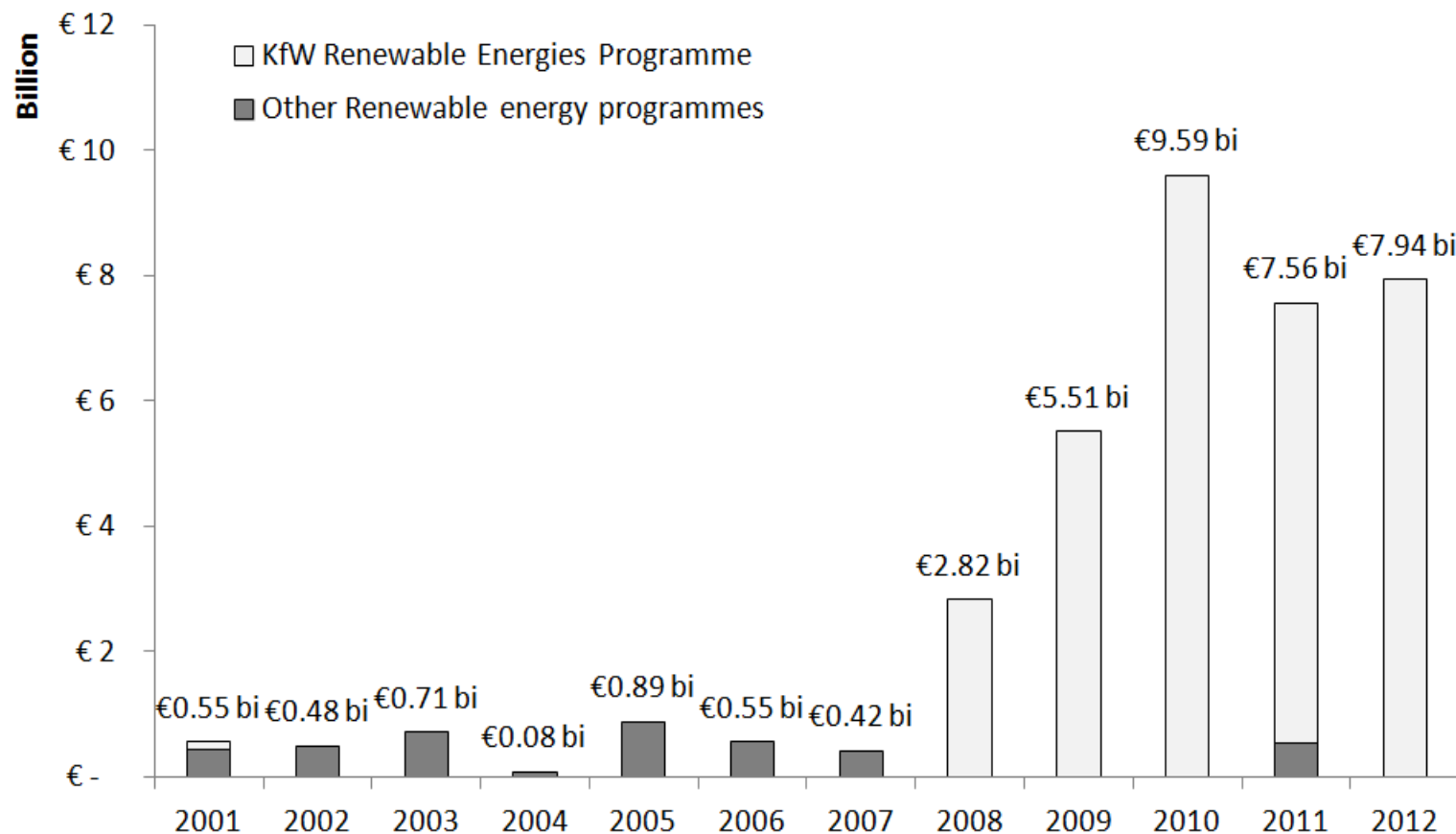
(2011)



Source: 2011 Climate Finance Initiative

KfW funding for industrial environmental and climate protection projects in Germany

2001-2012



China Development Bank

CDB founded **CDB Capital**, a 'public equity' fund with **\$US 5.76 bn to finance innovative start-ups** from the energy and telecom sectors.

Yingli Green Energy received **\$1.7 bn** from 2008 through 2012 with a **\$5.3 bn line of credit** opened for it. **LDK Solar (\$9.1 bn)**; **Sinovel Wind (\$6.5 bn)**; **Suntech Power (\$7.6 bn)**; and **Trina Solar (\$4.6 bn)**,

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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).*”

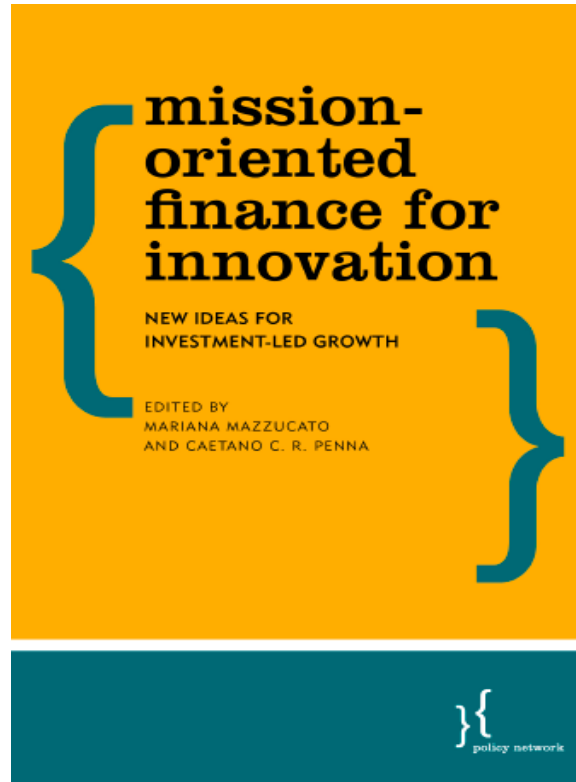
“The **ARPA-E mission** is to *catalyze* the development of transformational, high-impact energy technologies.”

“**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.”

We measure success by how many risks we have been willing to take (with inevitable failures) and whether the successes actually matter.

Cheryl Martin, ex-Director ARPA-E





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UCL

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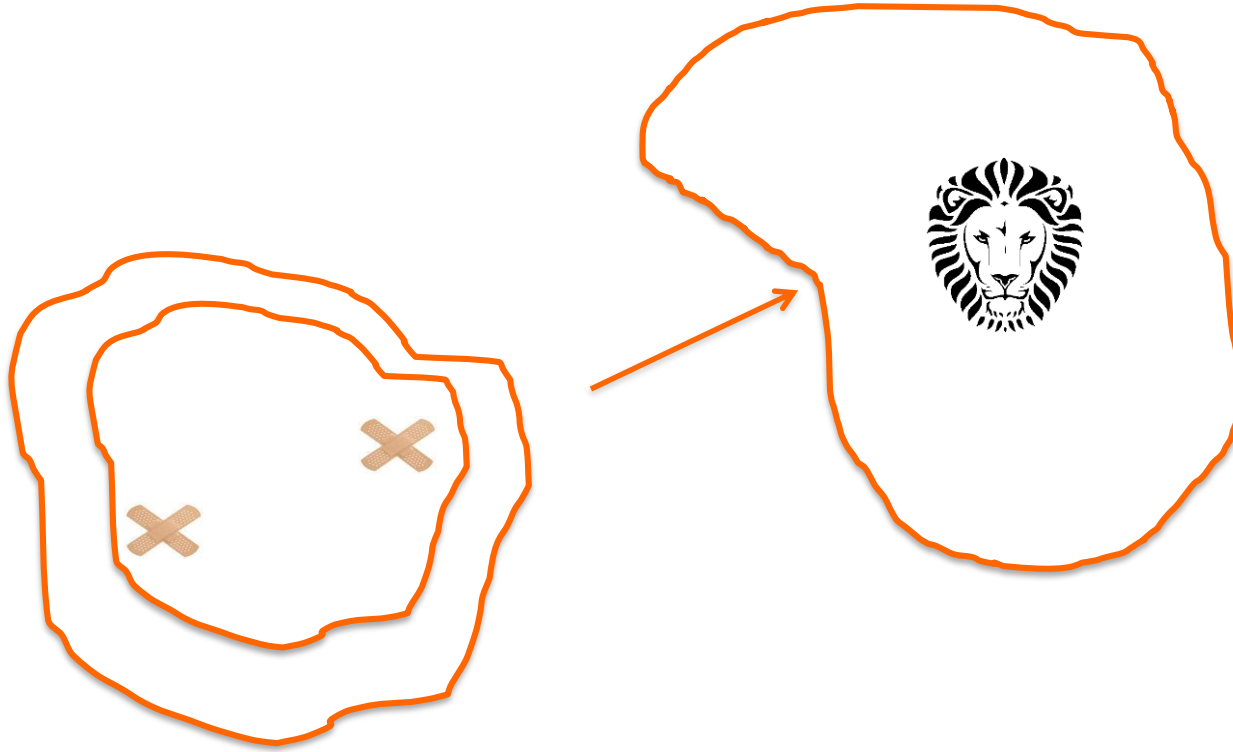
creating animal spirits



Businessmen have a different set of delusions from politicians, and need, therefore, different handling. They are, however, much milder than politicians, at the same time allured and terrified by the glare of publicity, easily persuaded to be ‘patriots’, perplexed, bemused, indeed terrified, yet only too anxious to take a cheerful view, vain perhaps but very unsure of themselves, pathetically responsive to a kind word. You could do anything you liked with them, if you would treat them (even the big ones), **not as wolves or tigers, but as domestic animals** by nature, even though they have been badly brought up and not trained as you would wish....

John M. Keynes’s private letter to **Franklin D. Roosevelt**, 1938

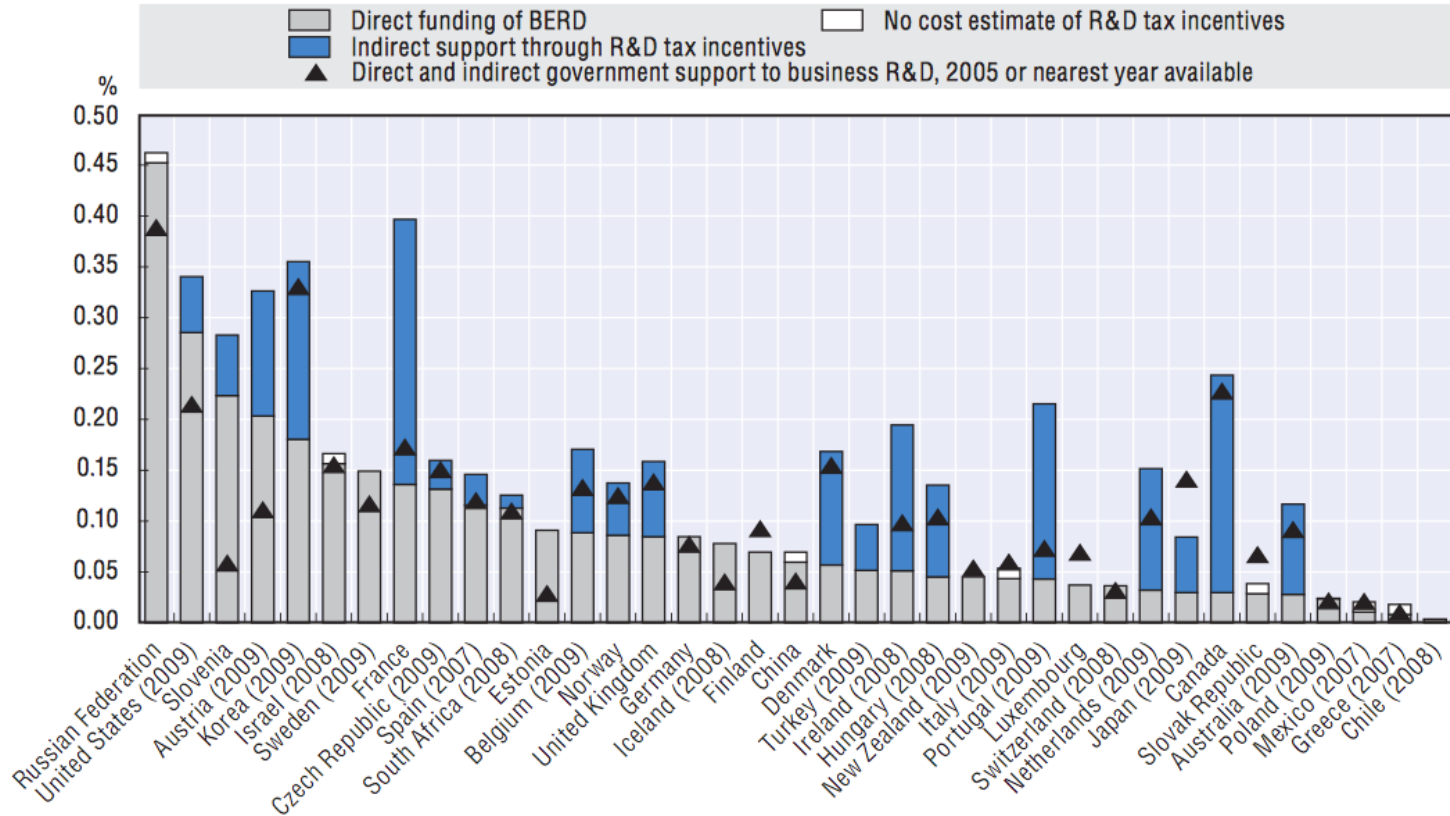
Measuring the *dynamising in process*



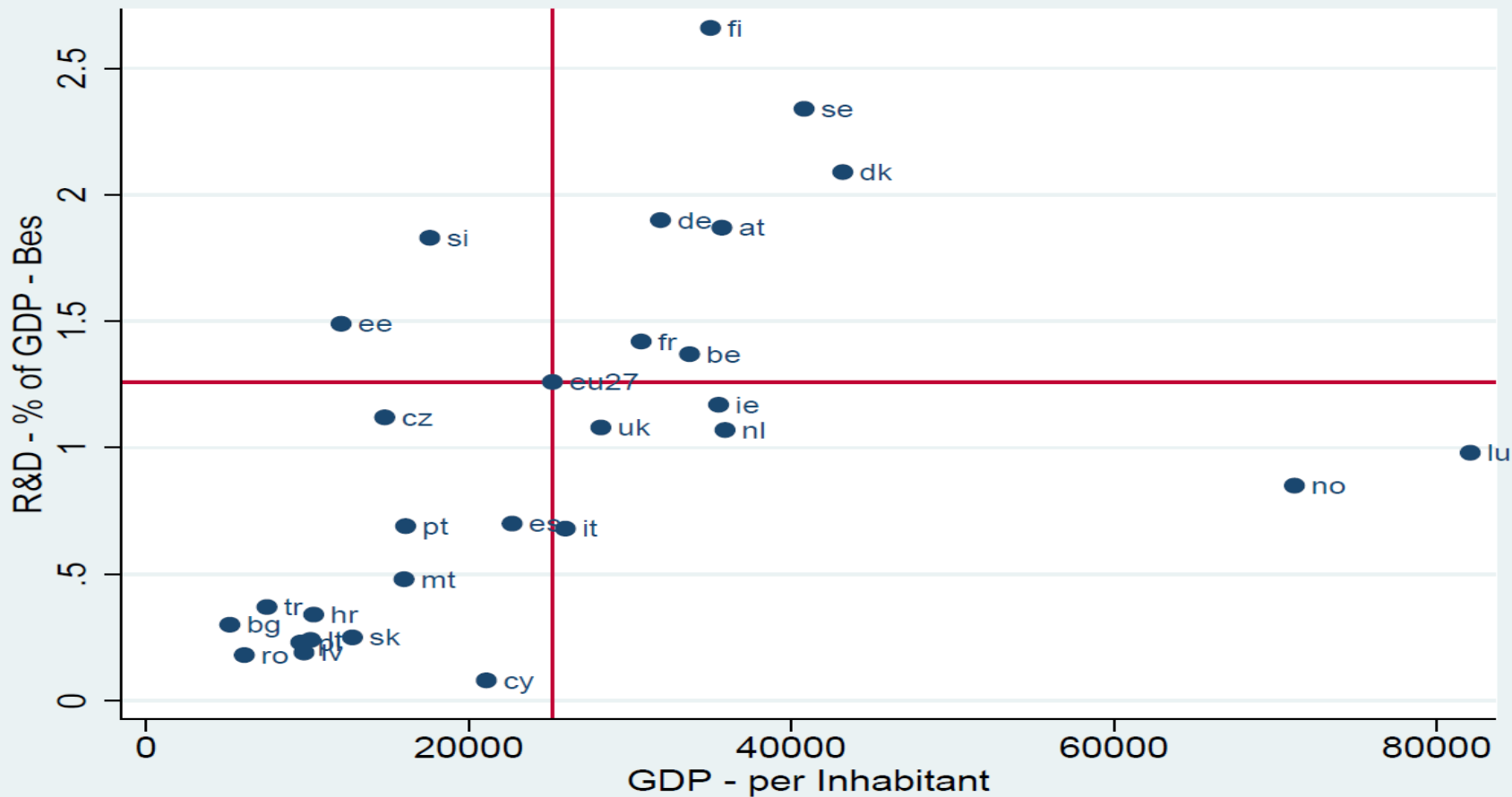
- **BBC** Charter Review: why not soap operas?
- Do **public banks** crowd out private ones?
- **Health**: why many drugs and so little life-style?

Direct government funding of business R&D and tax incentives for R&D, 2010

As a percentage of GDP



Business R&D spending (BERD)



From public goods to public values?

Public values are those providing normative consensus about (1) the rights, benefits, and prerogatives to which citizens should (and should not) be entitled; (2) the obligations of citizens to society, the state, and one another; (3) and the principles on which governments and policies should be based” (Barry Bozeman, 2007, 13).

From new public management’s **fear of government failure**, to enabling experimentation and capturing its effects.



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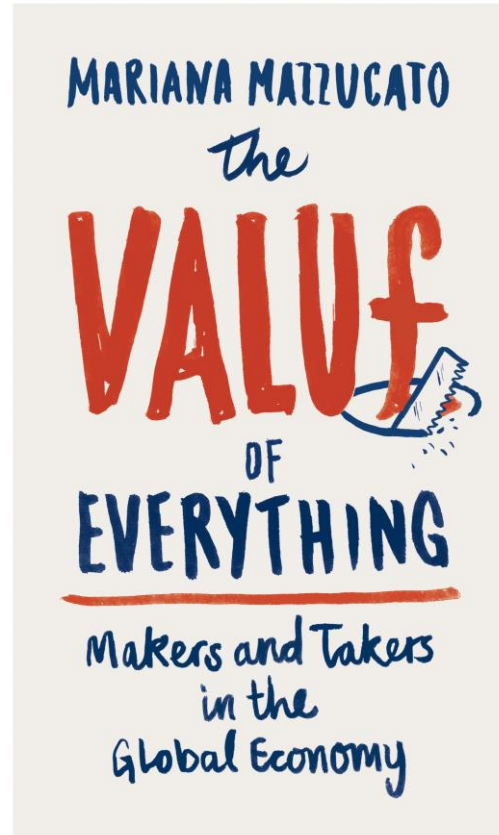


Collective value creation

“Success is a product of having been born in this country, a place where education and research are subsidized, where there is an orderly market, where the private sector reaps enormous benefits from public investment.” **Bill Gates**

“Society is responsible for a very significant percentage of what I've earned.” **Warren Buffett**

value extraction vs. value creation



forthcoming: April 2018

INCOME INEQUALITY IN THE UNITED STATES, 1910-2010



Source: Piketty, 2013

Warren Buffet

“I have worked with investors for 60 years and I have yet to see anyone — not even when capital gains rates were 39.9 percent in 1976-77 — shy away from a sensible investment because of the tax rate on the potential gain. People invest to make money, and potential taxes have never scared them off. And to those who argue that higher rates hurt job creation, I would note that a net of nearly 40 million jobs were added between 1980 and 2000. You know what’s happened since then: lower tax rates and far lower job creation.”

And....why did capital gains fall in 1976?

And the real economy not much better!

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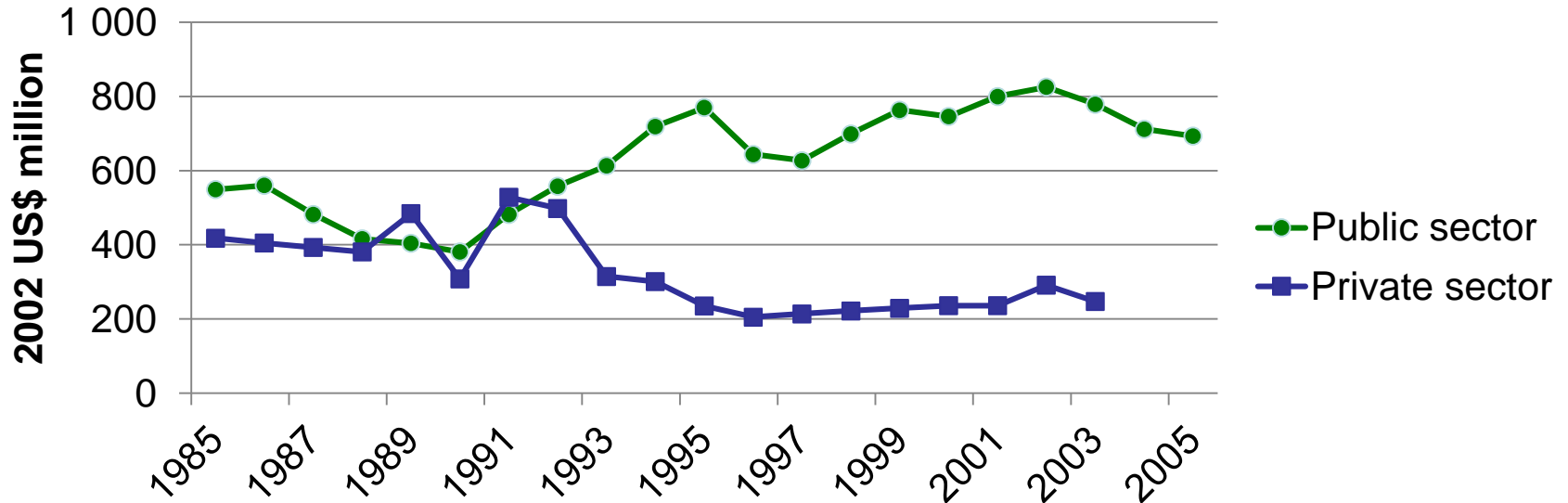
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Where are energy's Bell Labs?

Renewable energy R&D investments in the U.S.

in million 2002 dollars



Source: Nemet and Kammen (2007), "U.S. energy research and development: Declining investment, increasing need, and the feasibility of expansion", *Energy Policy*, 35 (1), 746-755

*“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

Better 'deal' between public & private

- reinvesting profits (and limiting share buybacks)
- retaining golden share of IPR
- capping prices (Bayh Dole act allows it)
- negotiating conditions (generics)
- income contingent loans
- retain some equity (Tesla & Solyndra lesson)
- % payback into an 'innovation fund'
- State investment banks

(discussed in Mazzucato, 2015; 2016)

Think Again!



private
sector

vs.



public
sector

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