

Statistical use of administrative data in the context of the big data revolution

Topic 1 – Bringing in information from where we can get it

Keywords: administrative data; big data; confidentiality; ethics; microeconometrics; impact evaluation

Introduction

This presentation argues that the European statistical community, and the European society at large, can reap substantial benefits from direct, secure access to administrative micro-data for research purposes. Digitally available administrative records collected on a wide range of activities of citizens (academic participation and outcomes, employment, earnings and retirement, health care services, demographic events, etc.) seem to offer radical improvements for micro-econometric statistical research by overcoming the limitations of survey-based studies.

Administrative micro-data, especially when combined with other sources of big data, and the use of advanced methods for statistical analyses offer unprecedented insights into social processes, thereby strengthening evidence-based policy making. At the same time, the "net" social benefits depend on the ability to ensure that concerns of privacy, and confidentiality are fully respected.

Methods / Problem statement

We discuss the key issues at stake in the debate revolving around the access to administrative data for research purposes. Attention is paid to the ethical as well as technical aspects of access, and issues of governance.

Results / Proposed solution

Rather than offering prescriptions, the purpose of the presentation is to highlight best practices (the case of the Danish system), as well as present questions and highlight potential pitfalls.