



The Entrepreneurial State

Implications for market creation and economic development

Raúl Prebisch Lecture, CEPAL

April 19 2016, Santiago, Chile

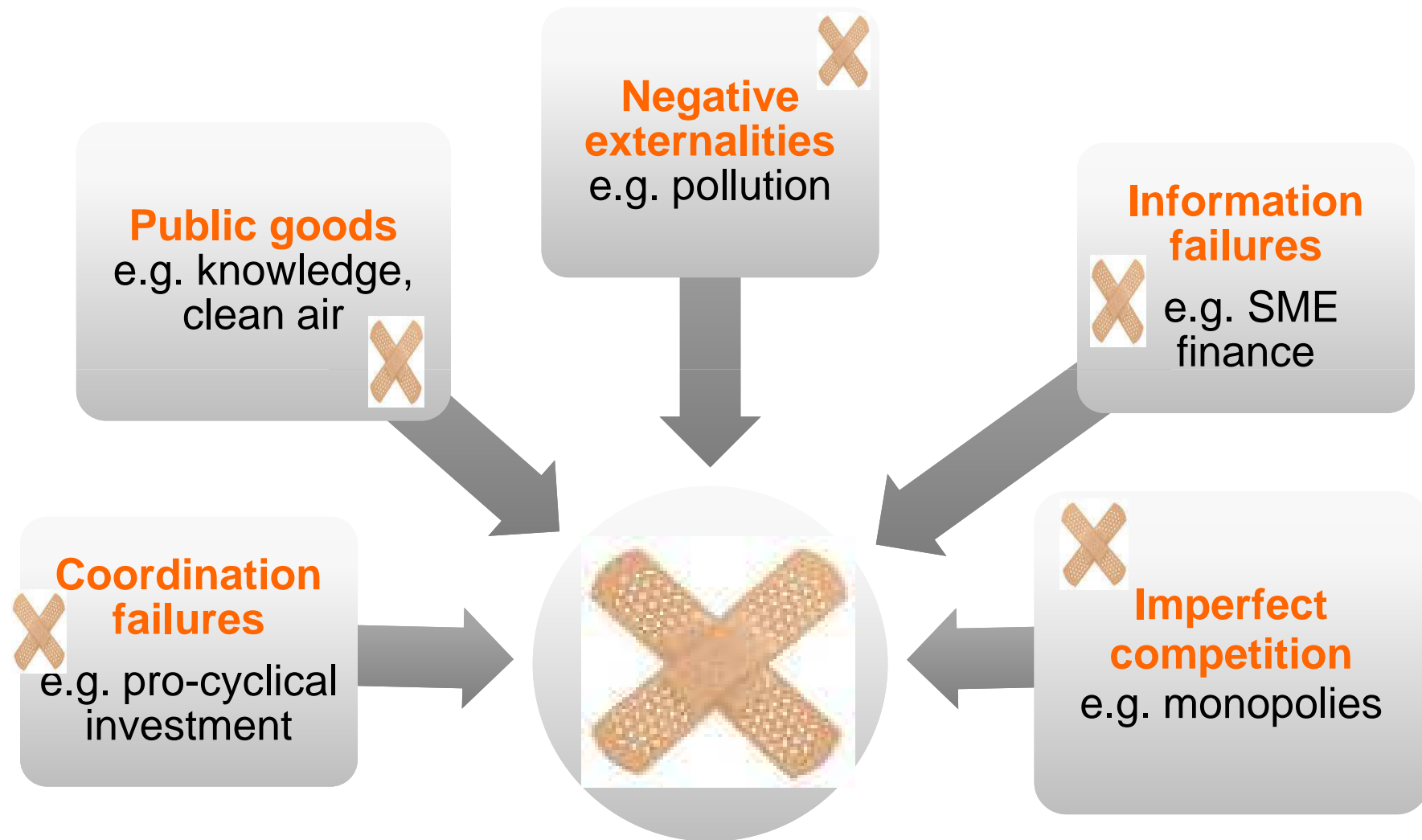
Mariana Mazzucato

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The 3 great challenges of our time

- Smart growth (better innovation)
- Sustainable growth (more green)
- Inclusive growth (less inequality)

Policy as (just) fixing market/system failures?

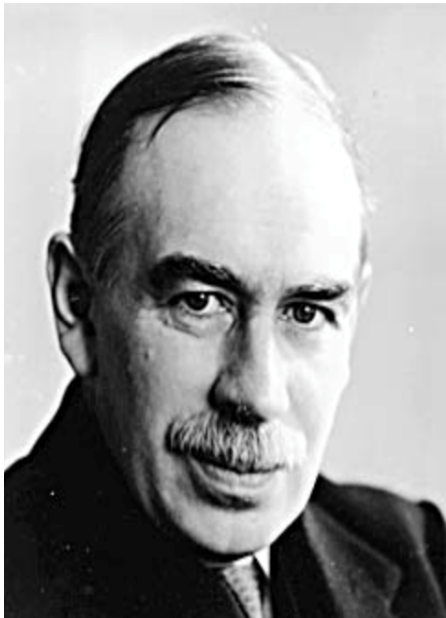


A different view: market *shaping* & *creating*



“The road to free markets was opened and kept open by an enormous increase in continuous, centrally organized and controlled interventionism... **Administrators had to be constantly on the watch to ensure the free working of the system.**”

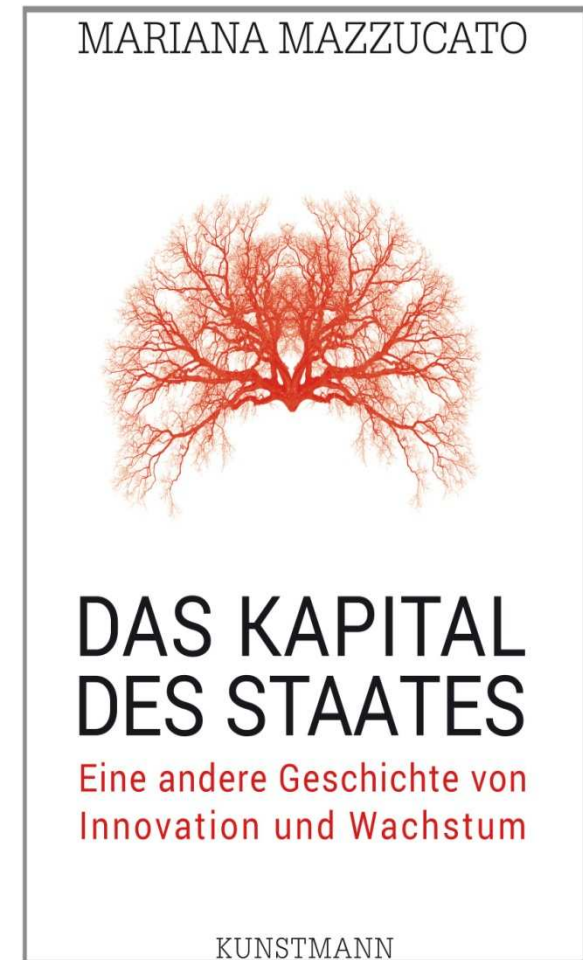
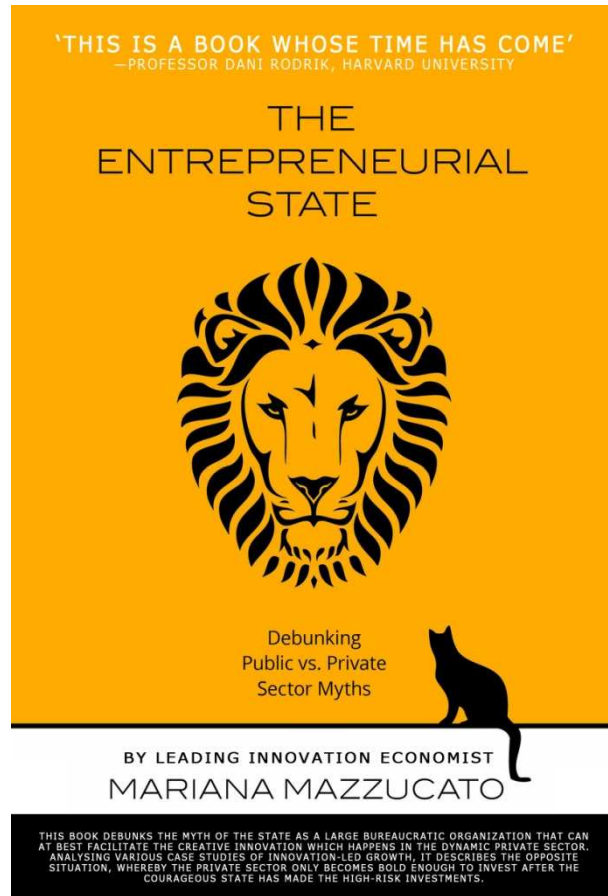
Karl Polanyi, *The Great Transformation*, 1944



“The important thing for Government is not to do things which individuals are doing already, and to do them a little better or a little worse; but to **do those things which at present are not done at all.**”

John M. Keynes, *The End of Laissez Faire*, 1926

State as Lead Risk Taker, *Investor of First Resort*



the assumption



private
sector

vs.



public
sector

“The success of a theory consists ... in that suddenly everyone begins to reason according to *new categories*”

Albert Hirschman

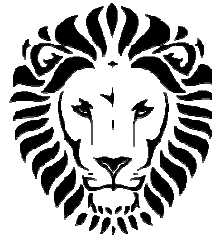
*Categories for Public Policy: **ROAR!***

ROUTES & DIRECTIONS. Policy as actively setting direction of change. How to foster a more democratic debate about possible directions (and stop useless fear about ‘picking winners’)?

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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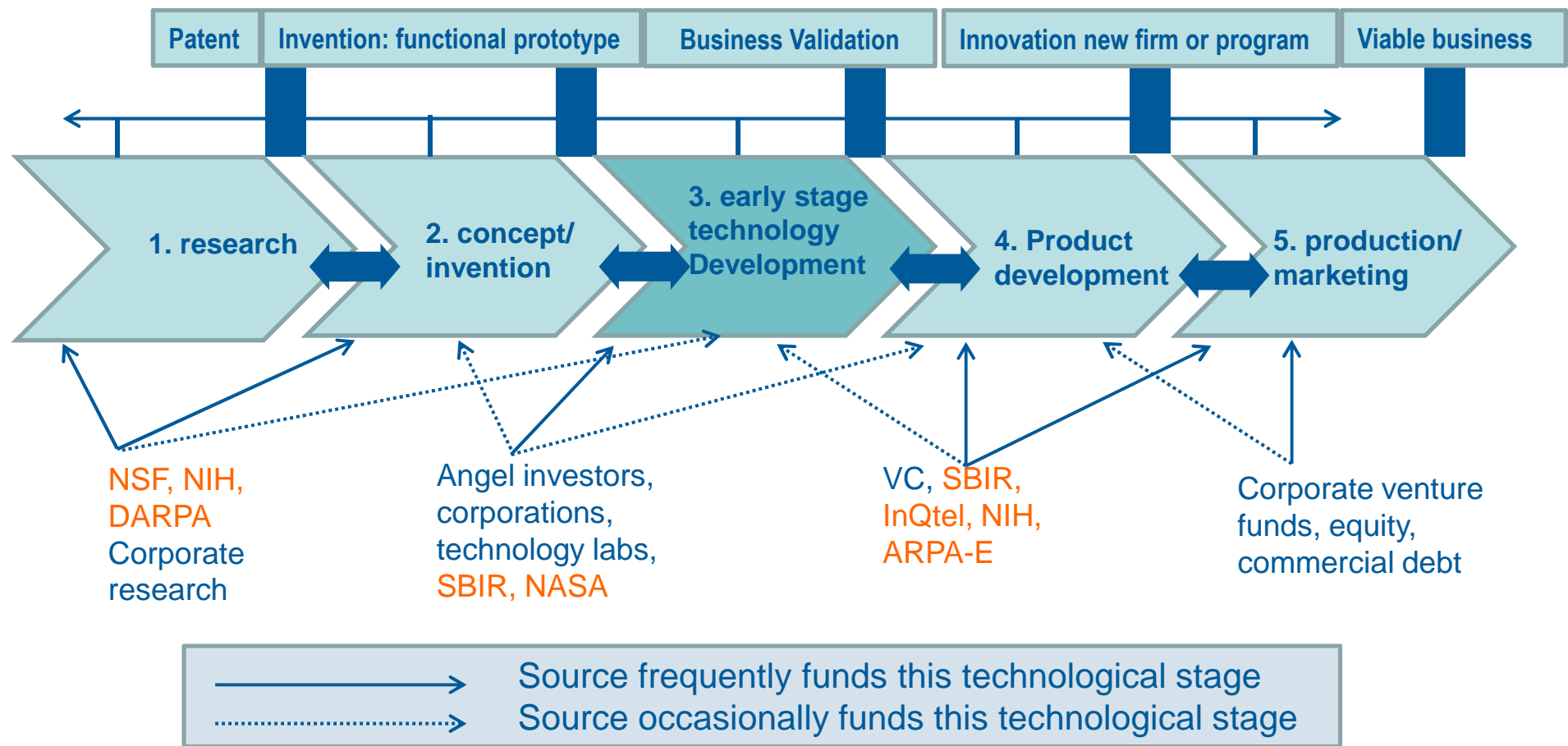
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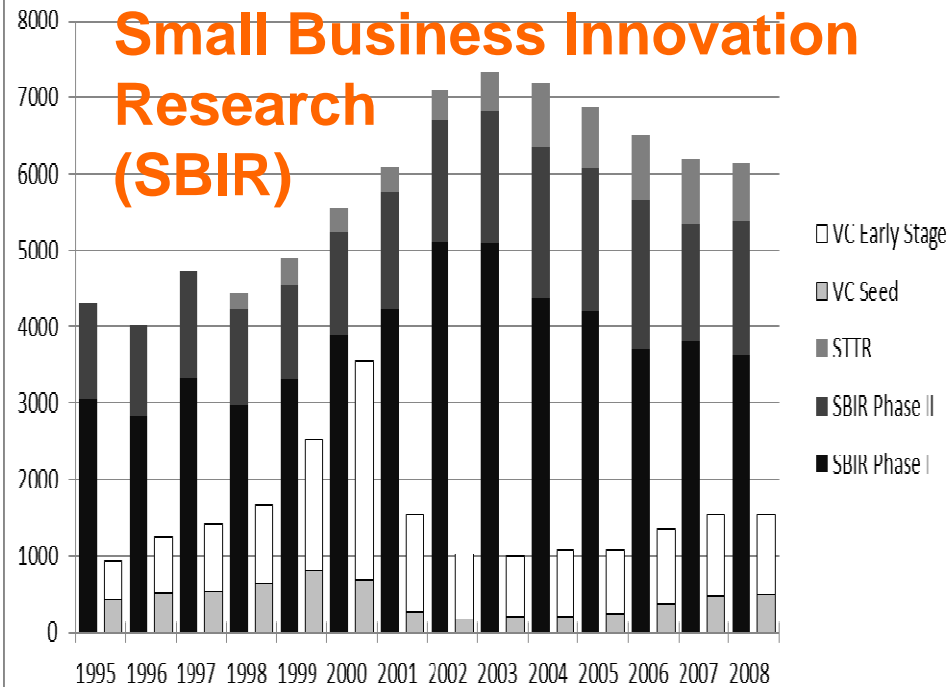
Market failure policies don't explain *General Purpose Technologies*

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

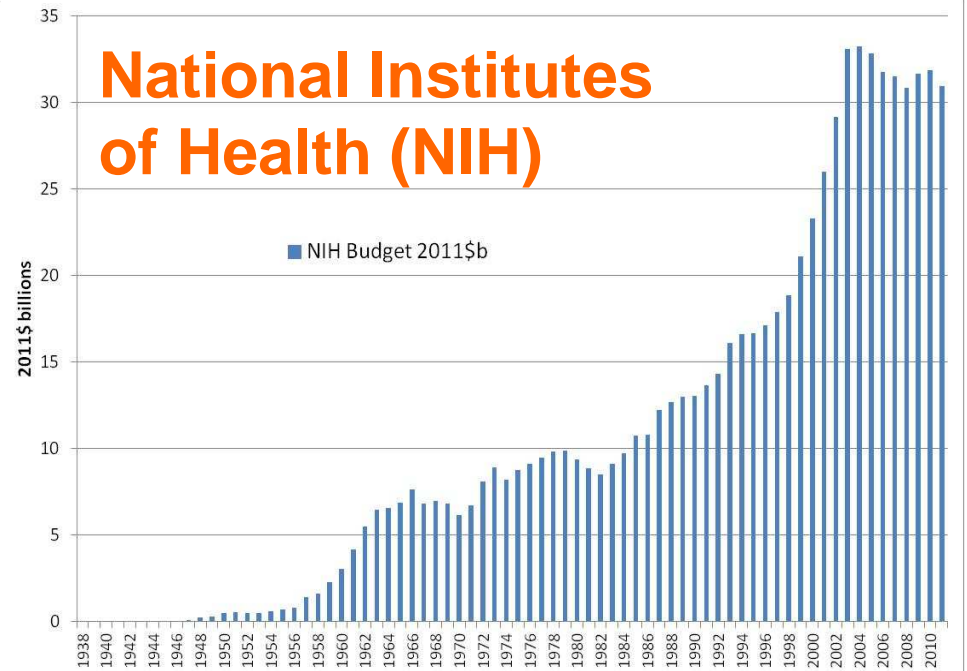
Missions and risk-taking along entire innovation chain



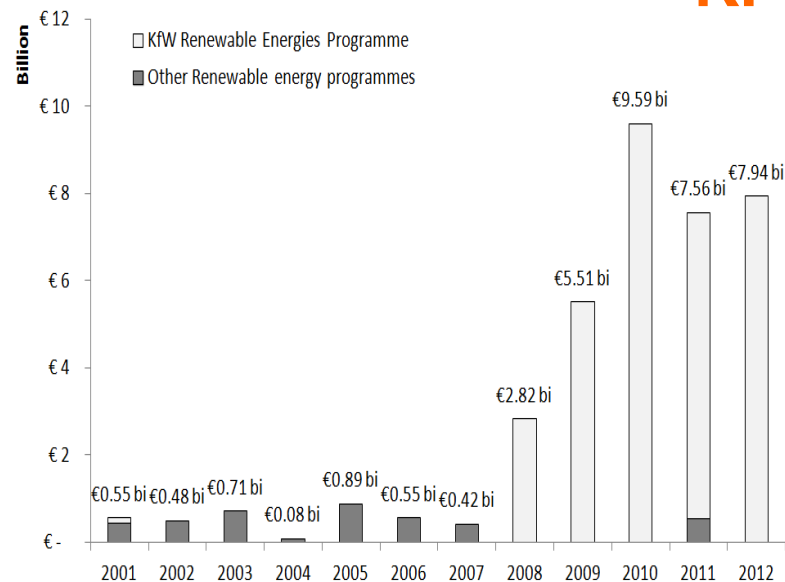
Small Business Innovation Research (SBIR)



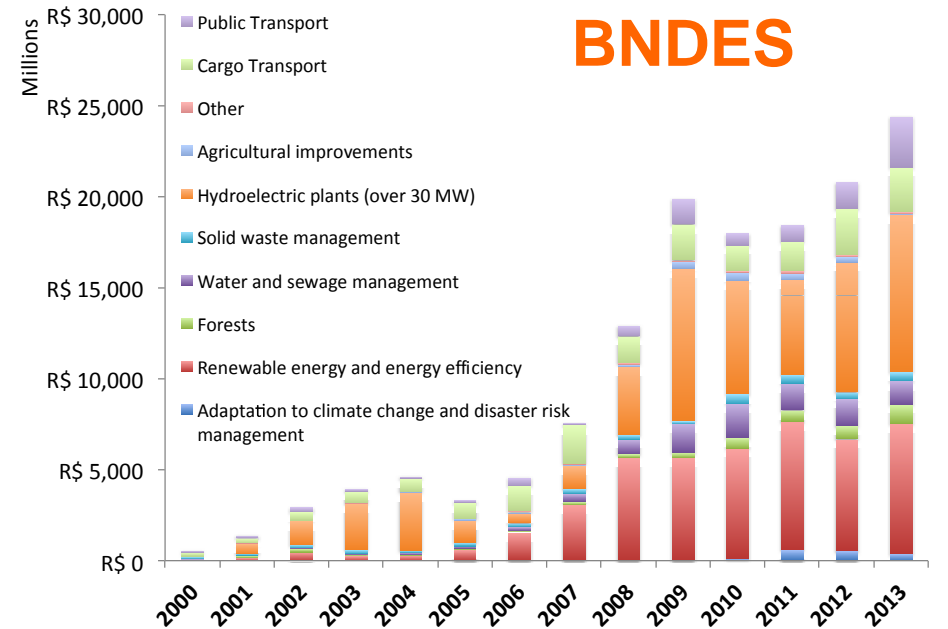
National Institutes of Health (NIH)



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

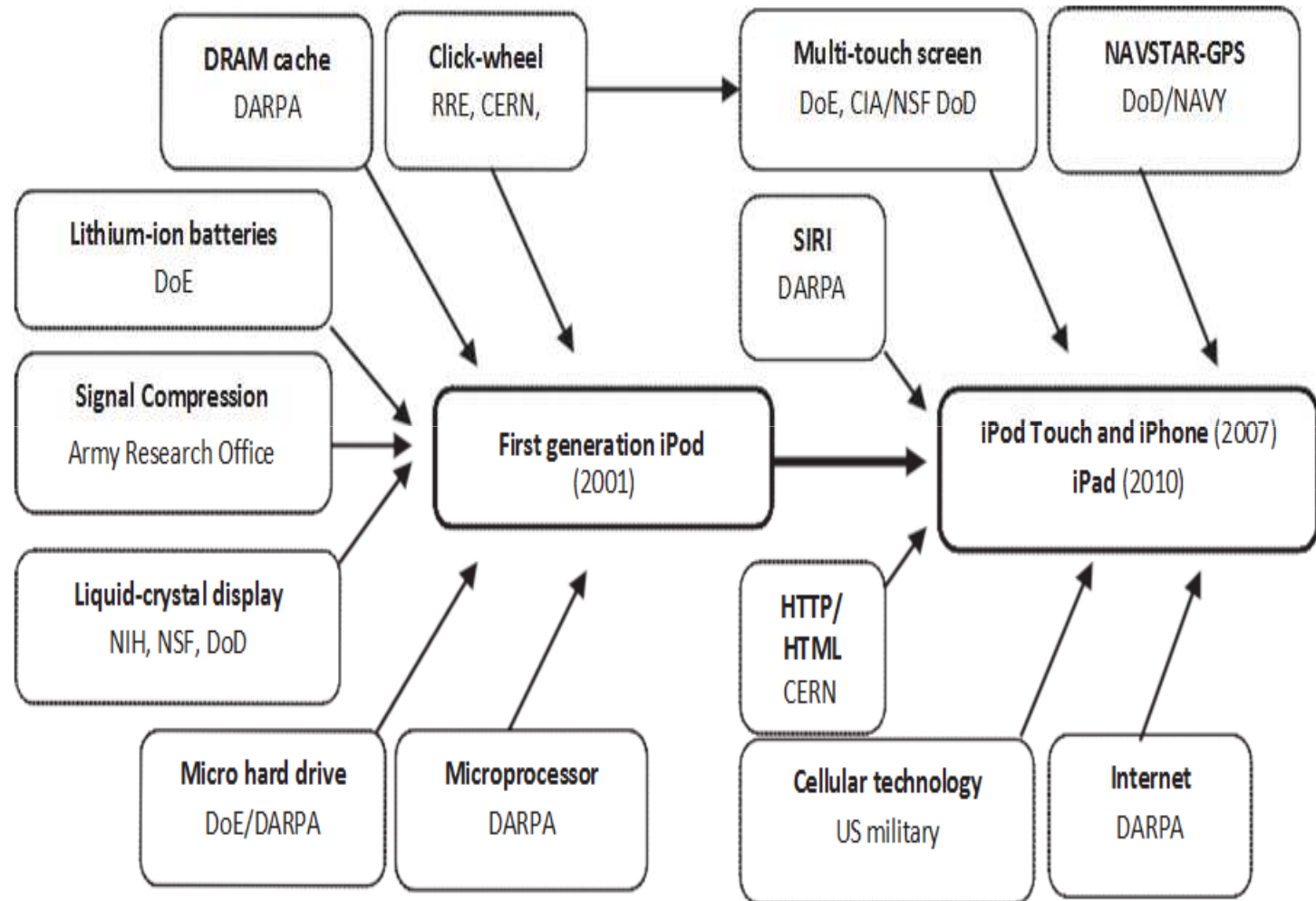
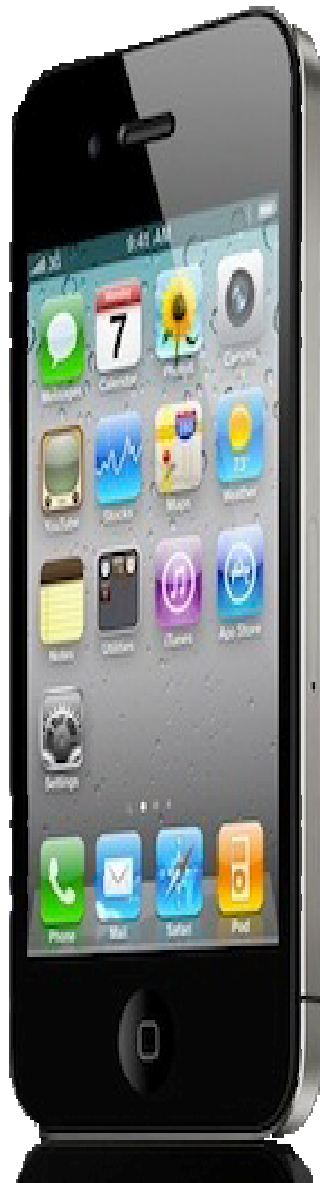


BNDES' disbursements for the green economy and climate change



Source: BNDES

What makes the iPhone so 'smart'?



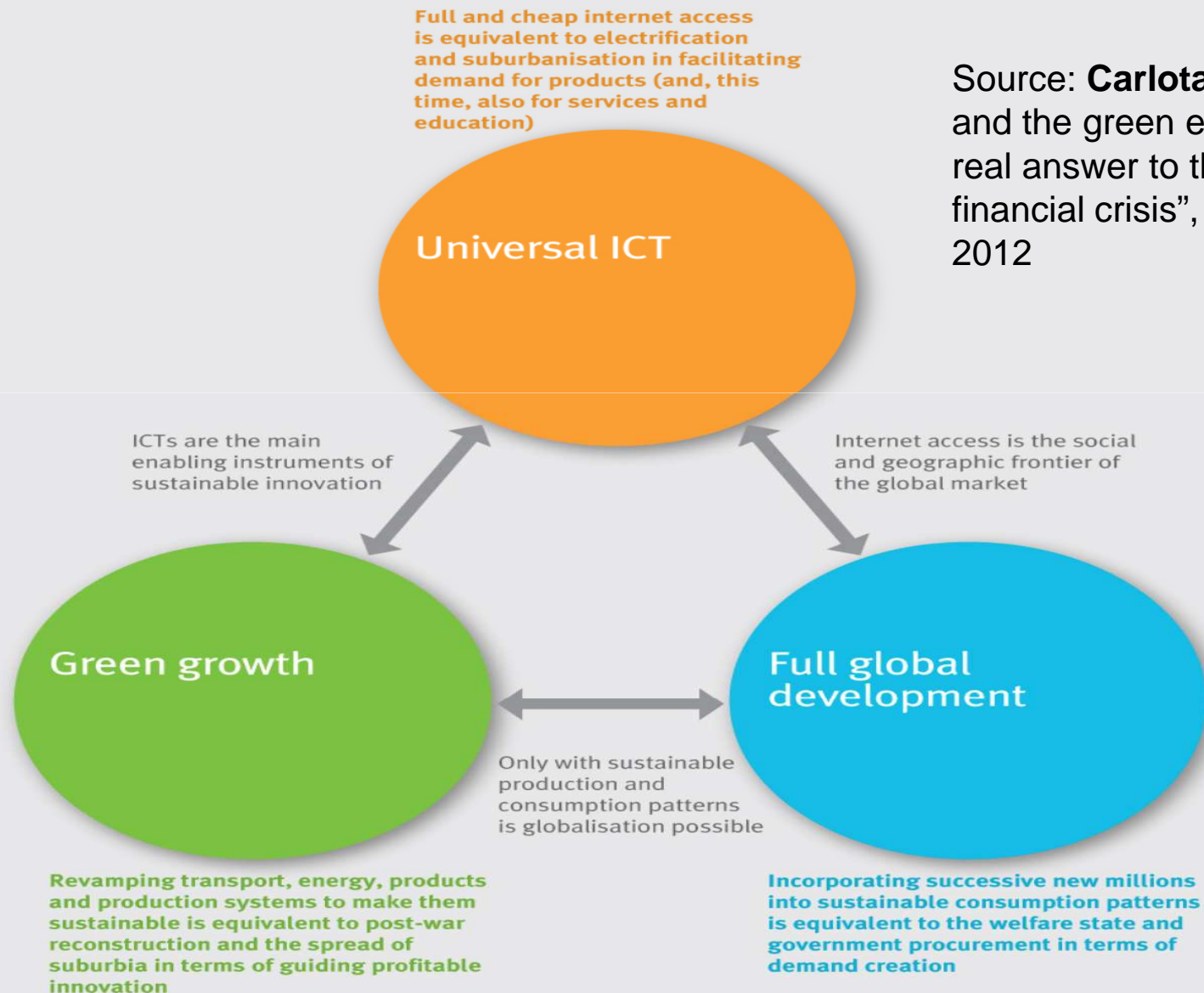
Prebisch lives in Asia...and Silicon Valley

“Whereas the government had spawned new industries in the **old economy** using State-owned enterprises and import substituting policies tools such as tariff protection, local content regulations and development banking, it did so in the **new economy** using spin-offs from **State-owned research institutes and science parks**, together with import substituting policy tools such as **subsidies to public and private R&D**, tax breaks and favorable conditions in science parks”.

Alice Amsden, “Import substitution in high-tech industries: **Prebisch lives in Asia!**”, CEPAL Review, April 2004

Tilting the playing field via Demand

The potential for a new global positive sum game



Source: **Carlota Perez**, "Why IT and the green economy are the real answer to the financial crisis", *Green Alliance* 2012

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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.”

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

Mission and values



Our mission, vision, and values inform the work of the BBC and are how we promote our public purposes.

The public purposes are set out by the Royal Charter and Agreement, the constitutional basis for the BBC.

Our mission

To enrich people's lives with programmes and services that inform, educate and entertain.

Our vision

To be the most creative organisation in the world.

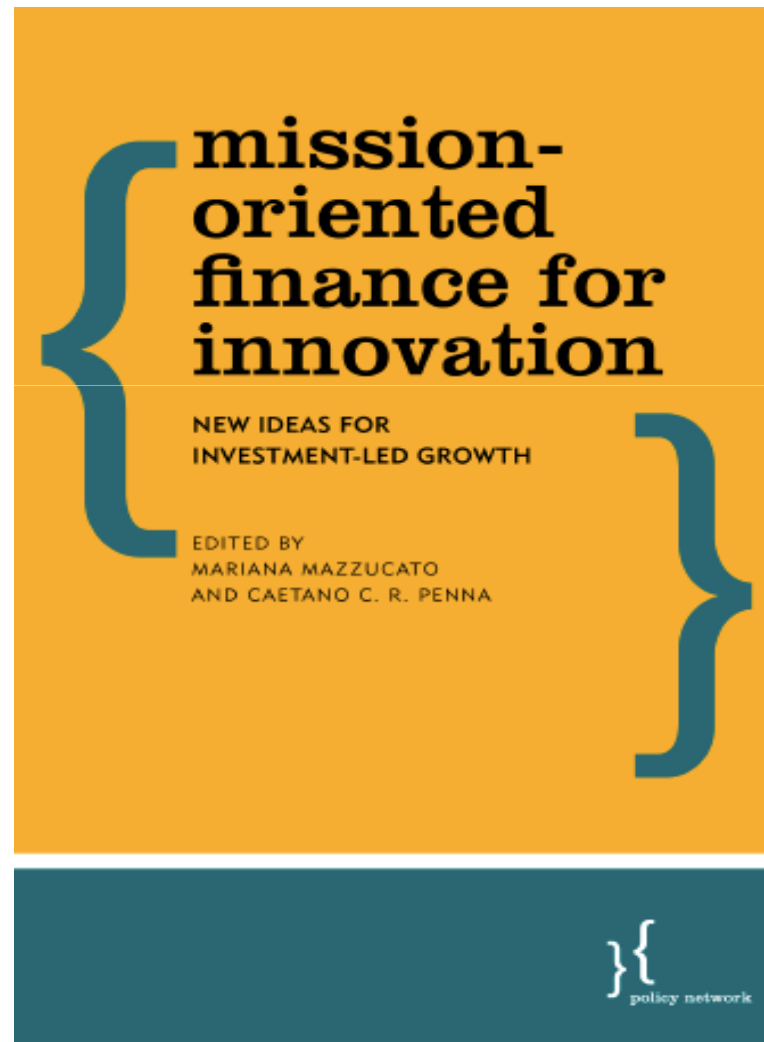
Our values

- Trust is the foundation of the BBC: we are independent, impartial and honest.
- Audiences are at the heart of everything we do.
- We take pride in delivering quality and value for money.
- Creativity is the lifeblood of our organisation.
- We respect each other and celebrate our diversity so that everyone can give their best.
- We are one BBC: great things happen when we work together.

The Royal Charter and Agreement also sets out six public purposes for the BBC. See [Public purposes](#).

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



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”

Albert Hirschman

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More than crowding-in: *creating* animal spirits

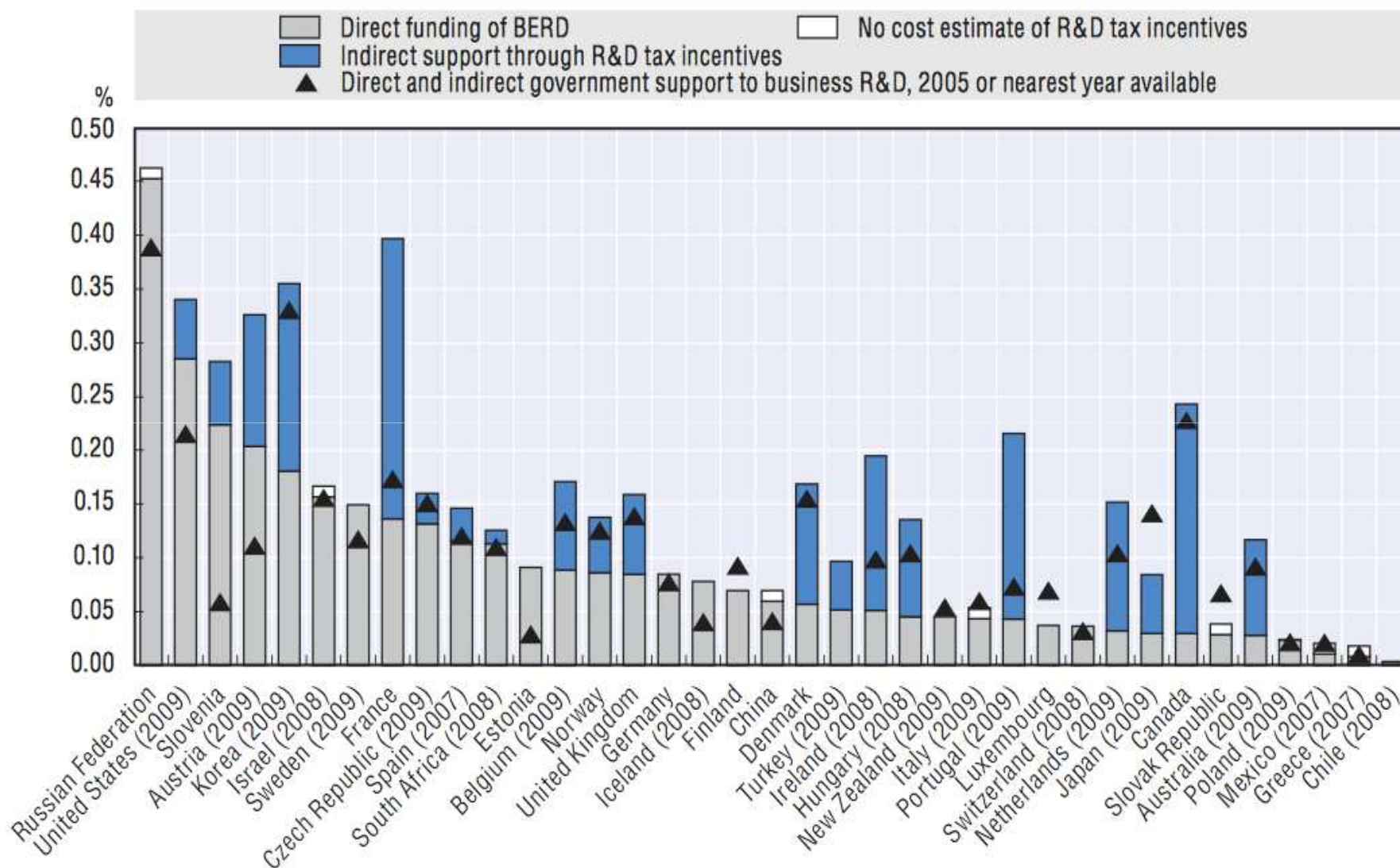
Businessmen have a different set of delusions from politicians, and need, therefore, different handling. They are, however, much milder than politicians, at the same time allured and terrified by the glare of publicity, easily persuaded to be 'patriots', perplexed, bemused, indeed terrified, yet only 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**
Feb 1, 1938

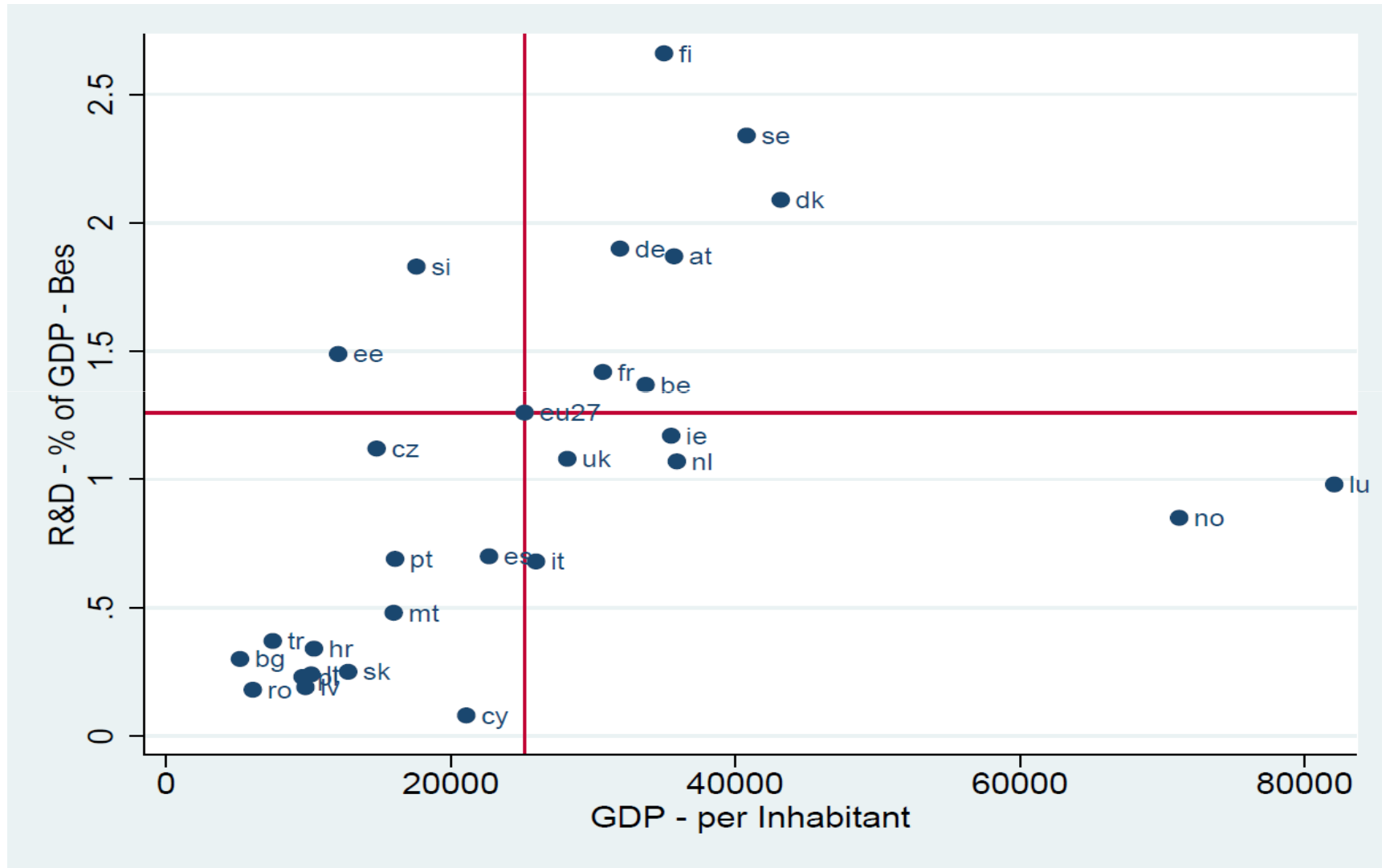
Direct government funding of business R&D and tax incentives for R&D, 2010

As a percentage of GDP

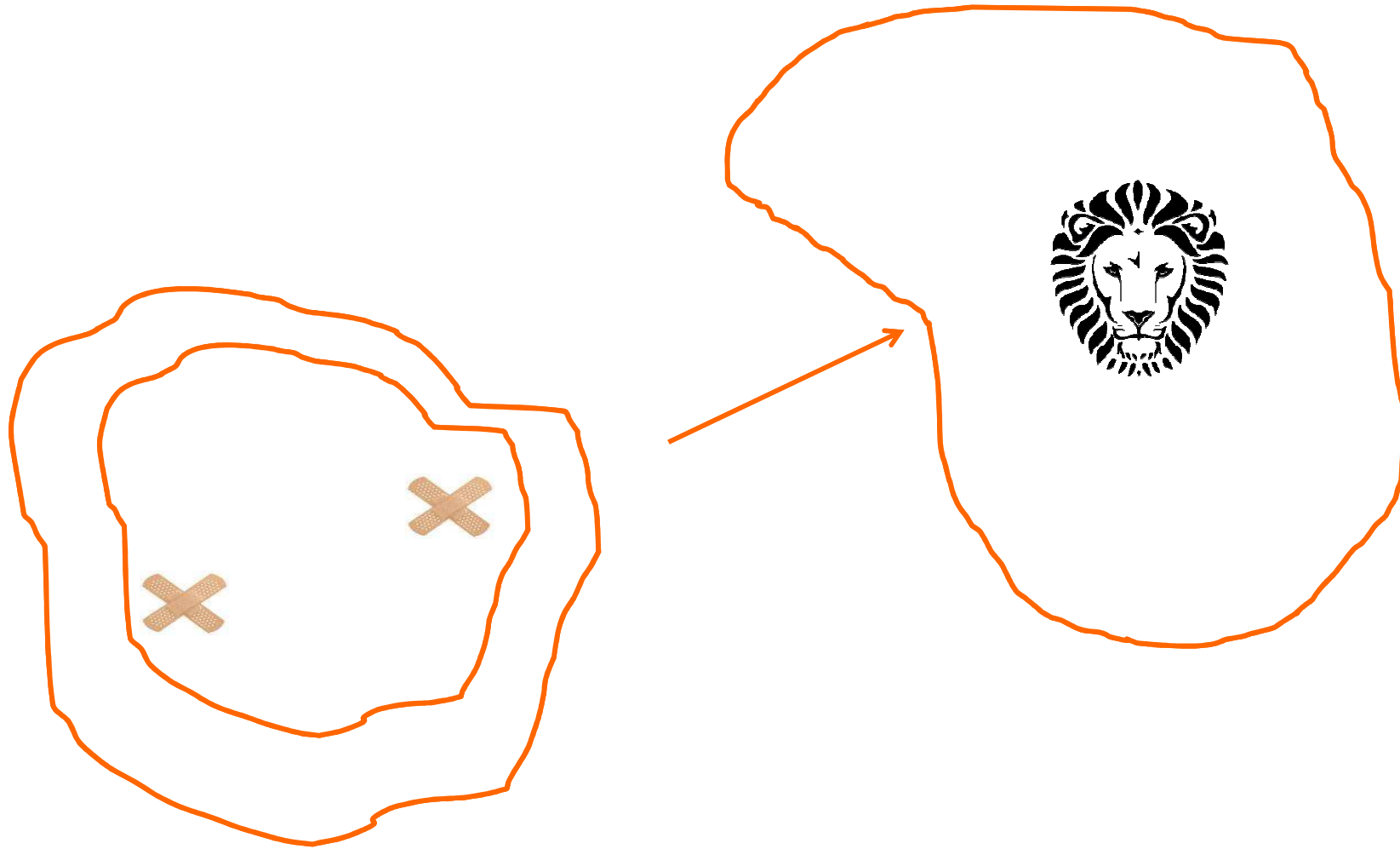


Source: OECD 2012 <http://www.oecd.org/sti/sti-outlook-2012-financing-business-rd.pdf>

Business R&D spending (BERD)



Measuring the *dynamising* in process



From Public Choice/Goods to Public *Values*

- **BBC** Charter Review: why not soap operas?
- Do **public banks** do what private ones don't?
- **Health**: why so many drugs & so little *life-style*?
- Did anyone bother measuring the spillovers from the **Concorde** 'failure'?
- Are **multipliers** higher for 'directed' stimulus?

Rethinking *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” (Bozeman, 2007, 13).

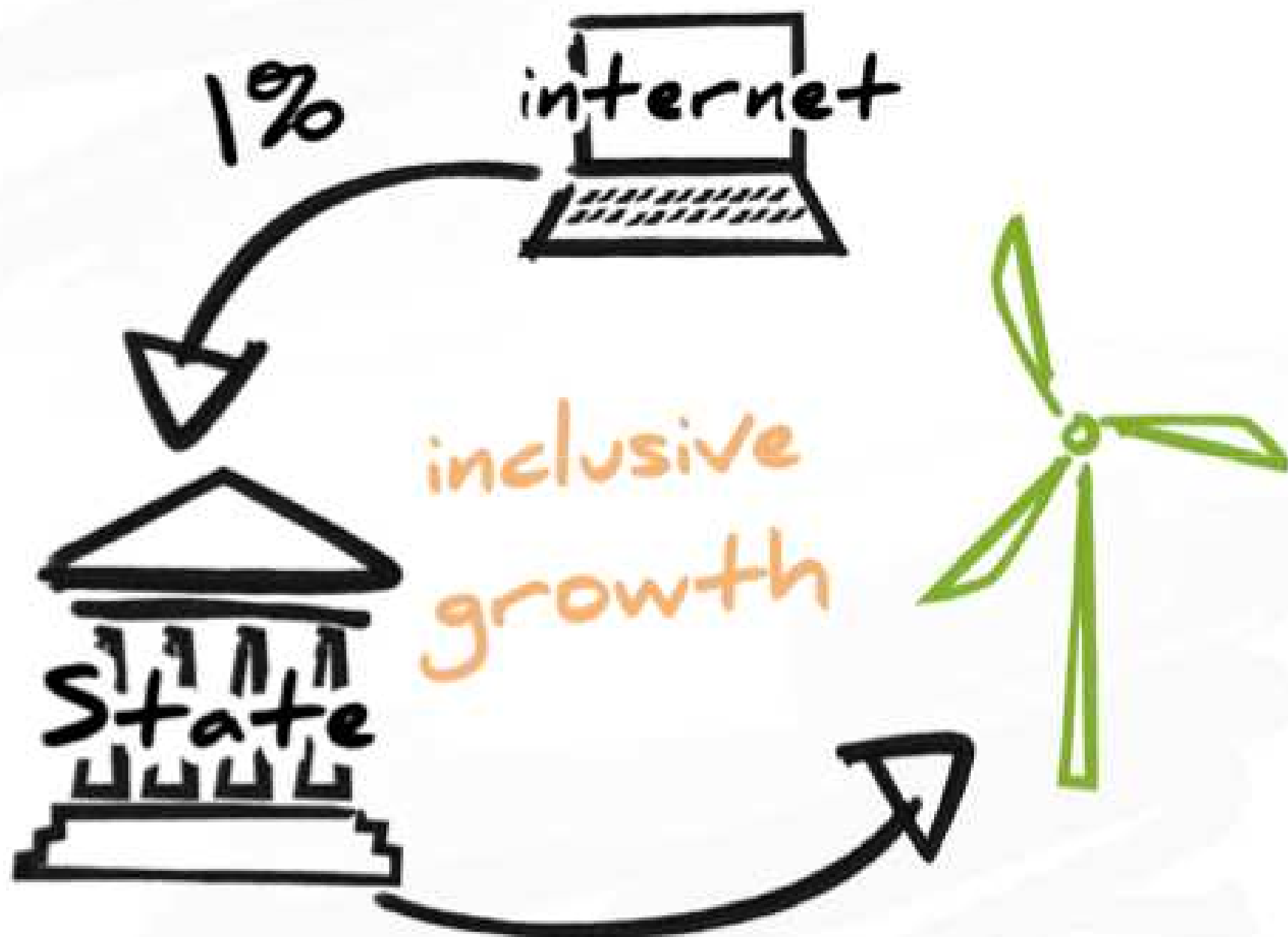
(beyond **static/ideological** measures of public ‘good’)

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Socialization of Risks AND Rewards

*“A new pharmaceutical that brings in more than \$1 billion per year in revenue is a drug marketed by **Genzyme**. It is a drug for a rare disease that was initially developed by scientists at the **National Institutes of Health**. The firm set the price for a year’s dosage at upward of \$350,000. While legislation gives the government the right to sell such government-developed drugs at ‘reasonable’ prices, policymakers have not exercised this right. **The result is an extreme instance where the costs of developing this drug were socialized, while the profits were privatized.** Moreover, some of the taxpayers who financed the development of the drug cannot obtain it for their family members because they cannot afford it.*

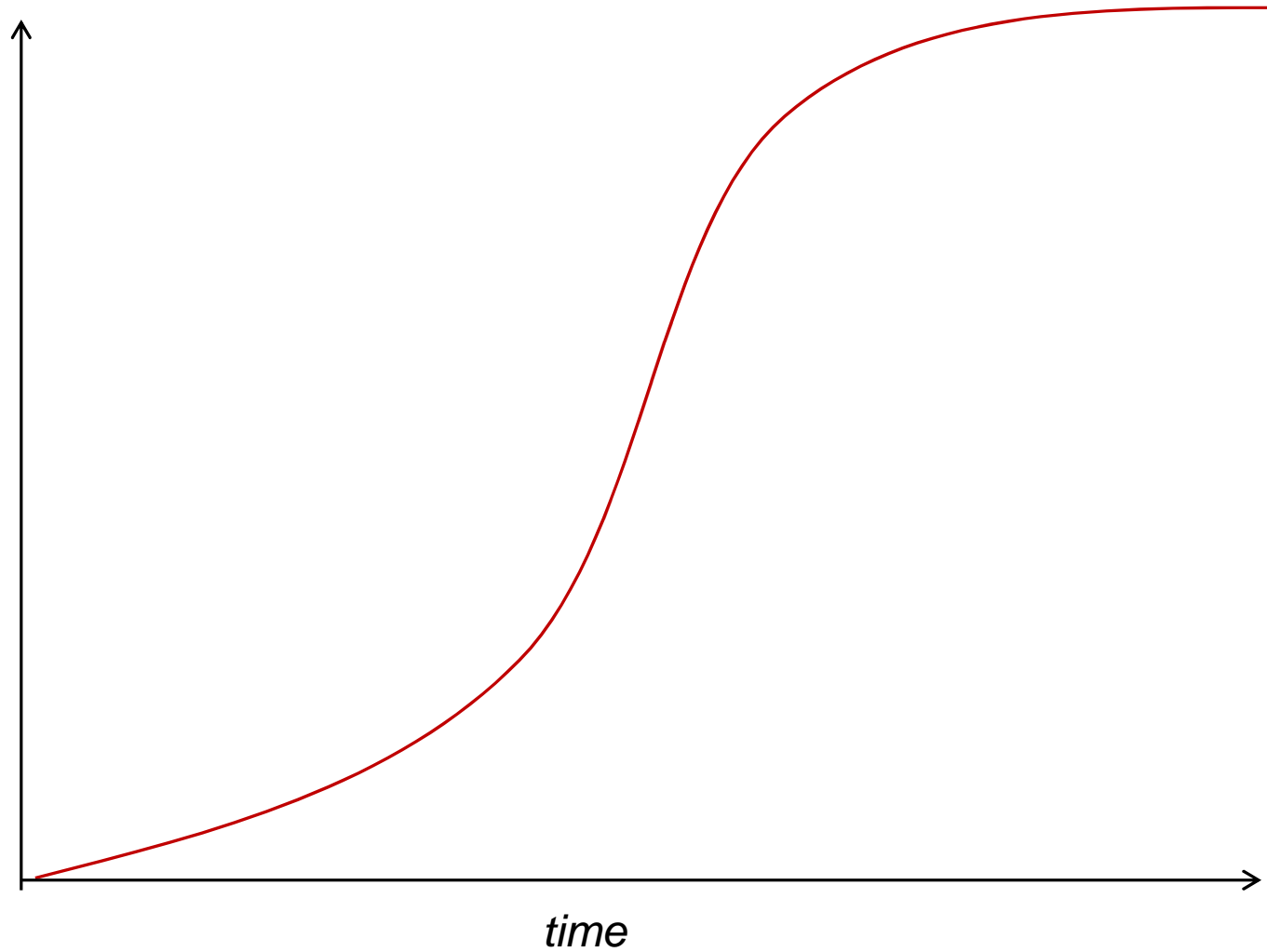
Industrial and Corporate Change, Volume 22, Number 4, pp. 1093–1128

doi:10.1093/icc/dtt019

The risk-reward nexus in the innovation-inequality relationship: who takes the risks? Who gets the rewards?

William Lazonick* and Mariana Mazzucato**

Cumulative innovation curve



INCOME INEQUALITY IN THE UNITED STATES, 1910-2010



Source: Piketty, 2013

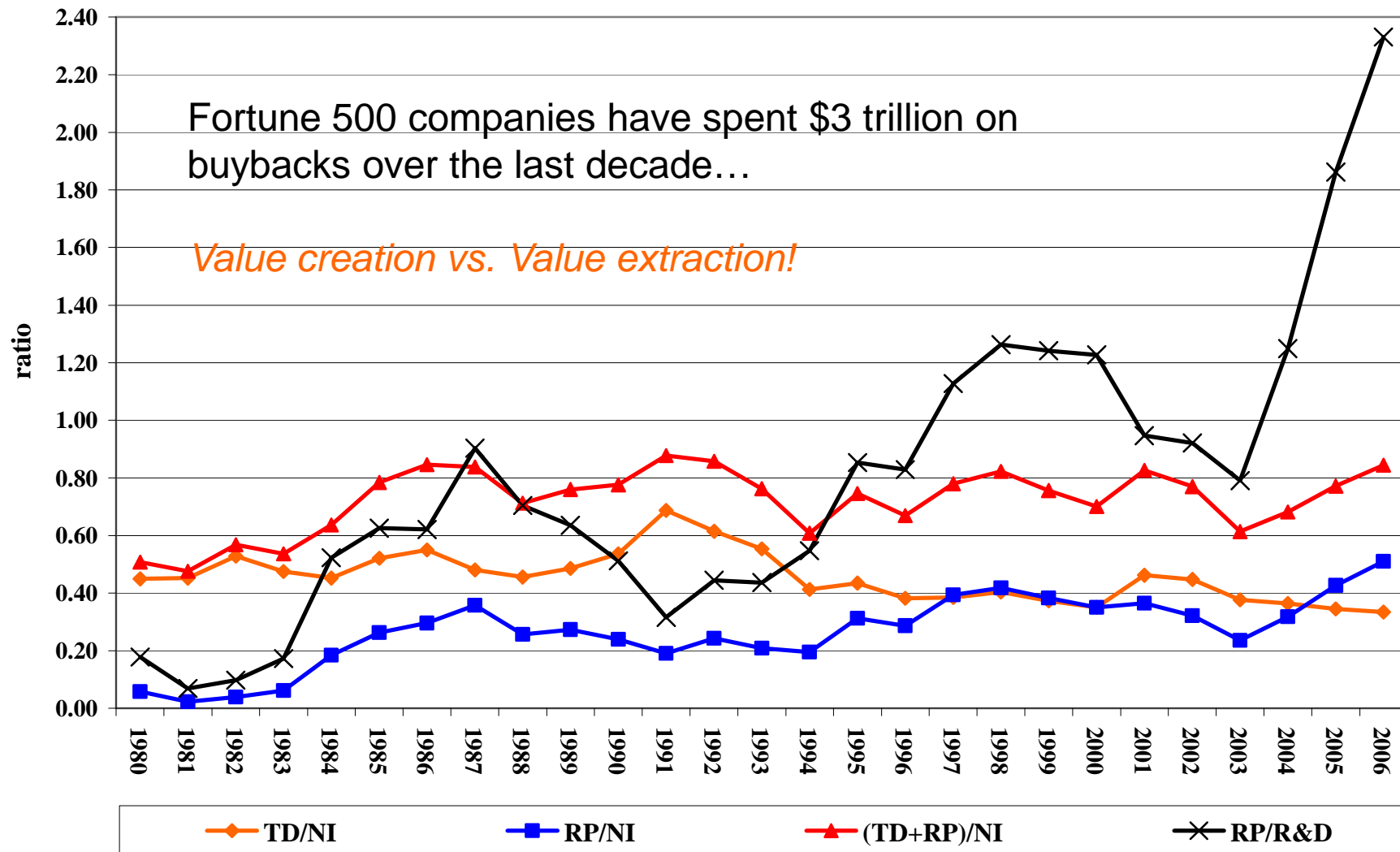
Warren Buffet

“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?

Repurchases, dividends, net income, R&D 1980-2006

(293 corporations in the S&P500 in October 2007 in operation in 1980)



Source: Lazonick & Mazzucato, 2013; Lazonick, 2014

*“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

- 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

and more...(but where is the conversation?)

(discussed in Mazzucato, 2013; 2015)

think again!



private
sector

vs.



public
sector

References

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