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A Standard Tool for Metadata Quality Assessment of External Sources in the Statistical Production (QmetaTool)

P. 229-237

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Resumen

Knowledge and documentation of the source is vital to help us to use external data in the statistical production. A practical tool (QmetaTool) has been developed for these purposes and gathers the basic aspects to take into account in any use of external data in the statistical production. The issues are based in the state of clarity in the definition of units, time reference, geographical scope and variables (with their classifications and codifications). Clarity in the communications of changes in these definitions are evaluated too. Furthermore, the metadata assessment is focused on clarity in the description of checks and modifications in the database made by the owner. The last aspect is the state of knowledge in the existence of unique keys or a combination of variables that can be used to identify the populations units of microdata. This standard tool (QmetaTool) offers the possibility to be used in any statistical operation fully or partial based on external sources. The time spent in the implementation of the tool is minimized and there is a graphical output for the overall situation of the metadata in the external data source. Just one assessment is needed by each source (no matter how many uses are made) and it can be implemented from any origin (public or private sector) and even in the use of big data for statistical purposes.

Statistical quality by design: certification, rules and culture

P. 239-251

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Resumen

International law, international regulations, national law, specific statistical regulations, Code of Practice, Privacy, ISO 27001 and ISO 9001. These are some of the 'rules' that National Statistical Institutes have to work with. In this paper we look at the why and how of these rules: why should we follow these rules, how to manage these rules and how to transform them into practice. Even if an NSI complies with all principles of the Code of Practice for European Statistics, it is still necessary to have external proof of commitment to process and product quality as well as to privacy and security. We argue that to achieve and to communicate quality of official statistics, it is essential that national statistical institutes adopt some system of quality by design, i.e. formal quality certification, e.g. ISO or EFQM. Such an external proof is necessary in order to maintain public trust in statistics. But quality does not come by itself. The statistics that are actually produced, must have sufficient quality. So we also need a quality culture that provides a production and work environment in which quality is embedded. In essence, the quality culture should be based on the principles that the staff of NSIs are professionals and are responsible for the quality of their products. But their main task is to produce statistics, not to understand all those rules mentioned before. Therefore the only way to make them involved is to make them the real owners of quality; this should be our goal for the years to come. It requires embodiment of the quality culture in work processes, management, and guidelines, based on Total Quality Management and plan-do-check-act cycles.

A systematic approach to quality: the development and implementation of a

P. 253-261

quality management framework in the Central Statistics Office, Ireland

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Resumen

In the context of increasing and more formal scrutiny of official statistics at international and EU level and having regard to our goal of the continuous improvement of our statistical processes and products, the Central Statistics Office (CSO) Ireland launched a Quality Management Framework (QMF) programme of improvement projects in January, 2014. The development of the QMF is an extensive and long-term programme of activities, which will ensure that statistical production meets the highest standards as regards quality and efficiency. The project focuses on the issues of standardization and storing of documentation in a central repository based on the principle of updating documentation once and reusing it multiple times for different products such as section manuals, quality reports, etc. It includes a system of metrics for data quality and internal processes, metadata standards, strong documentation control and other important internal governance elements. The project extends the use of systematic process improvement programmes to streamline, standardise, document and build robustness into our core processes of data collection, management, compilation, analysis and dissemination. This paper will tell the story of the development of the QMF from how it was initiated to its current status where it transitions from planning to implementation. It will highlight the challenges faced by the quality team including the importance of identifying and implementing quick wins at an early stage, while keeping in mind critical success factors through the lifespan of the implementation pilot. The planning phase of this project was completed in November, 2015 with the implementation phase starting in January, 2016.

Enhancing the Foundation of Official Economic Statistics with Big Data

P. 263-271

Brian Dumbacher, Rebecca Hutchinson

Resumen

Official economic statistics produced by the United States Census Bureau have long served as a high-quality benchmark for data users. To maintain this quality and enhance the foundation of its economic programs, the Census Bureau has begun exploring the potential of Big Data sources such as credit card transaction data, point-of-sale data, and publicly available building permit data. While this type of data may allow the Census Bureau to improve the timeliness, geographic detail, and product-line coverage of its economic data products, there are concerns such as methodological transparency and consistency of the data. This paper covers the Big Data findings that the Economic Directorate of the Census Bureau has discovered so far as well as the Directorate's Big Data vision for the future.

¿Qué ha sucedido con el consumo y el ahorro en España durante la Gran Recesión? Un análisis por tipos de hogar

P. 273-311

Julio López-Laborda, Carmen Marín-González, Jorge Onrubia-Fernández

Resumen

El objetivo de este trabajo es analizar, desde una aproximación microeconómica, cómo se han comportado el consumo y el ahorro de los hogares españoles durante la reciente Gran Recesión. Para ello, se ha realizado una fusión estadística entre la Encuesta de Presupuestos Familiares (EPF) y la Encuesta de Condiciones de Vida (ECV). El análisis realizado ofrece información sobre la evolución de las propensiones medias al consumo y al ahorro de los hogares españoles para cada año del período 2007–2015, por niveles de renta disponible, por tipos de hogar y según la fuente de renta mayoritaria.

Evaluación de autores científicos: dos sistemas estadísticos actuales

P. 313-324

Mariano Ruiz Espejo

Resumen

Este artículo presenta un conjunto de análisis y experiencias en torno a dos fuentes de citas de autores, como son las de Google Scholar (Google Académico) y Research Gate. Ambos recursos de internet proporcionan información de las

citas de los autores registrados y profesores universitarios en sus plataformas gratuitas en línea. Llegamos a la conclusión de que no son fuentes fiables actualmente para la toma de decisiones académicas o de acreditación de profesores de universidad o de investigadores, ya que presentan unos datos que no se corresponden biunívocamente con la realidad y no son fuentes objetivas de datos.

Ciencia e idealismo en estadística

P. 325-332

Mariano Ruiz Espejo

Resumen

En este artículo se explican algunas razones por las que el autor justifica que la ciencia estadística debe ser algo más que solo ideas sin una base real completa desde la lógica racional hasta una puesta en práctica coherente explicada con amabilidad. Indicamos puntos de idealismo en la estadística actual. Algunos ejemplos son sugeridos para explicar estas incoherencias, como inferencia clásica, inferencia bayesiana, estadística descriptiva, teorema central del límite y distribución normal en el contexto práctico. Presentamos también algunos límites a estas teorías y prácticas desde la revelación cristiana y judía. Hacemos una selección de trabajos del autor en los que ofrezco soluciones a problemas clásicos y dando soluciones objetivas a estos problemas estadísticos en artículos y libros seleccionados. Algunas conclusiones son deducidas de la exposición, en concreto en la docencia y en la investigación de la estadística.

El consenso como medio de acuerdo de expertos

P. 333-341

Mariano Ruiz Espejo

Resumen

En este artículo mostramos varios procedimientos de consenso, en total diez, para el acuerdo de personas expertas (o no expertas) en diversas áreas de la actividad humana. Describimos algunos de esos procedimientos y damos noticia o referencias de algunos otros procedimientos que han sido aplicados para alcanzar acuerdos en asistencia sanitaria, educación, cultura, comunicación, deporte, religión, etc. Es posible llegar a acuerdos entre expertos de las distintas profesiones una vez descritos varios procedimientos de ellos y su alcance en las decisiones.
