

## CIRET pre-Conference Workshop

### Big Data for Economic Statistics: Challenges and Opportunities

Tuesday, 11 September 2018, Rio de Janeiro, Brazil

#### Draft Concept Note

##### **Background**

Due to the pervasiveness of the use of electronic devices and the all-around generation and availability of digital information of the past few decades, there has been a fundamental change in the nature of data, which are now generated continuously and in enormous quantities, and which are referred to as *big data*. They have highly distinct qualities that differentiate them from conventional-source data. The data from these innovative sources achieve a high level of distribution and are loosely structured, large in volume and often available in real time. Big data are data sources that can be described as: “high volume, velocity and variety of data that demand cost-effective, innovative forms of processing for enhanced insight and decision-making”.

Big data have the potential to produce relevant and timely statistics. Big data can complement or, in some cases, replace traditional sources of official statistics, such as survey and administrative data sources. Users are increasingly relying on big data as additional data source on a regular basis for the compilation of selected statistics especially in the area of high frequency statistics and rapid estimates. There is ongoing research on best ways to harness information from Big Data for better and faster analysis of current and future trends in the economy, society and environment.

However, there are also many challenges with big data. Most sources of big data reside in the private sector, and legislation designed to permit the use of big data for official statistical purposes has not yet been promulgated in most countries. Therefore, further broad-based dialogue is needed to consider not only legal, confidentiality and perception issues, but also the subject of the timely, trustworthy and credible use of big data. By incorporating big data sources into the production of official statistics and in modelling of research institutions, national, regional and international statistical organizations could be better positioned to provide statistics on the economy, society and the environment in terms of improved timeliness and cost-efficiency, and a lessened resource burden.

##### **Objective of Workshop**

The Workshop aims to review successful examples of the use of big data for research analysis and for official statistics and to discuss how statistical offices, research institutes, technology companies and data owners can collaborate in this area in a mutually beneficial way in a changing world.

##### **Organization of the Workshop**

This workshop is jointly organized by the United Nations Statistics Division (UNSD), the Getulio Vargas Foundation (FGV), and the KOF Swiss Economic Institute in collaboration with the Brazilian Institute of Geography and Statistics (IBGE).

The workshop is organized in two sessions. The morning session will feature examples of uses of big data in official statistics and in research institutions to give an overview of current uses of big data. The afternoon session will feature presentations by big data providers, users and enablers on ways collaboration can be established and maintained in this area.

A final panel discussion on the challenges and benefits of big data for economic and business cycle analysis with presenters will conclude the workshop.