

Nicolas Jacquemet : “Laboratory experiments are for all economists, not just behavioural economists”

Nicolas Jacquemet is a professor at PSE and at the University of Paris 1 Panthéon-Sorbonne where he heads the Master in Economics and Psychology. His work uses findings from psychology research to understand economic behaviours in tax evasion, co-operation, racial and gender discrimination in the labour market, and the division of labour within households. With Fabrice Le Lec and Olivier L’Haridon, he wrote “Précis d’économie expérimentale” (Experimental Economics Primer), published in August 2019 by Economica. This work presents a detailed survey of all methods used in experimental economics.

- Nicolas Jacquemet's personal webpage: <https://www.parisschoolofeconomics.eu/en/jacquemet-nicolas/>
- Publisher’s page about the book: <https://www.economica.fr/livre-precis-d-economie-experimentale-jacquemet-nicolas-le-lec-fabrice-l-haridon-olivier.fr,4,9782717870800.cfm>



The first chapter of your book discusses experimental economics methodology: could you define this method?

The book starts from the idea that there is a kind of paradox with regard to economics laboratory experiments. This method is seen by those who use it as one tool among many that allows us to study decisions empirically, and especially economic decisions. But for many economics researchers who are not familiar with it, the method looks like one confined to a specific approach that calls into question classical economics hypotheses about the ways in which decisions are made. **So, the aim of the book is to resituate this method in the tool-box of the different empirical approaches available to economists**, and to present in detail how it can take into account different aspects of economic decisions, which other methods cannot do.

The method has a number of advantages, one of the most important of which is that **it allows us to control the environment in which decisions are made**. In most economics research, we try to understand the choices that are made and the way in which interactions take place in a world defined by a model. This model is a simplification of reality, which is necessary in order to render it intelligible. We can then legitimately ask whether the simple hypotheses that we develop, especially about the motivations - or “preferences” - of economic agents are able to account for what people are actually doing when they are confronted with the economic decisions that we are trying to understand. Laboratory experiments create this simplified world in which the economic theory reasons: we can always directly observe not only the manner in which participants make their decisions but also the consequences of these decisions for the economy, and possibly, develop new ways of reflecting on how they act.

How are these laboratory experiments carried out?

In a laboratory experiment, the researcher brings several people together in a room and describes **the rules that regulate the way in which they will make decisions and interact with the others**. These rules reproduce the simplified world mentioned earlier and thus allow us to test the hypotheses formulated about the behaviours actually adopted by the individuals. An important element of these rules is the fact that in general the participants will be remunerated for their participation depending on the decisions they are going to make and the consequences of their decisions and those of the others. The results are a measure of the ways in which participants respond to the rules of the experiment and the ways in which they adapt to the different rules of the game, which stand for as many different institutions possibly used to regulate and organize the economy.

You then discuss the different methods used in experimental economics: what are they?

These methods aim to document many different aspects of decision making, so as **to understand the different kinds of behaviour that both are important from the point of view of economic theory** and have important economic consequences.

First, **risk preferences elicitation** methods allow us to understand the ways in which individuals behave when the consequences of their decisions are uncertain. This kind of decision can have consequences in several domains, from financial investments to insurance choices, but also from a broader perspective, on choices in the areas of health, food and environment.

Beliefs are about the perception that individuals have of what others are going to do and how the environment in which they act evolves. This is a very important dimension in economic decisions, because we behave differently depending on what we think of others (and whether we are right or wrong to think so) and what we believe is the dynamic of our situation. Experimental economics has developed a very rich technology that aims to measure the beliefs used in decision making.

The measurement of time preferences is how individuals evaluate and consider in the present decisions that they must or want to take in the future. This method also allows us to evaluate the extent to which they are able to stick to those decisions, and to understand better the issues in economic choices that involve the long term, for example, decisions about savings.

Finally, a number of methods aim **to measure the social dimension of preferences**, which helps us to understand the consequences of individual attitudes to others. This is an aspect of decisions that has longed escaped traditional economic analysis but that has been greatly developed in recent years, thanks to the use of experimental economics in the framework of “behavioural economics” - an approach that focuses on the psychology of economic decision-making behaviour.

An interesting point, and one which seems to distance itself from classic models in economics, is the **altruism that people include in their decisions**. Can you tell us more about that?

These methods show that, far from taking into account the consequences of their decisions only for themselves, most people also take into account the consequences of their decisions for others, either in a positive manner (through a form of altruism) or in a negative manner (through feelings of envy or competition): many people, for example, are sensitive to inequalities and would prefer to win a little less money if that would mean a more equal sharing of the wealth. These elements are crucial to understanding the social dimension of economic decisions: the composition of the group and the relationship of each person with the other group members, are very important in how the economy functions.

So the broad field of applications covered by these methods helps to explain why these methods are very popular in applied economics today, especially in responding to questions of public policy?

Of course! What experimental economics brings to the development of public policy is very important and remains undervalued by decision makers. There are two axes on which the experimental method encourages thinking about the formulation of public policy (1):

First, thanks to laboratory experiments, we can observe behaviours that result from different rules of the miniature economy that we create in the laboratory depending on the economic situation we are interested in. These rules are different modes of economic regulation designed to modify the decisions taken and to achieve a different equilibrium: unemployment benefits, for example, aim to assist in the search for jobs and to cover the risks involved in being out of work. When considering unemployment benefits, we must understand job-seeking behaviours in order to find the system that promotes the quickest possible return to work in the best possible jobs. **Lab experiments can perhaps be used as a testbed (2) to evaluate various public policy decisions** by observing the consequences of these rules.

Next, while experimental economics leads to better understanding of the determinants of economic behaviour, it also allows us to **reflect differently on the consequences of different kinds of public policy and to develop new tools of intervention**. To return to the example of unemployment benefits, recent research shows, for example, the limitations of degressive allocation schemes and sanctions based on return-to-work targets: for many people, the prospect of a future decrease in benefits has little effect on the return to work because it is too distant in time to be taken into account in job-seeking behaviour. It would be better to introduce short-term targets and to increase the number of levels, as they have a significant rebound effect on job-seeking behaviour.

What does this recent work add to your earlier publications on the subject?

Our previous book (3) focused on the methodological issues of experimental economics – how and why it emerged, its specific contribution to empirical knowledge in economics, and what we learn from the results it produces. This current work has a more practical aim, describing as precisely as possible the various useful methods for conducting laboratory experiments.

As I mentioned earlier, **experimental methods can be used in many social science practices, not just in behavioural economics**: they are proving useful for any approach that involves investigating the empirical content of what economics says about individual and strategic behaviour. So, this book was developed with the idea of making **available a French-language tool with which to appropriate these methods and make them more accessible**, especially for young researchers who would like to use them in the framework of empirical economics research.

- (1) See, for example, Samuel Ferey, Yannick Gabuthy and Nicolas Jacquemet, "L'apport de l'économie expérimentale dans l'élaboration des politiques publiques" *Revue Française d'Economie*, Vol. XXVIII (2), 2013, pp.155-194
- (2) This is, for example, what was done in the granting of 3G and 4G mobile telephone licences in the US, where they tested different bidding rules in order to verify what revenues would be generated for the state by allocating bids on the basis of different allocation rules. The laboratory experiments were used to develop a bidding system that was then used to grant the mobile phone licences.
- (3) Nicolas Jacquemet and Olivier L'Haridon, *Experimental Economics: Method and Applications*, 2018