



CREST

(Centre de Recherche en Economie et Statistique)

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A PRESENTATION OF CREST

CREST stands for the Centre de Recherche en Economie et en Statistique, which is the research centre of INSEE, the French statistical institute. There is a long tradition at INSEE of combining data collection and compilation and statistical and economic studies based on that data. Accordingly, a research group was created in 1968 and expanded considerably in the early nineties. CREST is closely linked with ENSAE and ENSAI, the two *grandes écoles* of INSEE. It consists of nine “laboratories” which specialize in statistics (three units), quantitative sociology (one unit), finance and insurance (one unit), and economics and econometrics (four units). This presentation focuses on these last four laboratories.

There is a total of about 80 research personnel in the four economics and econometrics labs. A little bit less than 20 are full-time researchers at CREST. 40 only do part of their research at CREST (usually one-quarter to one-half), some part-time researchers are members of INSEE ‘Département des Etudes Economiques d’Ensemble’. The last 20 are doctoral students. These 80 people work in rather varied areas of economics, both theoretical and applied; here is a list that is not exhaustive.

1. The main specialization of CREST researchers is microeconometrics. About half of them have ongoing work in this area. A small proportion of this work is econometric theory; most of it is applied microeconometrics.

a) The major area of application is labour economics and policy evaluation, here are some examples using various micro data:

- Evaluation of the 35-hour week law (referred to as Aubry laws) with respect to labour productivity and workforce changes (Bruno Crépon, Sébastien Roux).
- Evaluation of the introduction in 2001 of a reduction in the marginal tax rate (from 100% to 0 then 50%) for people who get income support RMI (minimum welfare payment given to those who are not entitled to unemployment benefit) and take on a job with respect to their labour supply (Marc Gurgand, Stéphane Gauthier, David Margolis).
- Evaluation of PARE-PAP reform (unemployment benefit reform) in which individual help is given to the unemployed but a set of constraints and penalties is

introduced for unemployed who refuse too many job offers or training periods. The cost of implementation is analysed in comparison with the change in the unemployment spell distribution and the characteristics of the jobs taken on by the unemployed (duration, salary,...) (Bruno Crépon, Denis Fougère, Marc Gurgand, Thierry Kamionka, David Margolis).

- Evaluation of “Delalande contribution” which introduces an extra tax in case of lay-off of workers over 50 with respect to the hiring and lay-off frequency of this age group (Luc Behaghel, Bruno Crépon) .

With John Abowd from Cornell University, Francis Kramarz from CREST has pioneered the use of matched employer-employee data. New models and techniques for this kind of data have been developed that allows for a better description of the relations between firms and workers (wage formation, inter and intra firm mobility,...) their respective heterogeneity taken into account (Moshe Bushinsky, Denis Fougère, Francis Kramarz, Thierry Kamionka).

b) Other works based on micro data relate to fertility, education, crime, the behaviour of the firm, public sector workforce management, or the econometrics of contracts and auctions. Here are some examples:

- Analysis of fertility and its sensitivity to money incentives, a choice model linking fertility and female labour supply is estimated (Guy Laroque, Bernard Salanié).
- Effectiveness of tax credit on Research and Development investment, a France-US comparison is carried out (Jacques Mairesse).
- In-house training policy and its impacts on productivity, mobility and wage formation (Marc Gurgand, David Margolis) .
- Description of the population of applicants to civil servant positions and its changes over the business cycle (Denis Fougère, Julien Pouget).
- Consequences of changes in the number of criminal offences in a given district on household geographic mobility (Denis Fougère, Francis Kramarz, Julien Pouget)

c) Some works are done in a time series approach with a particular emphasis on seasonal adjustment or the modelling of dynamic panels (Stéphane Gregoir).

2. CREST also does research in economic theory. Some of it is purely theoretical, but most of it has an applied character.

a) Recent examples in theory include :

- Analysis of the consequences of belief heterogeneity on the equilibrium properties with a special interest in asset pricing and risk sharing. An aggregation procedure allows for the construction of a representative agent in CCAPM in presence of heterogeneous beliefs (Jean-Michel Grandmont).
- Characterization of income distributions which are fiscally stable under majority voting (Jean-Michel Grandmont).
- Stability conditions of the rational expectation equilibrium in presence of learning (Stéphane Gauthier).

b) In a more applied perspective, numerous works deal with taxation, labour economics and various topics in industrial organization: the economics of insurance, the economics of deregulation, antitrust policy, and auctions.

- Optimality conditions of an indirect taxation scheme, it appears that under mild conditions, goods with different characteristics may have equal tax rates (Stéphane Gauthier, Guy Laroque).
- Characterization in an extensive labour force supply model of the optimal tax-subsidy schedule. In presence of an income guarantee provided by the welfare state, the tax schedule that maximize the government revenue provides a bound (Laffer bound) beyond which it is inefficient to tax. Under mild conditions, a feasible allocation is second best optimal if and only if the associated taxes are lower than this bound. An empirical analysis gives an estimate of the Laffer bound in the French case (Guy Laroque).
- Analysis of the impact of low-skill job subsidy policy in a dual labour market in presence of crowding out (Martine Carré, Stéphane Gregoir).
- Wage bargaining in presence of imperfect competition on the good market and research cost (Pierre Cahuc)

Recent scientometric studies that rank research centres in economics and econometrics put CREST at the second place in France (behind the Toulouse group) and, depending on the criteria used, among the first five or the first ten groups in Europe. It comes ninth in the world among the economics and econometrics research centres that do not belong to a University, behind the World Bank, FMI, the network of US Federal Reserves. Accordingly, we have a dense network of relationships with other European research centres, some of which are financed by contracts from the European Commission. Contacts with researchers on other continents are frequent but take place on a more individual basis. Finally, while CREST is part of INSEE, it also is associated to CNRS, the main French research network.

The Director of CREST

Stéphane Gregoir