

Quels enseignements tirer des théories de la justice en matière de lutte contre les inégalités de santé ?

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Lessons from the theories of justice on ways to tackle health inequalities

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Joint work

A lot of the material covered comes from (joint) work with Florence Jusot, Sandy Tubeuf and Damien Bricard (By the way, I have benefited from chats with them)

Outline

- 1. How can justice theory shape our view on how to reduce health inequalities ?
- 2. Putting numbers into perspective

HOW CAN JUSTICE THEORY SHAPE
POLICIES REDUCING HEALTH
INEQUALITIES ?

Theories of Justice

- John Rawls (*A Theory of Justice*, 1971) a turning point in the anglo-saxon world
- From consequentialism (*egalitarianism, utilitarianism*) an ex post perspective to an ex ante perspective
- Ex ante perspective: a set of means which should be as equal as possible
- Ex post is related to ex ante by the exercise of freedom

Equalities of opportunities

- Different formulations for the same broad idea
- To be equalized
 - Primary goods (John Rawls)
 - Capability set (Amartya Sen, Martha Nussbaum)
 - Circumstances (Ronald Dworkin, Gerard Cohen, Richard Arneson, John Roemer, Marc Fleurbaey) (*Principle of compensation*)
- *Ex-post Inequalities* may persist because people will not exercise their freedom (responsibility) in the same way (*Principle of natural reward*)

How can this literature be used for health inequalities ?

- A normative view : For the design of public policy with scarcity of resources ?
- The Georges Best Example in UK
- Illegitimate inequalities vs legitimate inequalities
- All freedom/effort/responsibility correlated to circumstances should be considered illegitimate (*the debate Brian Barry-John Roemer*)
- Does this normative view correspond to the view of a majority of people in France ?

An instrumental view

- 1. Useful to understand how health inequalities are generated/built
- A decomposition of the generating/building process which is meaningful at least from a positive viewpoint
 - Disentangling the role of inherited (genetically or socially) factors, lifestyles, and luck.
- 2. Clarifying how to reduce health inequalities
 - Because efficient policies will not be the same.

Our view (a mix of normative and positive arguments)

- Even if you stick to a pure egalitarian view (*which may be more prevalent for health than for income, because health is more important*), the perspective of equality of opportunity is interesting because it may offer some keys for reducing health inequalities
- Suppose that we have to give priority to reducing health inequalities
 - The share of inequalities coming from circumstances is even more unjust than the others.

Two types of analysis

- *Causality analysis* : Finding the best ways to reduce health inequalities, tool by tool
 - Econometrics, quasi-experiment, field natural experiment
- *Correlation* is sufficient for decomposition analysis
 - How much of the health inequality is coming from exogenous sources? (*Omnibus measure*)
 - How much of the health inequality is coming from lifestyles?
 - How much can we gain at most if we are targeting public health policy?

Correlation may not be that bad

- For the global impact of circumstances.
- The lead poisoning example
- Lead in childhood-home walls has both consequences on parents and children health
- Correlation between parents' health and children's health which is not causal.
- Lead in childhood-home is still a circumstance. Lead and parents' health are exogenous
- Presumption that even if there are differences between decompositions according to correlation/causality for each determinant, in aggregate for the whole set circumstances, the deviations are compensated.

Correlation for effort more problematic

- Because lifestyles may be endogenous to health status
- If safe lifestyle because good health, the contribution of safe lifestyle is upward biased.
 - Example: exercise
- If safe lifestyle because bad health, the contribution of safe lifestyle is downward biased
 - Example: to quit smoking if lung cancer
- Conceivable to identify the sign of the bias for each lifestyle
- Difficult to guess the sign of the bias for the total impact of lifestyles

Same old wine in a brand new bottle ?

- Change of the focus. **Switching from:**
- How are health inequalities related to social inequalities (occupation, education, income) ?
- **To** : How are health inequalities related to exogenous determinants (genes, parents' health, family and social background) ?
- Occupation, education are endogenous (product of circumstances, effort and luck)
- New for the correlation, mainly a reinterpretation for the causality

2. Putting numbers into perspective

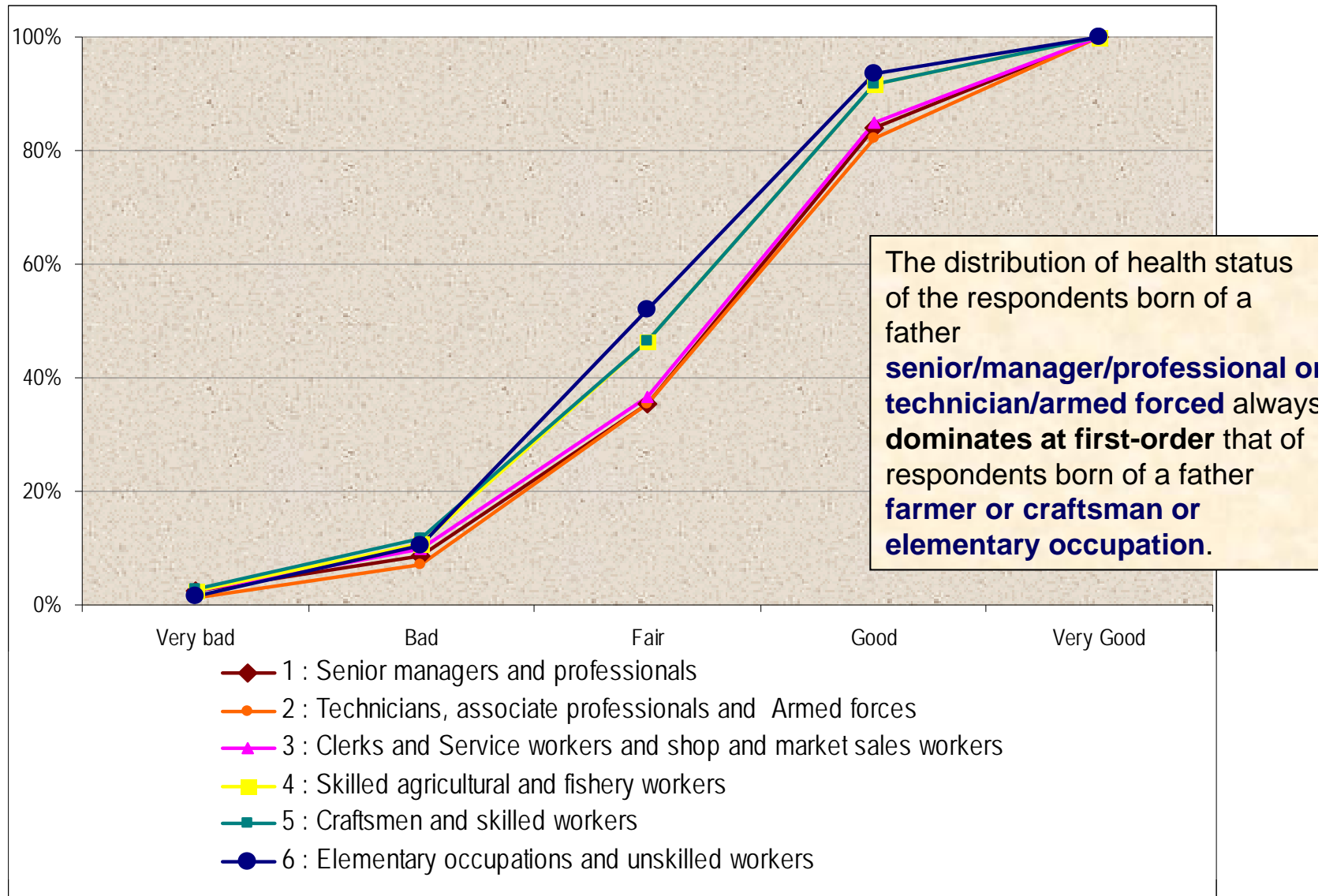
4 sets of determinants of health when adult

- **Circumstances** : all the determinants before being an adult
- **Effort** = Lifestyles as an adult
- **Luck**: Health shocks as an adult
- **Demographics**: Age and Sex

Messages from correlation studies

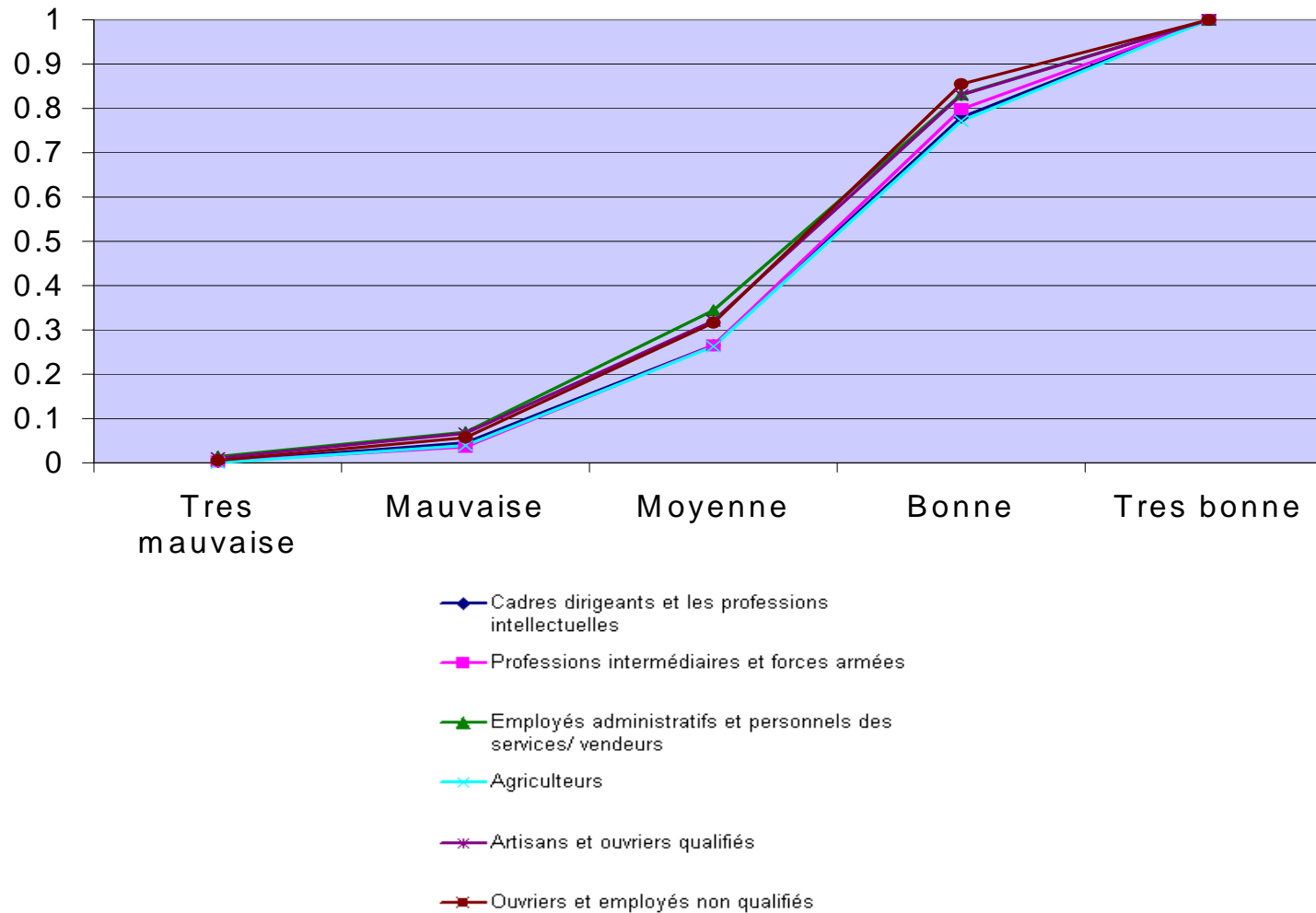
- 1. Long-lasting effect of circumstances on health as a senior
- 2. Examples of countries where it is reduced (not a natural law)
- 3. What are the relative shares of circumstances and lifestyles?
- 4. The difference between Roemer and Barry not so important
- 5. Age profile of share of lifestyle: an inverted U-shaped curve?

Distribution of opportunity of SAH according to father's SES (France, 1st wave of *Share*)



Distribution of opportunity in SAH according to the father's SES (NL, 1st wave of *Share*)

Pays-Bas



The relative contributions of circumstances and lifestyles to explained inequality (SAH) : British (NCDS)-French (ESPS) comparisons

	Circumstances	Effort	Demographics	Variance
Barry's scenario				
In the UK	49.44% (52.46%)	44.8% (47.54%)	5.76%	0.09 (0.089)
In France	51.81% (57.57%)	38.19% (42.43%)	10.0%	0.157 (0.142)
Roemer's scenario				
In the UK	55.94% (0.052) (59.00%)	38.88% (0.037) (41.00%)	5.18%	0.094 (0.089)
In France	61.42% (0.095) (67.26%)	29.90% (0.047) (32.74%)	8.68%	0.157 (0.144)

Source (Jusot-Tubeuf: (ENSAI 2010) Age groupe: around 46 yo

In the UK: Corr (circumstances, effort)=0,11***

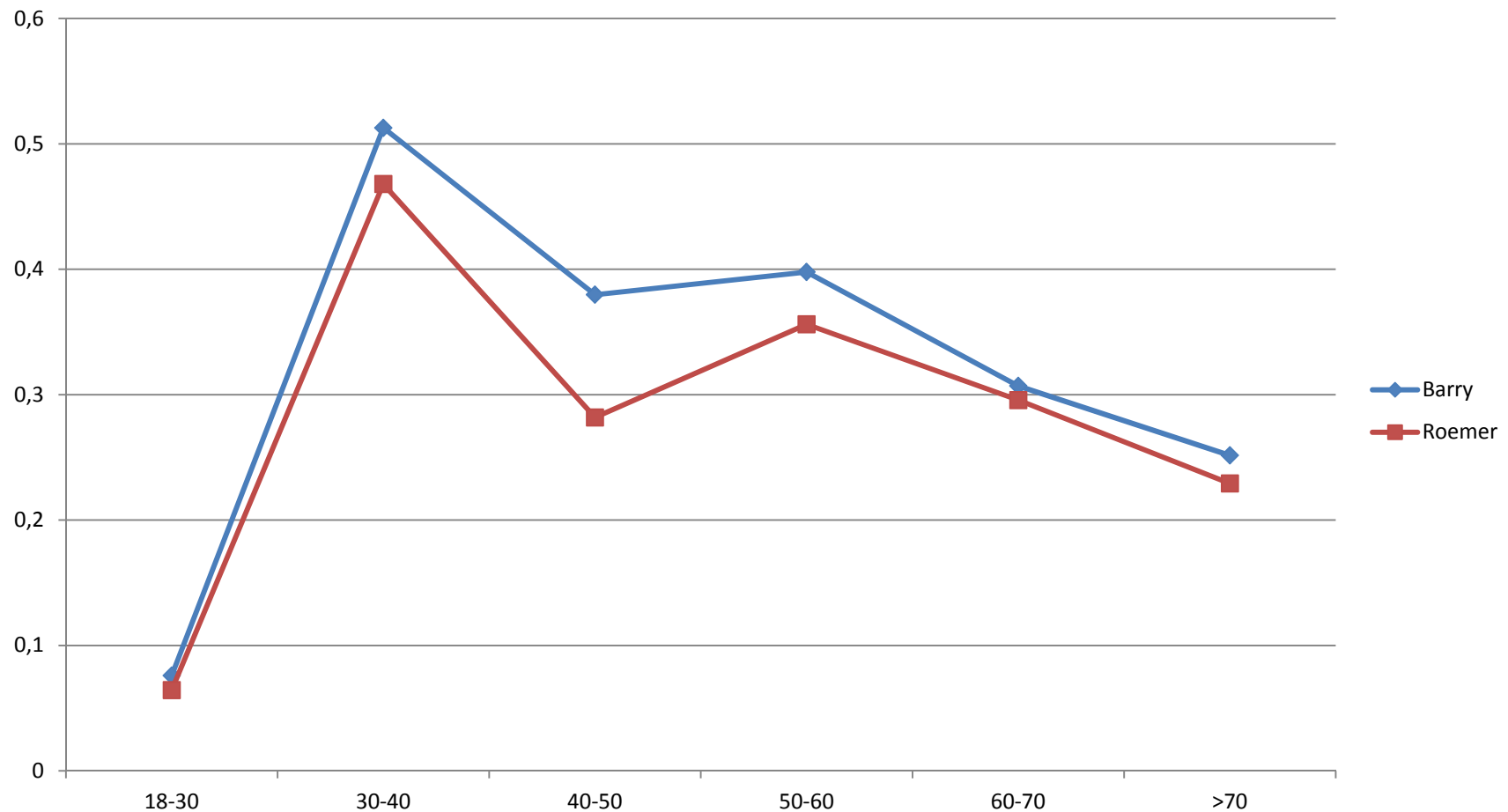
In France: Corr (circumstances, effort)=0,18***

Lessons from the British-French comparison for the French health public policy

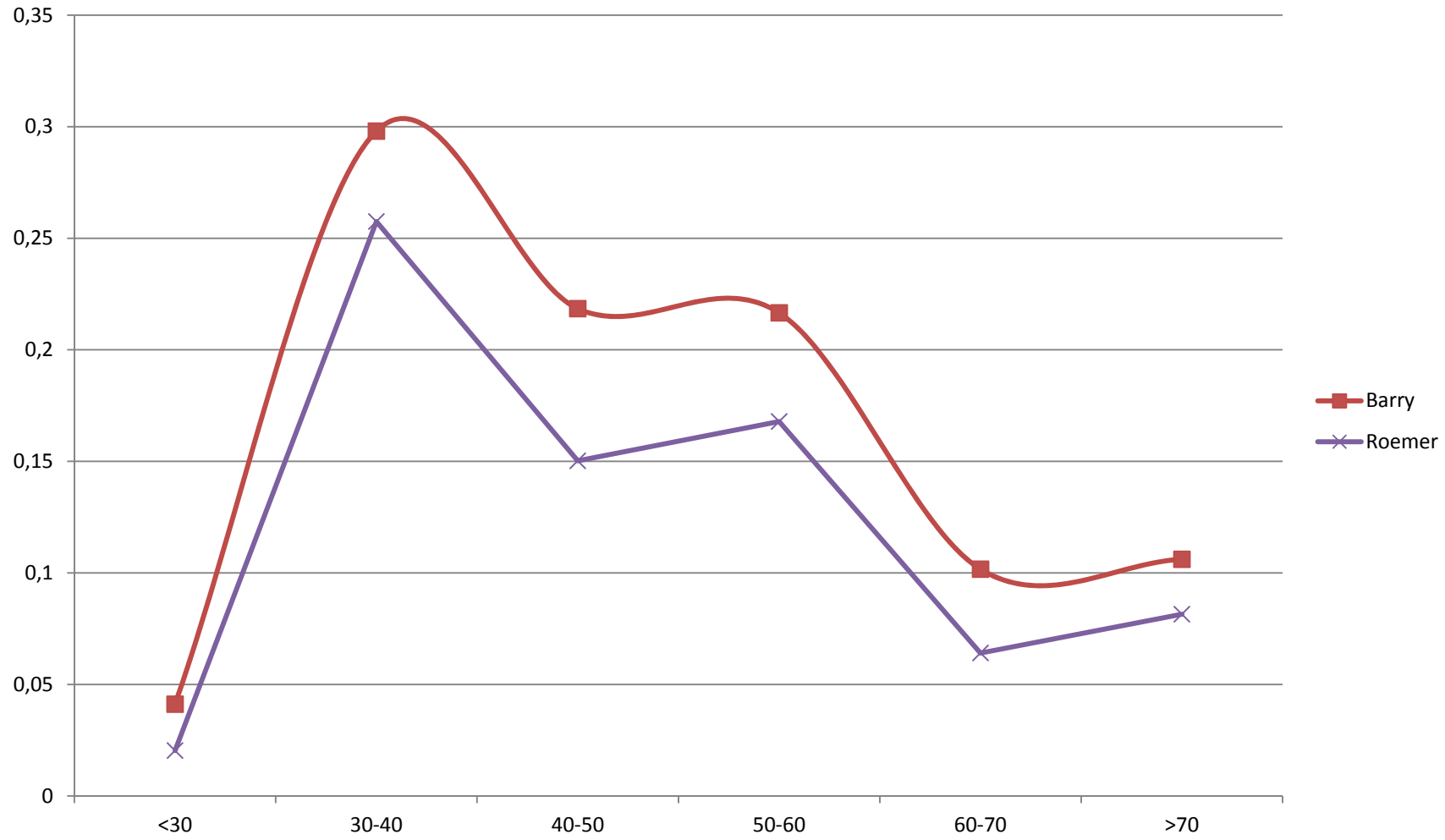
- The lower level of health inequalities in Britain is a well established fact
- Where does it come from?
- Not so much from the impact of inequalities in lifestyles
- The bulk is coming from the impact of circumstances.
 - Income (disposable) inequality is not higher in France than in the UK
 - The transmission of income inequality is higher in the UK than in France
 - A presumption that it is the way the health system is organized that makes the difference.

Age profile: An inverted U-shaped curve for the share of current lifestyle in France ?

However different generations



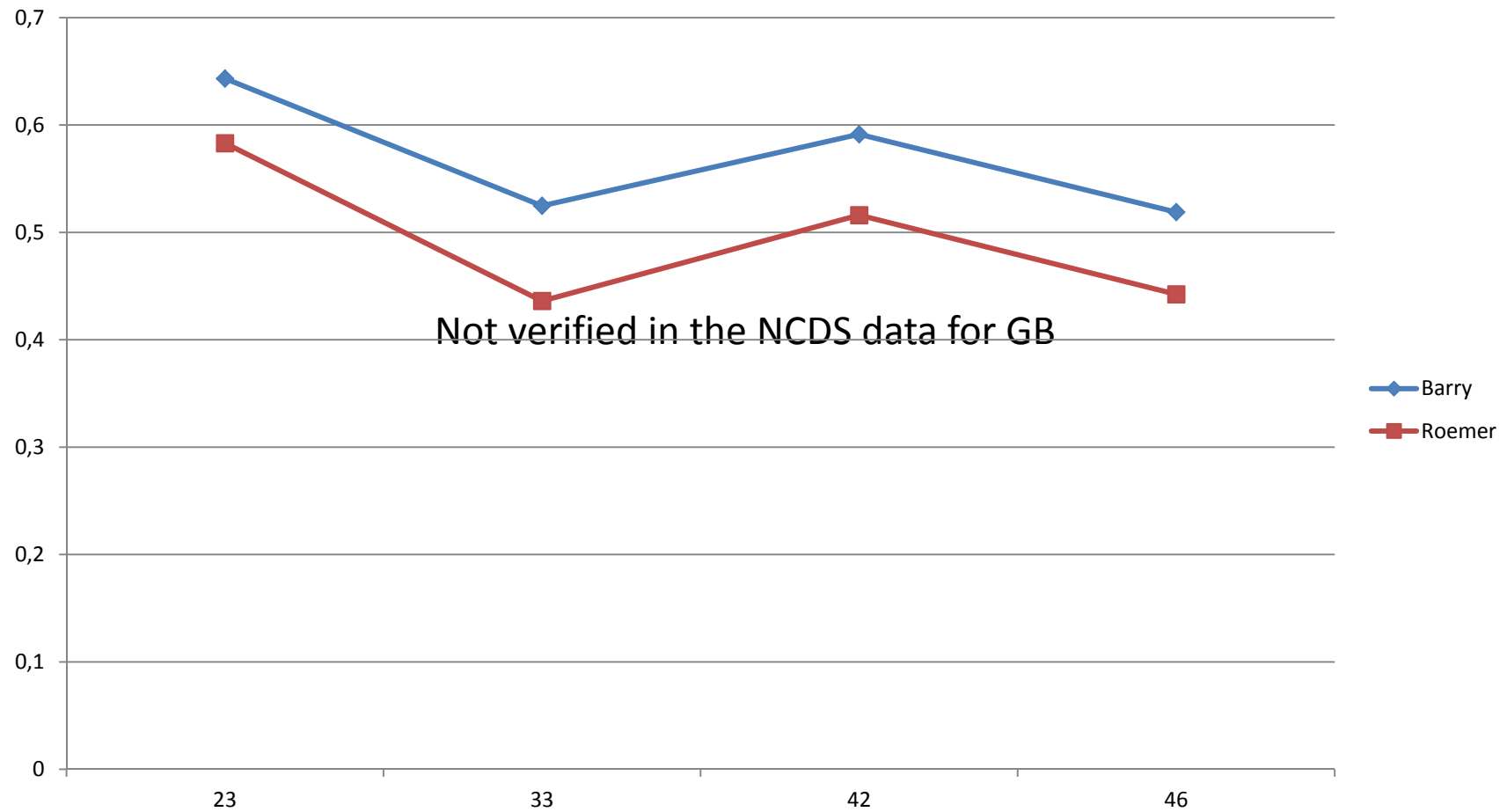
For a larger set of circumstances



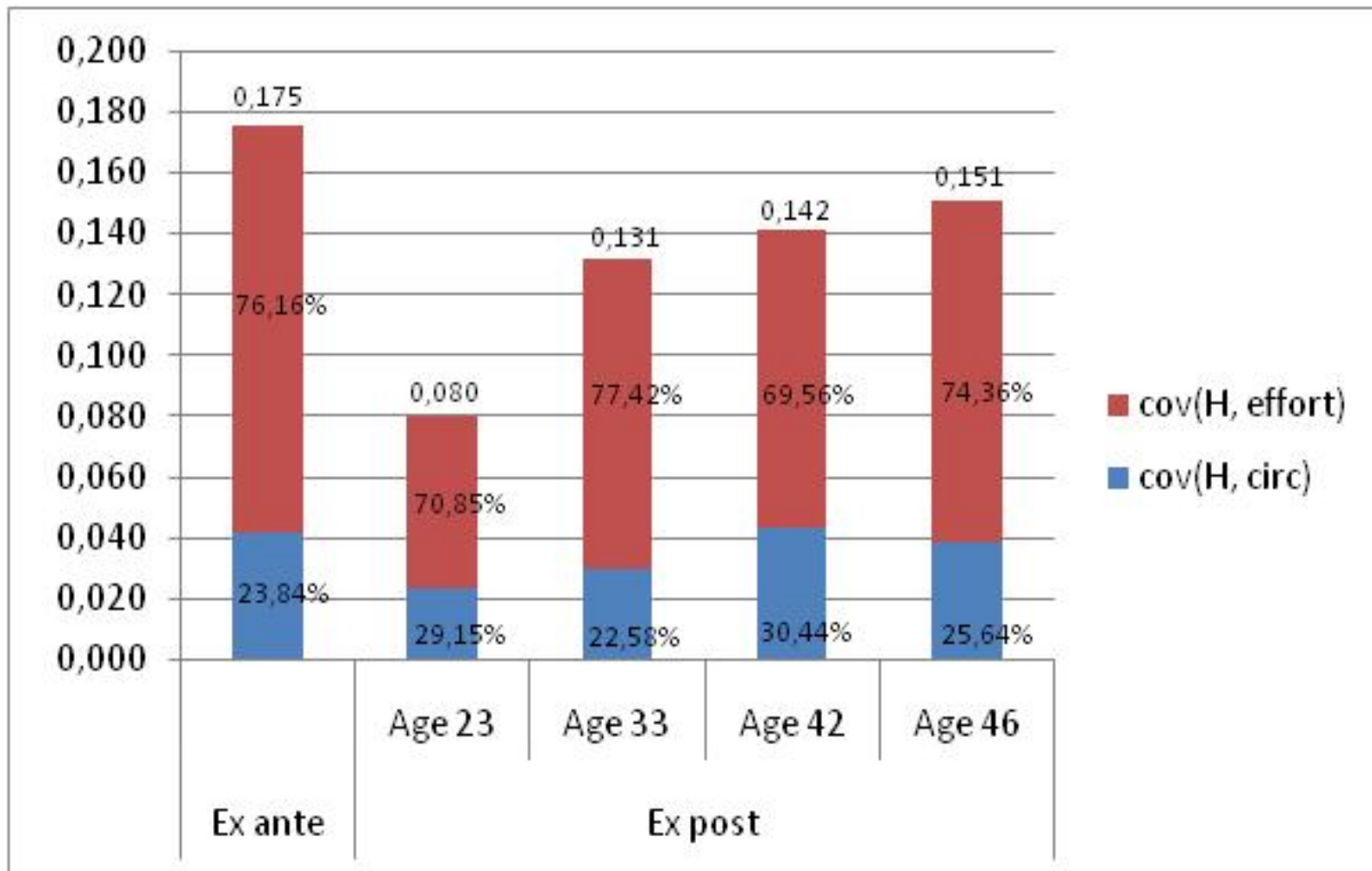
Rationale for a inverted U-Shaped curve

- Risky lifestyles aren't problematic when young because health is a capital
- The frequency of risky lifestyles decreases when ageing because of selection and health problems help people to adopt safer behaviours
- Before ageing starts, the peak because
 - too young to die
 - Sufficiently old for a marked impact of repeated risky lifestyles

Neither verified in the NCDS data for GB! (current lifestyle, same generation)



Nor for cumulated effect of lifestyle up to the current age ! (Barry)



To sum up

- For Britain, the huge importance of lifestyles in explaining health inequalities is also found by *Balia & Jones (JHE, 2008)* and *Contoyannis & Jones (JHE, 2009)*
- The share of lifestyle in health inequality varies across countries (see *Stringhini et alii, Plos Medicine, 2011* for a British-French comparison using Whitehall II and Gazel) and ages.
- Important to know how much we can expect to gain by targeting on circumstances or lifestyles in cumulated terms
- Much research to come!

Messages from causal studies

The impact of circumstances

- Not so many
- *Lindeboom and al. (JHE 2009)*, NCDS
- Investigation of the impact of parental education on child health outcomes.
- Exogenous variation in parental education induced by a schooling reform in 1947, which raised the minimum school leaving age in the UK.
- Increasing the school leaving age by 1 year had little effect on the health of their offspring.

Messages from causal studies

(2) Ctd

- *Lindo (JHE, 2011) PSID*
- The health effects of job displacement extend to the children of displaced workers.
- They reduce birth weights by approximately 4,5 pc.
- The effect is concentrated on the lower half of the birth weight distribution.

Messages from causal studies (3. cdt)

- *Lindeboom and Van der Berg (JHE 2012)*
Exposure to the Potato famine in the Netherlands in 1846-1847
- Regional and temporal variation in market prices of potato and rye.
- Lifetimes of a random sample of Dutch individuals born between 1812 and 1902
- Boys and girls lose on average 4, respectively 2.5 years of life after age 50 after exposure at birth to the Potato famine.

What have we learnt for circumstances ?

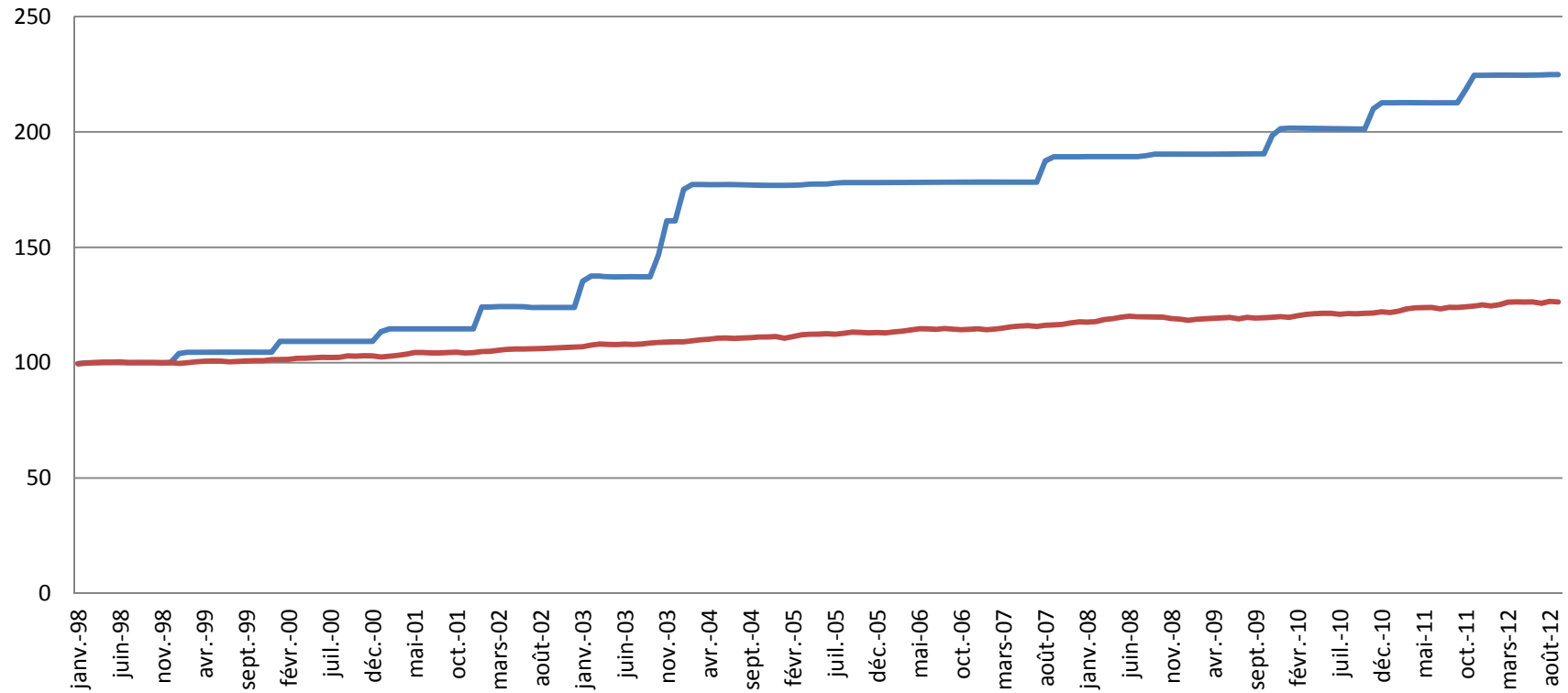
- Too early to know what to do in a cost-effective way
- We know what not to do!
- Reducing the safety net during the economic bust as it has been done in Greece and Spain since 2007.
- It will increase health inequalities for this and the next generation.

How to promote healthy lifestyle among poor households ?

- The social gradient: risky lifestyles are concentrated in poor households
- The price policy : taxing bad habits, subsidizing good ones
- Shaping preferences through information, public health campaign
- Not so much effective. Why?
- Because of an endogeneity problem: Poor adopt risky lifestyles to support their (absolute or relative) poor conditions of life

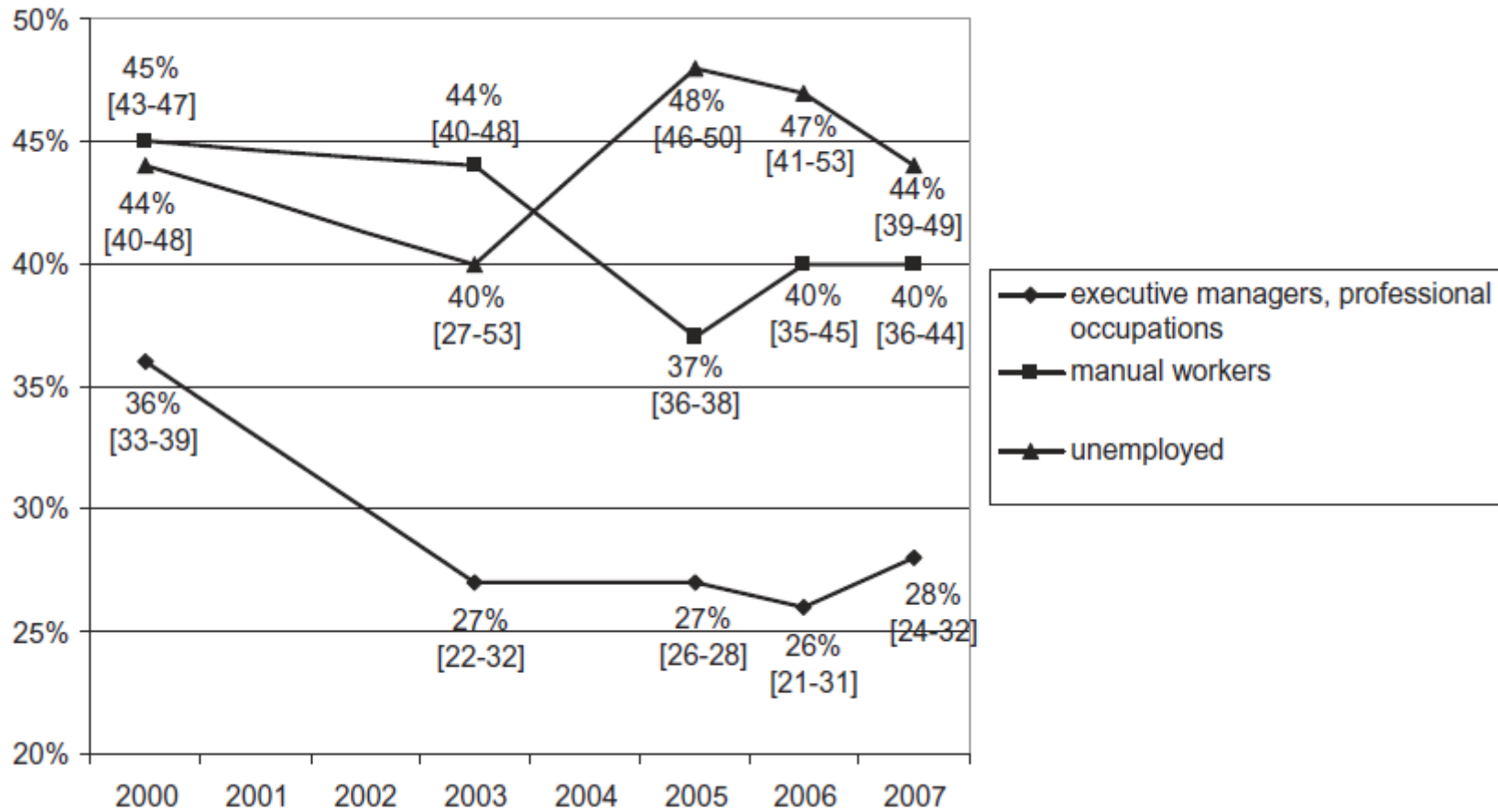
Price policies (Tobacco)

IPC (red), Index of tobacco price (blue)



Smoking prevalence (INPES)

Perreti-Watel & al., Addiction 2010



Price policies are harmful

- Increase inequalities in health
- Make both the current generation and their descendants poorer
- Poor households pay 3% of their budget in taxes on tobacco and alcohol
- If they saved this 3% for 50 years at 3%, they would bequeath € 60,000 to their descendants.
- In France, 50% of bequests are less than € 110,000

Concluding comment

- **Provocative idea ?** : The **share of lifestyle** in the “Roemerian” perspective is an indicator of success of a public policy aiming at reducing health inequalities.
- The higher, the better (because it means that the share of circumstances is low)
- Not because they are legitimate, but because we do not know how to tackle them: very difficult to reduce the social gradient
- The main contribution of this vein of literature up to now: providing a macro indicator, a **thermometer**, to gauge the success of public health policy aiming at reducing health inequalities.