#### The superiority of economists Fourcade, Ollion and Algan Discussion Lucrezia Reichlin London Business School and CEPR

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### The paper

The paper makes three observations which define the "superiority of economists" vis-à-vis other social scientists:

- 1. They are paid more
- 2. They are more quant
- 3. They are insular
- 4. The discipline is "hierarchical"
- 5. They are subject to capture

#### Discussion

- A. How are these features related?
- B. Does economics promise more than it can deliver?
- C. The future

## A. How are these characteristics related?1. The pay gap

Economists are paid more than social scientists but also more than mathematicians and physicists – control group should be hard sciences as well

 $\rightarrow$   $\rightarrow$  pay gap not due to barriers to entry (quant) but to the fact that economics is a practical field

Shiller: "economics focus on policy rather than discovery of fundamentals. Nobody cares of economic data except as guide for policy. Economics is more like engineering than physics, more practical than spiritual"

Because of this focus on practical advise (policy or private sector), economists are in high demand also outside academia

 $\rightarrow$  Pay gap is a market outcome

## A. How are these characteristics related?2. Quant (i)

*Is the key role of practical advise related to the importance of quantitative methods?* 

- Economics has an important quant side which cannot be escaped [causality and prediction are both important in our quantitative methods/ the central role of causality is specific to economics and it is related to the objective of policy analysis]
- Causal models are key to understand methodological developments in economics

Micro-econometrics: quasi-experiments and structural models Macroeconomics: quantitative GE models and structural VARs .... a lot of methodological sophistication beyond statistics

### A. How are these characteristics related?2. Quant (ii)

However economics is not a science

Sims: "unbelievable assumptions"

- Economics is not an experimental science: the same data generate multiple interpretations and therefore judgement, prejudice, opinions matter ... and room for capture
- Although this fundamental uncertainty is recognized and formal approaches have been proposed to deal with (eg Manski in micro, Leamer and Sims in macro), a lot of economic practice, especially if policy relevant, disregard it

## A. How are these characteristics related?2. Quant (iii)

 Even within the profession people talk about "the model" rather than "models" denying the fundamental uncertainty the discipline is facing

See Rodrick's comment in PS about Krugman's criticism of mainstream economic: is it a model that has failed as Krugman maintains when criticizing the profession failure to understand the crisis or an approach which is not sufficiently robust because it is not based on risk and model uncertainty? Economists use models NOT one model

Models are needed for causal reasoning (policy) but must remain fictions (parsimony). This is why we need many

## A. How are these characteristics related?3. Capture (i)

Capture is related to the practical/policy relevant nature of economics and to the fact that although quantitative methods dominate, economics is fundamentally non experimental

- Once you focus on policy, much that is not science inevitably comes in and there are strong rewards to political posturing
- $\rightarrow$  This is why economists are vulnerable to capture
- Moreover there are rewards to oversell research findings.

Policy analysis inevitably combines assumptions and data to draw conclusions on the population of interest. But assumptions are arbitrary

Manski states the *Law of decreasing credibility*: credibility of inference decreases with the strength of the assumptions maintained. In practice policy analysis tends to sacrifice credibility in returns for strong conclusions. Why?

## A. How are these characteristics related?3. Capture (ii)

Analysis responds to incentives. There is pressure and rewards to produce a number rather than ranges. Examples:

- One economists trying to present uncertainty around a forecast to President L. Johnson presented the forecast as a likely range of values. Johnson answered: "ranges are for cattle. Give me a number"
- Hausman to Manski's idea of presenting bounds: "the client needs a number not an interval" communicating uncertainty is difficult and unsexy
- $\rightarrow$  TENDENCY TO OVERSELL

## A. How are these characteristics related?4. hierarchical organization and insularity

• Hierarchical organization is the outcome of competition, itself generated by large economic rewards: selection, branding ...

Interesting to note that economics is less hierarchical in terms of age, the new kid in town can reach stardom quite fast, an established professor must continue to prove herself – not the same in other social sciences

- Insularity is not obvious:
- i. economics has a tradition of colonization of other social sciences: eg Gary Becker, Acemoglu ...
- ii. And a tradition of importing tools from hard sciences
  However economics maintains its specificity imported tools are
  adapted

The attempt of physics to colonize economics has been mostly unsuccessful for example

#### Bottom line

The characteristics of the field highlighted in the paper are connected

- Defining characteristic of economics is its practical orientation → this leads to emphasis on quantitative/causal models.
- However, need to cope with the fact that economics is not experimental (no matters the recent enthusiasm for quasi-experiments in micro-econometrics!). Judgment and ideology necessarily gets in which makes the field sensitive to incentives such as monetary or others (capture). Moreover there are incentives to oversell

B. Does this mean that economics promise more than it can deliver?

Macro and micro:

- Micro-econometrics is more innocent: excessive faith on robustness of randomized experiments
- In macro strong influence of Bayesian influence: judgemental views formalized as priors

But not a convincing way to deal with fundamental uncertainty on human behaviour (deviations from rationality and fundamental Knightian uncertainty) .... and, as mentioned, the practice remains mostly oblivious to these issues

#### C. The future?

Two topics:

- 1. The impact of the crisis
- 2. Technology: the impact of big data

The impact of the crisis example: monetary policy

Draghi 2014:

There is little doubt that our simpler understanding of monetary policy in the past will not readily return. Policymakers are operating in a more complex and heterogeneous environment. Structural breaks and model uncertainty imply that regularities of the past can no longer be relied upon. This in turns means that judgement plays a greater role in decision-making

# Are barbarians at the central bank's gate?

Possibly

This is why researchers are moving towards an eclectic approach ....

# The impact of the crisis example: monetary policy

- Faust and Leeper's paper at JH this year: "conventional view on which much of the pre-crisis policy based on is that central bank best promote inflation stability by behaving in a simple systematic manner, responding mainly to the sates of inflation and aggregate real activity" [this view accomodate a broad range of models/keynesian and non] is crazy
- Alternative view: inflation and real dynamics reflect movements in tons of variables and policy implications of this dynamics are not well captured by two conventional summary statistics such as inflation and real activity. FL call this problematic variation in macro-variables disparate cofounding dynamics (cofounding refers to complicating any conventional interpretation of business cycle and appropriate policy response

# The impact of the crisis example: monetary policy

- They suggest that we will not return to the simple view
- "we cannot return to that world because it never existed": understanding DCD has always been he key for successful policy making – even pre-crisis / the simpler view has played a minor role both in successes and failures
- > The new view will be eclectic

### Implications?

- Combining formal models with judgement
- More eclectic view on how to combine data and theories
- More tolerance for different approaches But again it is unlikely that economics will return to purely descriptive or purely judgemental

## The impact of technology big data

Big data will affect economic policy and research: availability of large administrative datasets and the ability to process large information in real time will affect the way business decisions are taken and will inevitably affect research. How?

- 1. More emphasis on data and empirics (more quant)
- 2. More emphasis on predictive rather than causal models [predictive algorithm have huge amount of applications: they convert large amount of unstructured data into predictive scores in an automatic way and often in real time [machine learning techniques such as lasso or Ridge]

## The impact of technology big data

- Predictive models imply a shift from the single covariate causal effect framework that has dominated much empirical research
- Predictive models are multivariate: focus is not on how a single variable affects given outcomes measure but on how the outcome varies with a large number of predictors

Obviously subject to the Lucas critique [models are predictive/non structural]

Question: will there be more emphasis on prediction and less on causality? This could imply a colonization of economics from hard science .....

But it is likely that economists will strike back ....

### Conclusions

- Economics will evolve as a competitive field will be quick to conquer new territories in policy analysis as both technology and awareness of models limitations evolve
- The superiority of economists amid social scientists is there to stay, the pecuniary stakes are high
- Inevitably the field will be vulnerable to capture