



Call for Papers

Special Issue: Big Data, Statistics and Economics

Big Data include large datasets from the private sector (electronic payments, mobile phones signalling events, retail stores scanner data, electricity meters, geospatial data, ...), from the Internet, social networks, etc. They are often in less structured, higher dimensionality, frequency and granularity than standard datasets. These data provide new opportunities for statisticians and other social scientists to improve and expand the production of information, build new indicators and measures, deepen economic and social sciences research, and *in fine* to better inform policy-makers. These new data, most often available at detailed levels of geographical and temporal granularity, potentially concern a large number of areas in economics and social sciences: economic activity, short-term outlook and employment, consumers' purchases and prices, agents' well-being, wealth, poverty, housing, finance, etc.

At the same time, the use of these new datasets still presents technical and statistical challenges to address: beyond technical issues strictly speaking, using these data is an incentive to the development and improvement of methods of data analysis, such as machine learning, textual analysis or network analysis, in association with econometric modelling. These new data also raise many issues, especially about the influence they might have on the representation and analyses of the society and of social and economic interactions as well as the implications for data quality, privacy and ethics.

In this context, European National Statistical Institutes (NSI) have launched several projects on Big Data, together with university researchers, experts from various institutions and research centers. In France, INSEE, the National Institute of Statistics and Economics Studies, is currently working on the use of scanner data to compute the consumer price index and has launched other projects, in cooperation with research centers and other statistical services. More generally, a number of initiatives, involving international organizations, national administrations, think-tanks and researchers from diverse disciplinary backgrounds, are also investigating various issues related to the use of these data, from the development of subjective measures of well-being (from OECD) to identifying the risks inherent to digital data-objects.

Economie et Statistique, the scientific journal published by INSEE, calls for articles for an upcoming special issue "Big Data, Statistics and Economics". We welcome articles presenting either:

- 1) Relevant applications making use of original Big Data (scanner data, mobile phones data, Google Trends, etc.) for (official) statistics, economic or social analysis;
- 2) New statistical or econometric methods well suited for these new data.

This special issue will be coordinated by a scientific committee composed of:

Vincent Aguiléra (Ecole des Ponts ParisTech and CEREMA)

Arthur Charpentier (University of Rennes 1)

Piet J.H Daas (CBS (Statistics Netherlands))

Pauline Givord (INSEE and CREST)

Michel Juillard (Banque de France)

Pierre Lavallée (Statistics Canada)

Fabrice Murtin (OECD)

Fabrice Rossi (SAMM, University Paris 1 Panthéon-Sorbonne)

Evelyn Ruppert (Goldsmiths, University of London)

Monica Scannapieco (Istat)

Claudia Senik (Paris School of Economics)

Patrick Sillard (SoeS, Commissariat général au développement durable, Ministère de l'Environnement, de l'Energie et de la Mer)

Michail Skaliotis (Task Force-Big Data, Eurostat)

Important Dates

- Authors are invited to submit an abstract to *Economie et Statistique* (redaction-ecostat@insee.fr), no later than **January 20, 2017**.
- Abstracts will be selected by the scientific committee. Authors will be notified on **February 15, 2017**.
- The full papers are expected by **end July 2017**; they will then be submitted to the usual review process.

The articles of this special issue will be published both **in French and English**. The abstracts and full papers can be written in French or in English.

Ms. Laurence Bloch
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