The role of the State in financing
Lorenzo de Medici
ruler of the Florentine Republic
15th Century

Banks were an innovation!
14th Century

No formal education
Innovation funding through the ages

Middle Ages
- Noble & religious patronage

Age of Enlightenment
- Self-funding

18th & 19th Century
- Universities
- Philanthropy
- Industry
- “State sponsored prizes”

20th & 21st Century
- VCs
- State as investor
University was given to the people of Leiden by Prince William of Orange as a thank you for the heroic defence against the Spaniards in 1575.
Innovation leads to economic growth
R&D spend per GDP 2001 (%)

- Germany: 2.4
- UK: 1.8
- Greece: 0.6

- Germany: didn’t overspend –
- UK: didn’t spend enough!
WHAT DRIVES GDP?

“Financial services

“Hospitality services

“Construction

“Creative industries
Innovation leads to economic growth

What can the State do?
Cold War defence spending
State funded research has given us …

Internet

GPS

Siri
Sources of funding for R&D in the USA
(2008, NSF)

- Business, 67%
- Universities/Colleges, 4%
- Other non-profit, 3%
- Federal Gvt, 26%
The State can set the direction and make things happen

“The role of the State has been more about taking on risk with courage and vision – not simply taking it away from someone else who then captures the returns” (Mazzucato)
Supporting commercialisation
Touch Bionics
i-Limb

Ambulance
Child Restraint

Illuminated retractor

Scottish Health Innovations Ltd
But surely this is where the money-men come in?
Source of investors in European Venture Capital
(2011, EVCA)

Government 57%
Capital for Enterprise Ltd ➡ British Business Bank

Enterprise Capital Funds
Get private investors to invest in early stage VC funds

Angel Co-investment Fund
Get angels to invest in more early stage deals

Enterprise Finance guarantee
Get banks to lend to SMEs
The State needs to wear mauve

Perkins discovered mauve dye by accident 1856

He patented it and went on to manufacture, derided by his scientific peers

1862 Queen Victoria appeared at the Great Exhibition in a mauve silk gown

By 1870, its great demand succumbed to newer synthetic colours in what became a new synthetic dye industry

Public procurement accounts for 17% of the EU's GDP