

Magento Live

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Mariana Mazzucato

Professor, University of Sussex



The Entrepreneurial State

building 'symbiotic' innovation eco-systems

Mariana Mazzucato

R.M. Phillips Professor in Economics of Innovation

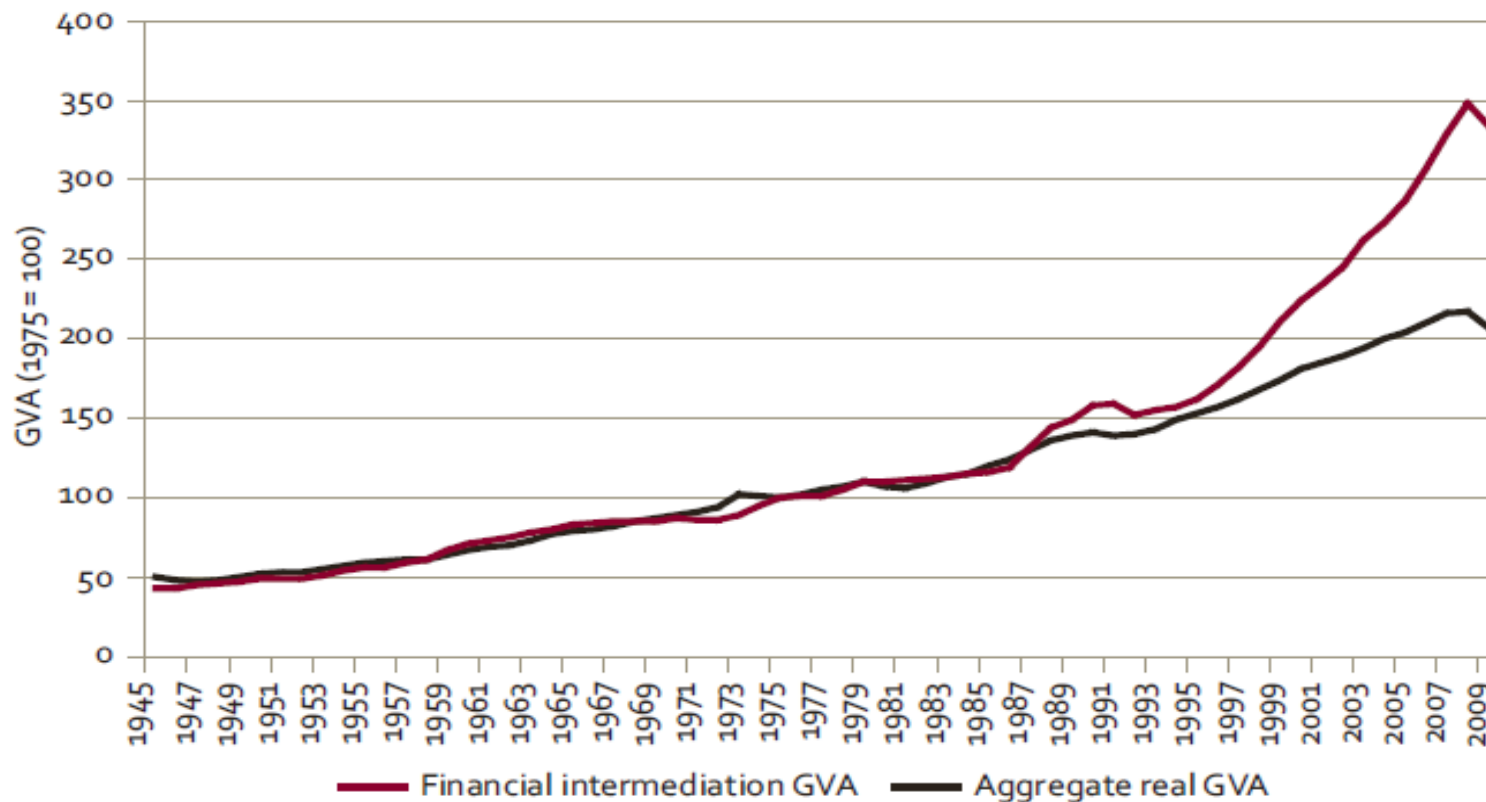
Science Policy Research Unit (SPRU)

University of Sussex, UK

www.marianamazzucato.com

@MazzucatoM

Rebalancing: industrial policy is back!



Big battles require big (policy) thinking

“Smart” innovation-led growth

(*battle* vs. ‘secular stagnation’, consumer debt-driven growth)

“Inclusive” growth

(*battle* vs. increasing inequality)

“Sustainable” growth

(*battle* vs. climate change)

“Rebalancing” away from speculative finance

(*battle* vs. short-termism, speculation, ‘financialization’)

Biggest battle: what is the State's role in the economy?

- a) Set 'level' playing field then *get out of the way*
- b) Solve market 'failures'
- c) Something more interesting?

Assumption



private
sector

vs.



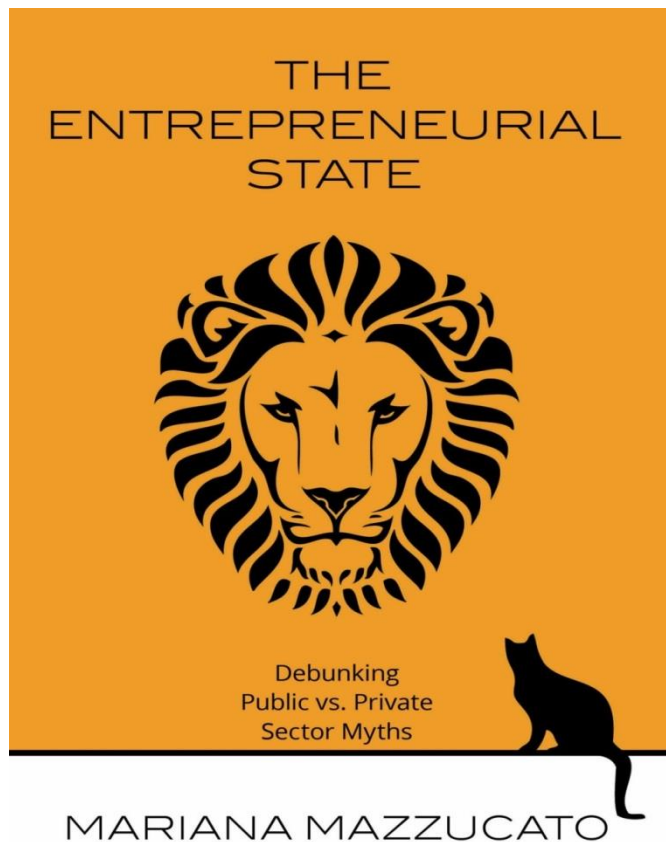
public
sector

“...Governments have always been lousy at picking winners, and they are likely to become more so, as legions of entrepreneurs and tinkerers swap designs online, turn them into products at home and market them globally from a garage. 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

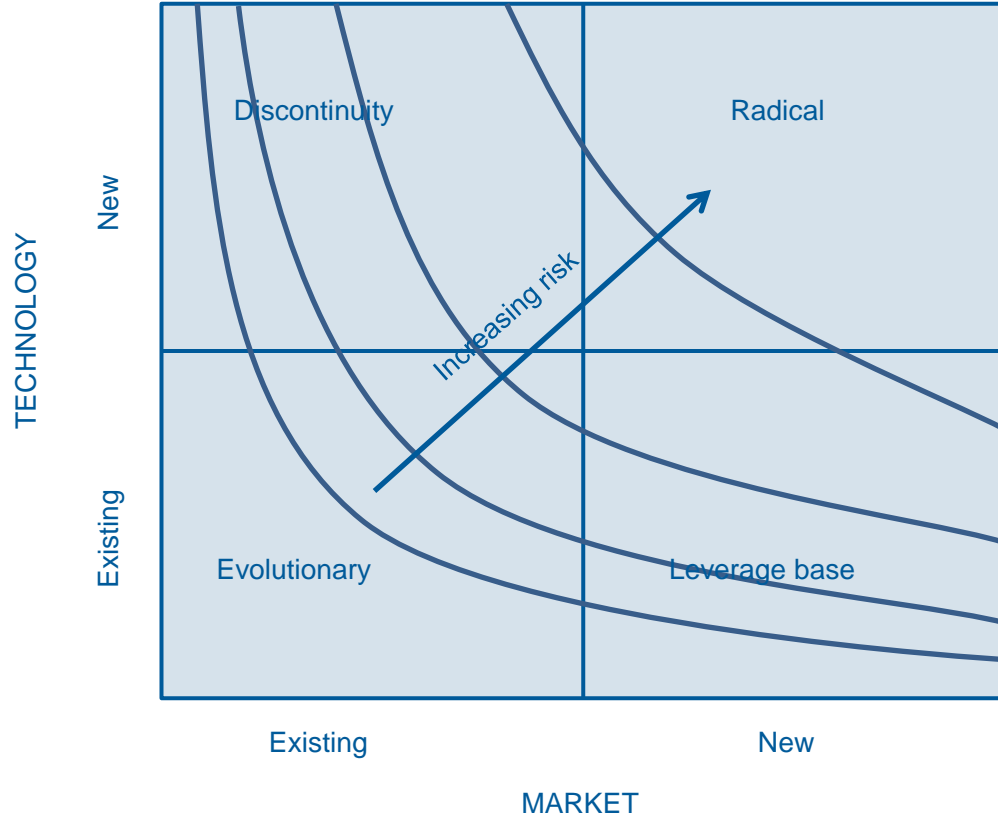
The Entrepreneurial (risk taking) State



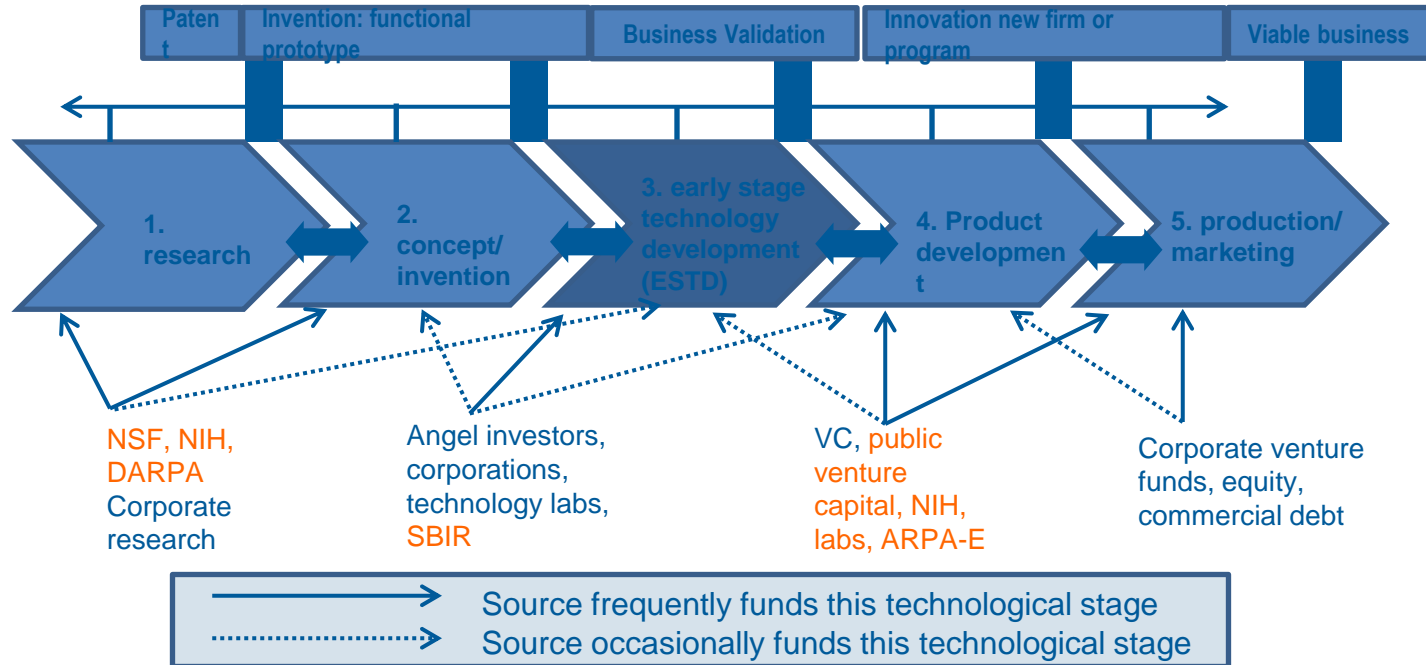
Market failure policies don't explain the advent of key General Purpose Technologies

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

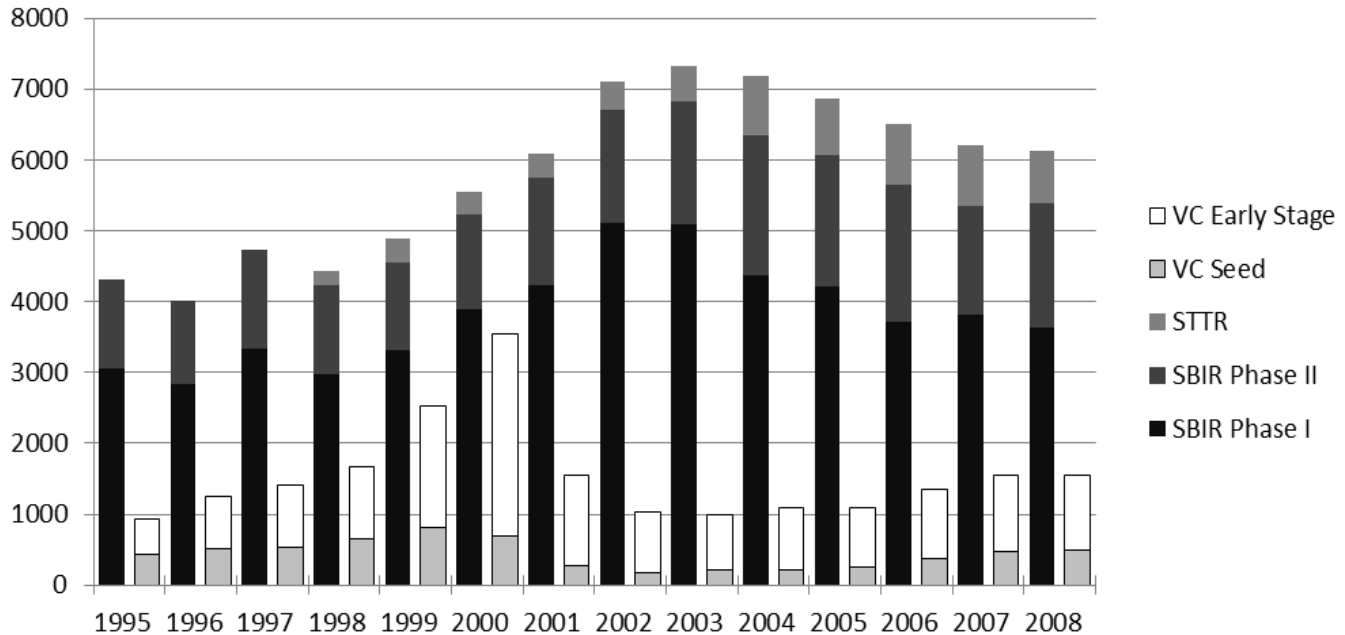
Market and technology risk



Mission oriented investments along entire innovation chain

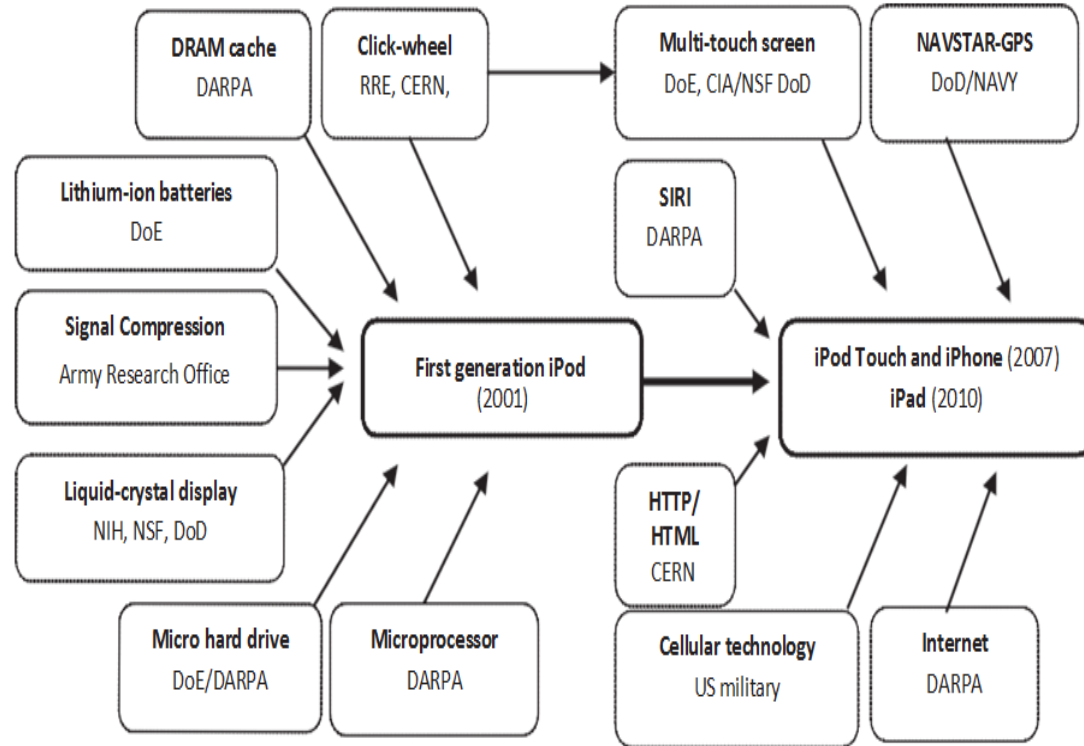


Number of Early Stage and Seed Funding Awards, SBIR and Venture Capital

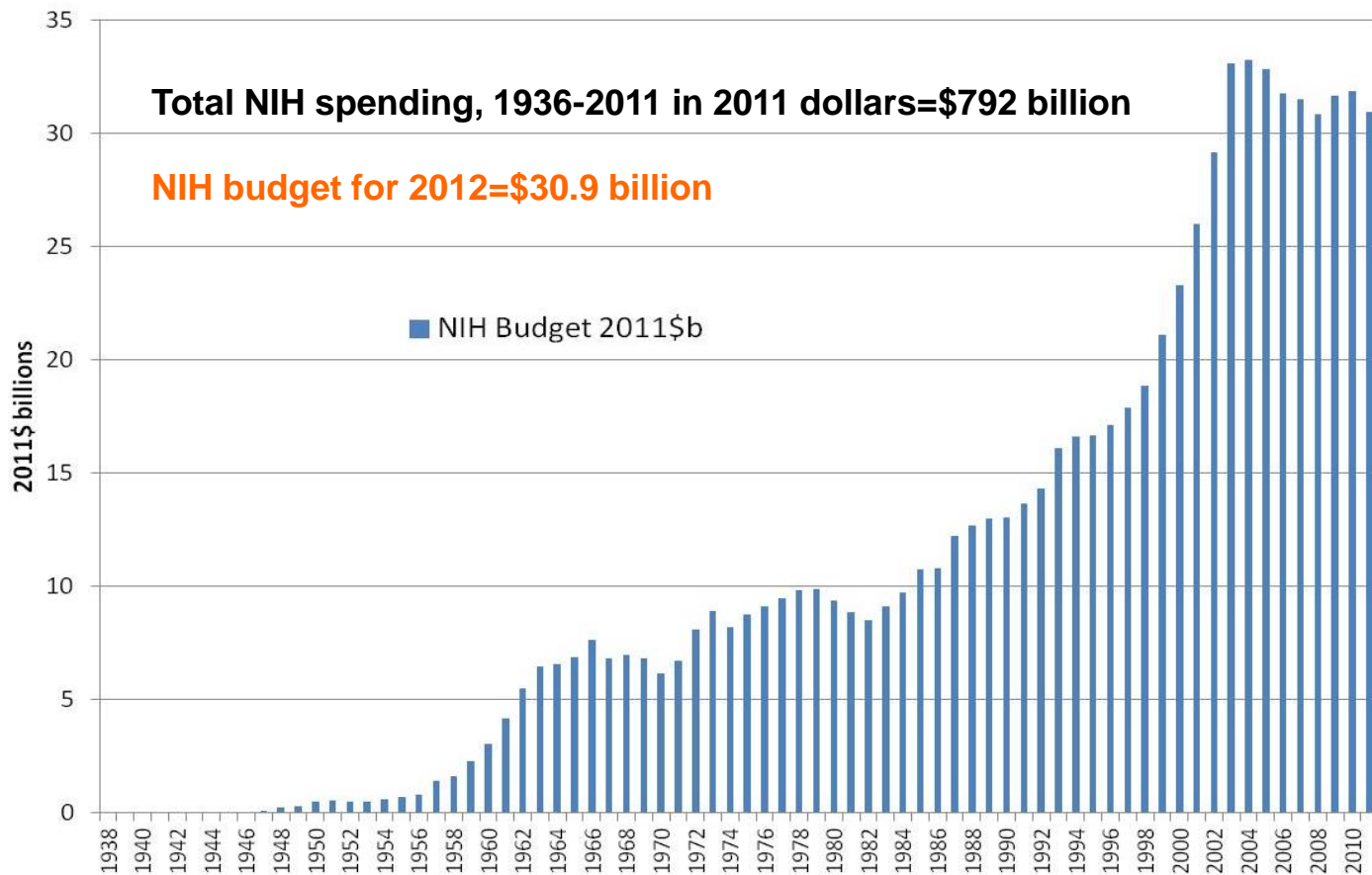


(source: Block and Keller, 2012)

What makes the iPhone so 'smart'?

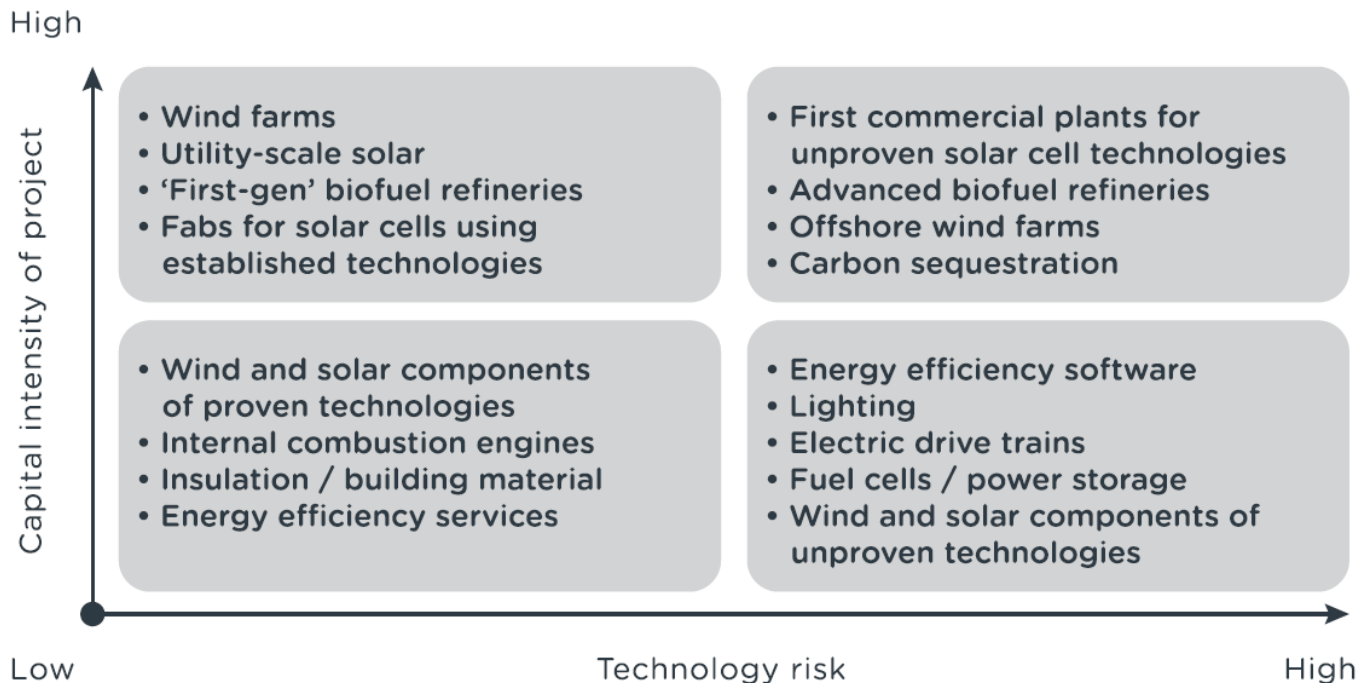


National Institutes of Health budgets 1936-2011



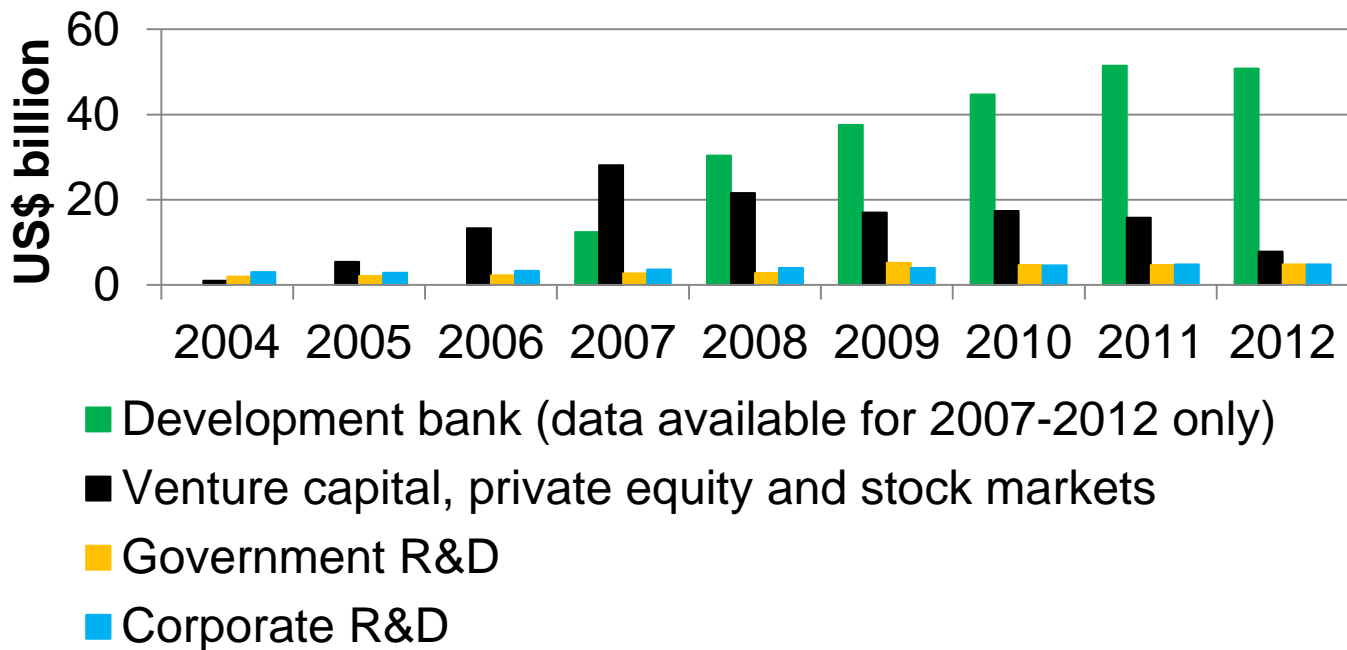
Technology risk in clean tech

(venture capital will ride the wave, who will kick/push?)



Who is funding the green revolution?

Renewable energy investments



Mistake 1: Wrong actors in wrong *places/times*

let's copy Silicon Valley...venture capital!!



Mistake 2: obsession with some actors, e.g. SMEs

UK: 4% of new firms born in any given year accounted for 50% of all the jobs created by the surviving firms within that cohort after ten years (Storey, 1994).

USA: 10% of fastest-growing firms contributed to three quarters of new jobs during an eight-year observation period within a cohort of firms started in the US in 1978 (Kirchhoff, 1994).

Mistake 3: obsession with knowledge transfer (system failures) = *pushing on a string*

1. EU problems don't come from poor flow of knowledge from research but from **EU firms' smaller stock of knowledge**. US: 2.6% of GDP on R&D. Germany 2.5%. UK 1.3%.
2. If the US is better at innovation, this isn't because university-industry links are better—they aren't—or US universities produce more spinouts—they don't. It simply reflects **more research being done in more institutions**.
3. And **more mission oriented research**.
4. US funding is split between research in universities and early-stage technology development in firms. Getting EU universities to do both runs the risk of generating technologies unfit for the market.

Mistake 4: focus on tax and 'red tape'

“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.”

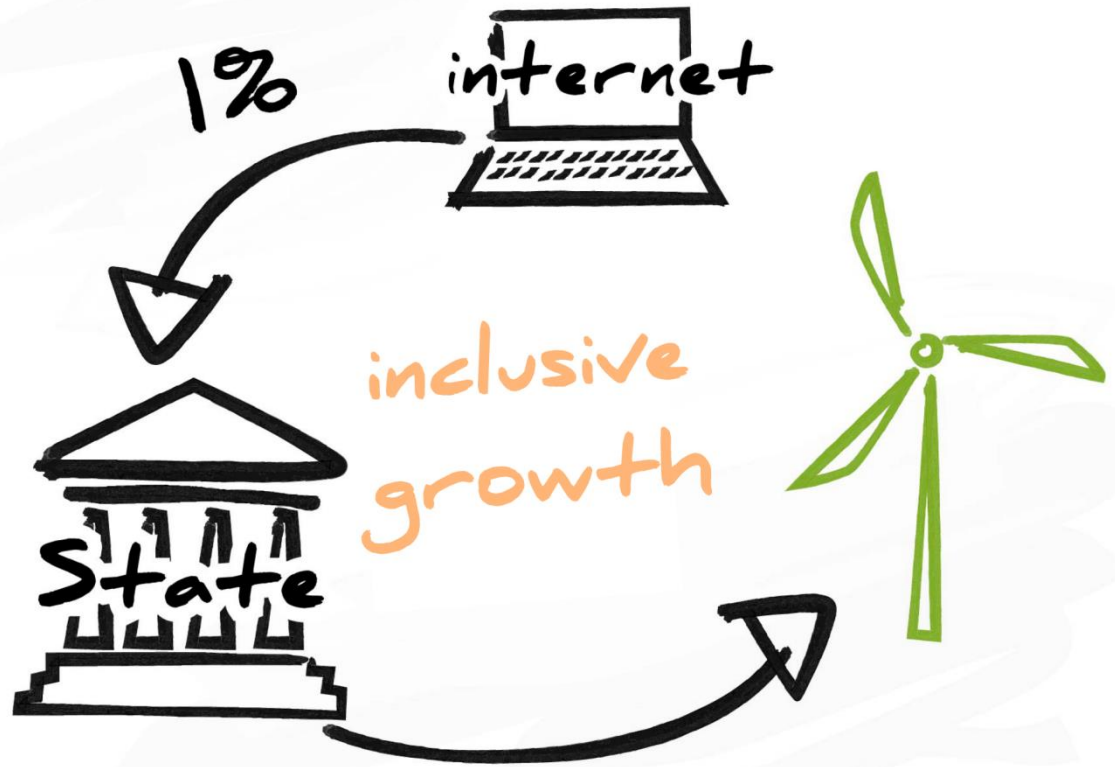
(Warren Buffett, 2011)

Mistake 5: Risks and Rewards

Socialisation of risk, privatisation of 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. (Vallas et al. 2011).



Where will the money come from?

Are taxes enough?

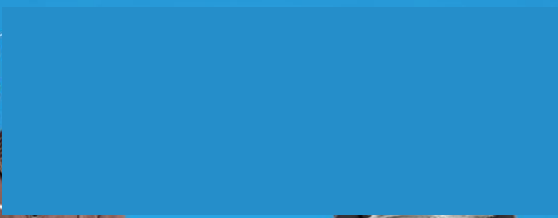
- IPR golden share
- Income contingent loans
- Retain some equity (e.g. SITRA with Nokia)
- % payback into an 'innovation fund'
- State investment banks
- Sovereign wealth funds?

Lessons from [Solyndra](#) and [Tesla](#): win some lose some.
How to cover the losses and have enough for next round?

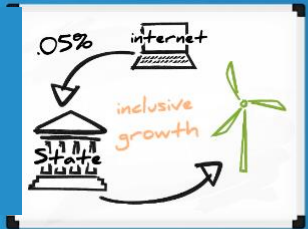
think again!



private
sector



where are the
european goals?
vs.



public
sector