

Heart and reason: bounded rationality in today's economic world

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Heart and reason in history

- «Η καρδιά πολλάκις ήδη
είρηται ότι τον νουν
σημαίνει»
“It has already been said
many times that the heart
means the intellect.”
(Didymus, EcclT 225, 13-
21)
- “He that ruleth his spirit is
better than he that taketh
a city” (Proverbs, 16:32)



Michelangelo, The original sin, 1508-1512

The quest for rationality

- Economics, whose concept has its roots in ancient Greece, is a human science, therefore a social science: similarly to law and medicine it has been born *hominum causa*.
- Literally, economics means administration (from the verb *nemo*) of the house (*oikos*), and by extension of the community, of the state.
- Hence, since its beginning economics has experienced a friction between:
 - public and private
 - qualitative and quantitative metrics
 - the rational and the irrational.

A definition of rationality

- A human being is “rational” if he chooses what he considers to be in accord with his own preferences.
- The concept of rationality can be traced back to the work of David Bernoulli (1738), who tried to theorise the choice in lotteries, in order to study the risk propensity of human beings. Adam Smith (1759) wrote that the selfishness of individual economic agents leads to the achievement of collective well-being.



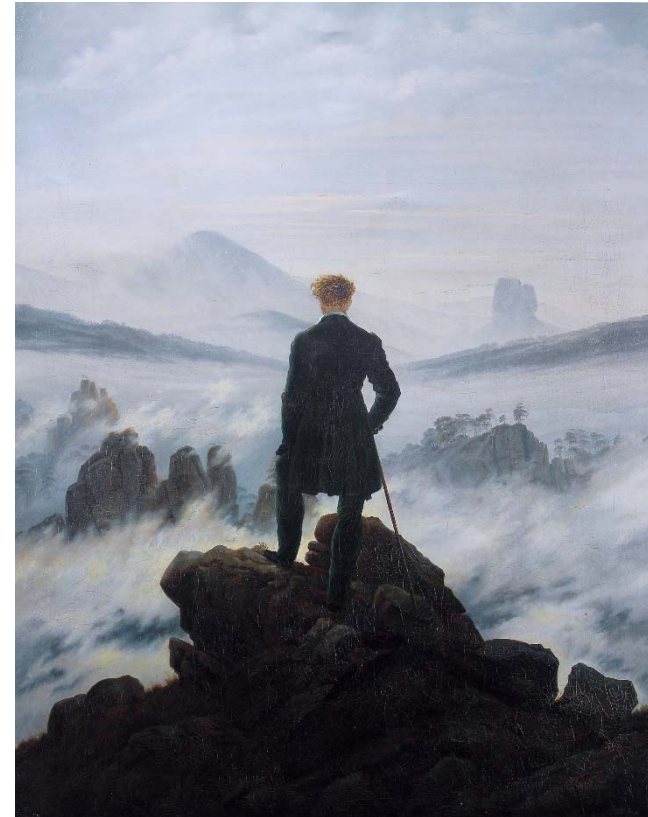
Caravaggio, The cardsharps, c. 1594

The limits of rationality

- «One of the greatest reasons why so few people understand themselves is that most writers are always teaching men what they should be, and hardly ever trouble their heads with telling them what they really are” (Bernard de Mandeville).
- Multiple experiments, starting from Allais (1953) demonstrated that human choice **can be inconsistent**.
- Kahneman and Tversky (1979) identified a pervasive and systemic presence of **human biases** that led to the birth of behavioural economics and of the concept of bounded rationality: rationality is there, but for some reason is bounded (Simon, 1991).
- *Random* errors would not matter to economic theory, but *systematic* error (=bias) is a big deal!

Bounded rationality at work: three modern dilemmas

- Sustainability or development?
- Automation or employment?
- Cost containment or quality?

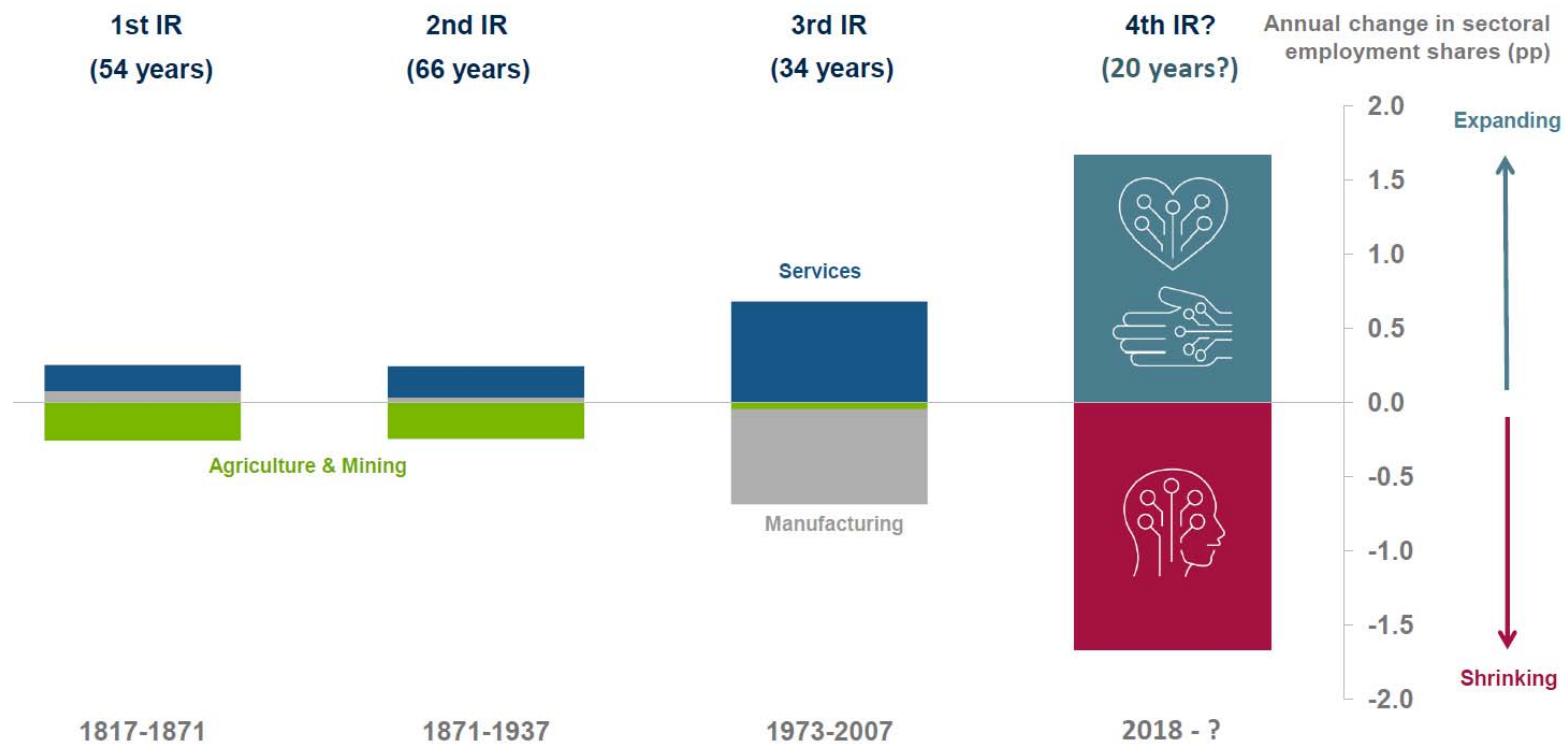


*Caspar Friedrich, Wanderer above
the sea of fog, c. 1818*

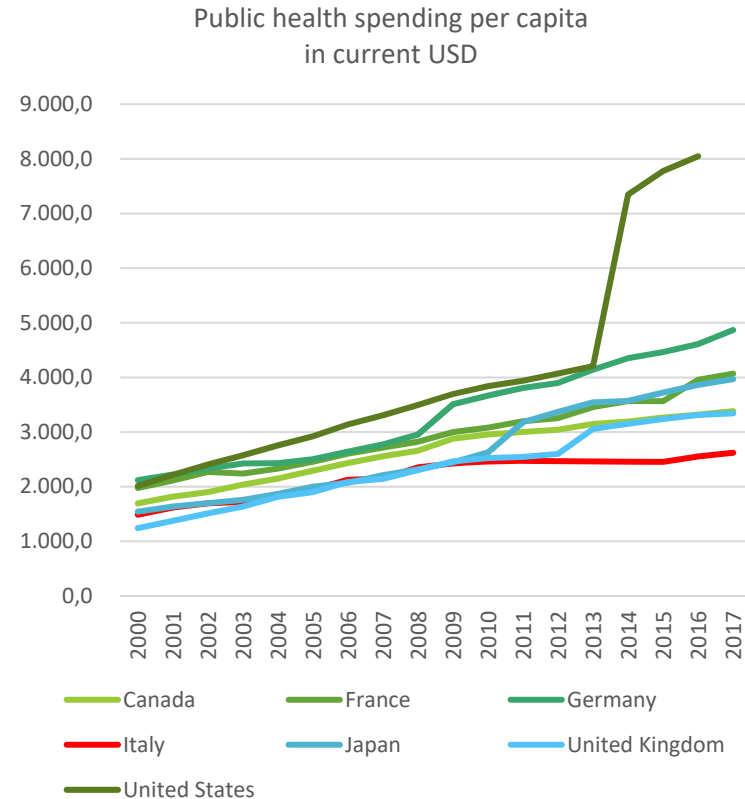
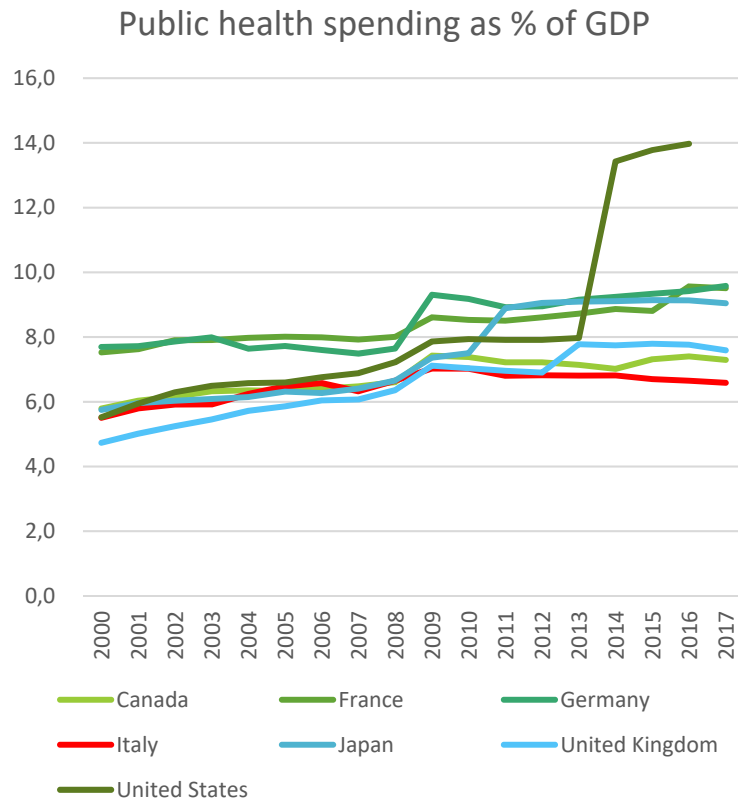
Sustainability or development?

- Industrialised nations took profit of large scale pollution in the 1950s-1980s. Is it correct nowadays to ask developing countries for environmental protection?
- Since the beginning of this century 1,1 bn people were out of poverty. 1,9 bn have obtained access to water. 3,5 bn have obtained access to Internet. However, richer people have become even richer, increasing income inequality. Is it fair?
- 8 mn tons of plastic out of 322 produced yearly reach the oceans. However, plastic is light and easy to transport, and allows poorer populations to access sterile water and safe food.

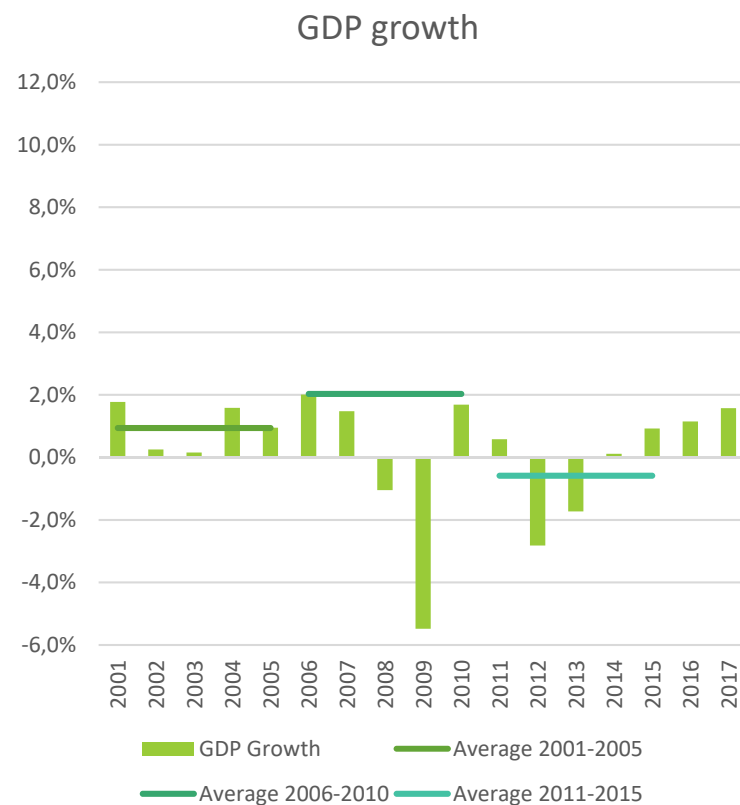
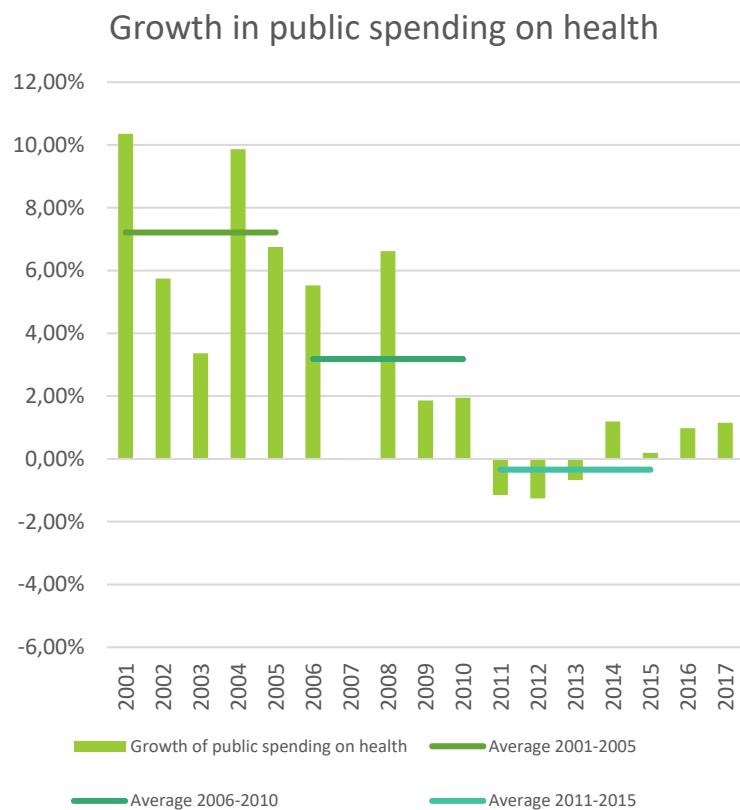
Automation or employment?



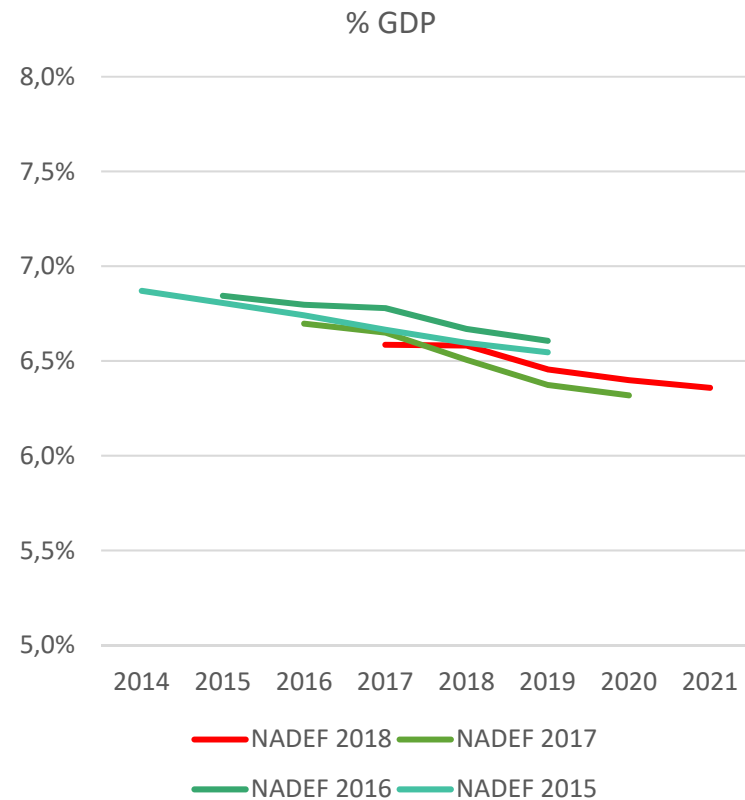
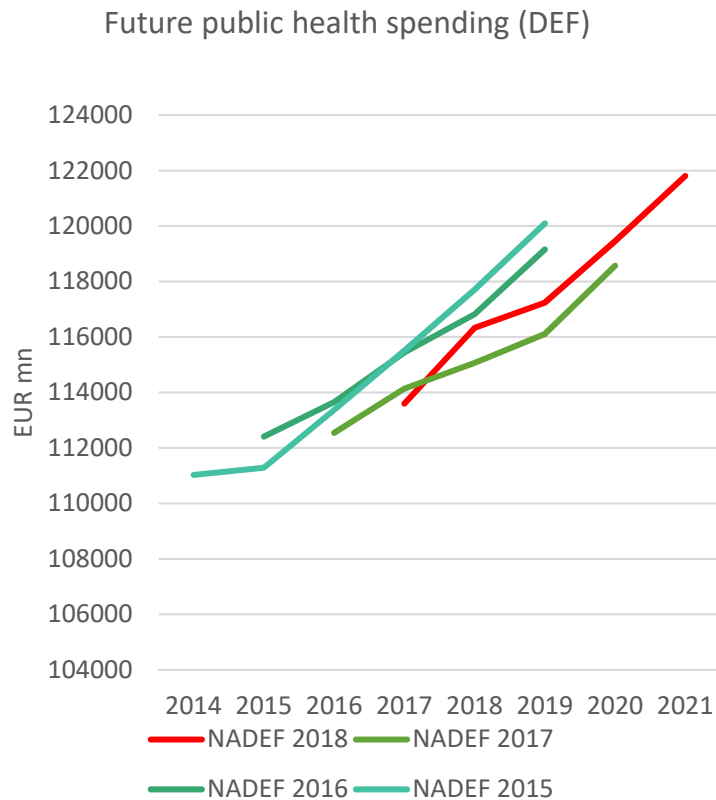
Health spending: cost containment vs. quality?



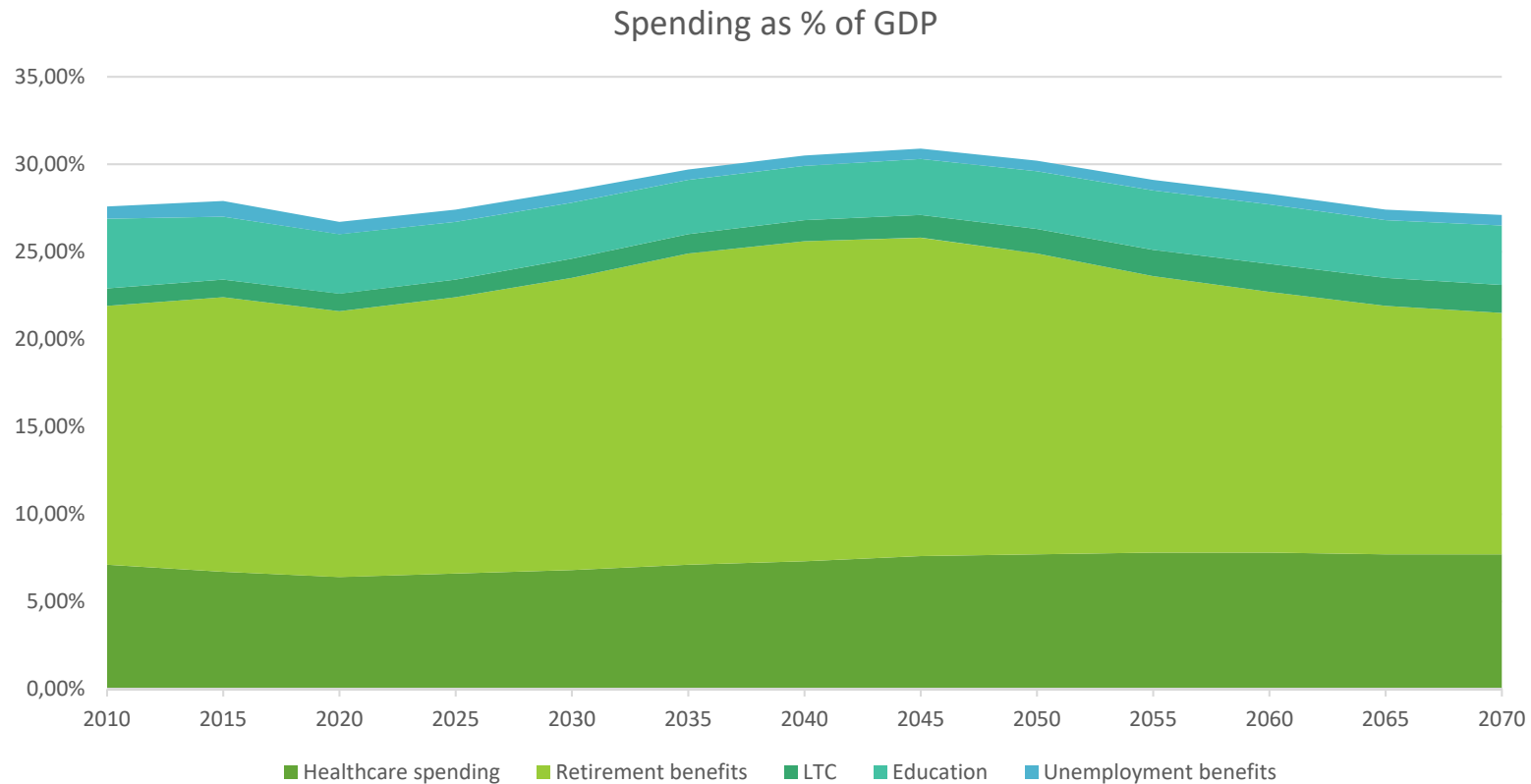
Is the Italian spending slowdown rational by any account?



Budget projections on public health spending in Italy



Health spending in the long term: mind the ageing gap



The rationale of a slowdown

- Ageing population
- Increasing impact of innovation:
 - Pharmaceutical
 - Technological / service (e.g. robotics)
- Increase in the demand for health services
- High debt burden, low fertility rate
- Political uncertainty and political disturbance
- Constitutional setting (Title V)
- Low investment in research

Italian peculiarities



Summing up...

- In a way, Didymus was right: heart and intellect may not be the same thing, but they do cooperate in human choices.
- «*The heart has its reasons, which reason does not know*». Blaise Pascal
- It is not easy to navigate through modern dilemmas, especially in times of demographic and economic strain...
- ...the challenge is to avoid that the cost containment efforts hinder the quality of the service...
- ...and in the end only heart and reason together may strike the right balance!