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Editorial

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1. Embracing Open Access and FAIR Publishing Principles[1]

In the rapidly evolving landscape of scholarly publishing, with the emergence of "citation cartels"[2] and a fast-growing number of 'predatory' journals,[3] the Statistics Journal of the International Association of Official Statistics (SJIAOS) stands out as a vital platform for the dissemination of research and best practices in official statistics by publishing articles that promote its understanding and advancement and that foster the provision of effective and efficient official statistical services on a global basis. In this role, the journal faces a pivotal moment in its journey, considering the recent trends in scientific publishing, including the increasing popularity of Open Data and FAIR (Findable, Accessible, Interoperable, and Reusable) publishing principles.

This editorial delves into the complexities of applying these principles to the SJIAOS and proposes transformative steps to further improve its openness and accessibility. The FAIR principles, conceived to guide the transformation of digital resources into entities that are Findable, Accessible, Interoperable, and Reusable, provide a roadmap for enhancing the impact and use of published research. However, their adoption is neither straightforward, nor sufficient to achieve full openness. On the other side, transitioning to a business model that provides free and open access to all published articles, while aligning with the objective of democratizing knowledge, raises practical problems, particularly in terms of financial sustainability. In this editorial, we outline a comprehensive vision for the SJIAOS to actively incorporate Open Data and FAIR principles, fostering a culture of openness, collaboration, and reproducibility. At the same time, we explore the feasibility, benefits, and potential pitfalls of such transition, and propose alternative mechanisms for resource recovery that would not burden authors, especially those not institutionally supported, such as young statisticians, freelance consultants, retirees, and experts from developing countries.

FAIR publishing

The first principle of FAIR publishing is Findability. The SJIAOS already ensures that published articles are assigned unique and persistent identifiers (DOIs) but it should also ensure that datasets associated with articles are findable and accompanied by rich metadata. This metadata should be structured and standardized, making it easy for both humans and machines to discover the datasets. Moreover, integrating a data citation policy within the journal's guidelines would be crucial. Researchers should be encouraged to cite the datasets they use, providing proper attribution to data contributors and promoting a culture of recognition for the effort put into data generation.

Accessibility is the second pillar of FAIR. The SJIAOS should commit to providing open and free access to datasets through reliable repositories. A partnership with established data repositories or the development of a dedicated repository affiliated with the journal can ensure the accessibility of data associated with published articles. Moreover, the journal can advocate for the development and adoption of data access policies and request authors to share their datasets openly, aligning with the broader movement toward Open Science.

Interoperability, the third FAIR principle, involves making data compatible with various tools, platforms, and workflows. The SJIAOS could contribute to interoperability by endorsing and encouraging the use of standard data formats and controlled vocabularies. Ar-

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[1]The content of this editorial builds on the author's intervention as discussant at the Invited Paper Session "New developments in science publishing in Official Statistics" of the last ISI World Statistics Congress in Ottawa.

[2]https://www.science.org/content/article/citation-cartels-help-some-mathematicians-and-their-universities-climb-rankings?utm_source=Live+Audience&utm_campaign=e38e4df02f-briefing-dy-202401231&utm_medium=email&utm_term=0_b27a691814-e38e4df02f-49187095.

[3]Sarah M. Ward: "The Rise of Predatory Publishing", Weed Science, Vol. 64, No. 4 (October-December 2016) https://www.jstor.org/stable/26420746

ticles are currently locked up in PDF format and there are no guidelines or standard vocabularies for titles and keywords. The journal should promote the use of widely accepted standards in the field by publishing interactive pdf files, which ensure virtual access to referenced datasets, graphs, and tables through hyperlinks, and by providing clear guidance to authors on data formatting and text structures. This not only facilitates interoperability but also makes the content of the published articles actually usable and comprehensible, even across diverse research communities.

Reusability, the fourth and final pillar of FAIR, should be the ultimate goal of scientific research and scientific publishing. The SJIAOS could play a pivotal role in maximizing the reusability of data and articles by enforcing stringent guidelines on comprehensive documentation. Authors should be encouraged to provide detailed information about their datasets, including the methodology, variables, and data collection processes. In addition, the journal could make the current blind peer-review process more stringent, specifically for data quality. This process would assess the completeness and clarity of dataset documentation, ensuring that published datasets are not only findable and accessible but also usable for subsequent research.

One of the key challenges in implementing the four FAIR pillars and the 15 associated guiding principles is that they are subject to diverse interpretations and that different research communities adopt their own implementation modalities, leading to a multitude of solutions that are not comparable. Moreover, different digital assets (e.g., datasets, software, and digital articles) require different implementation modalities. This diversity hampers, in particular, data interoperability and reusability, which are the most challenging principles to apply.

Despite these challenges, the SJIAOS should enhance its accessibility, interoperability, and reusability, in alignment with the FAIR principles. Several practical steps have already been mentioned while reviewing the FAIR principles, but they can be summarized as adopting stringent citation, metadata documentation and open access policies for datasets associated with articles; coding each manuscript with a set of keywords for easier classification and comparison; and, lastly, ensuring virtual access not only to papers but also to referenced data sets, graphs, and tables through hyperlinks.

Open data

Focusing now on open data, it is essential to recognize that FAIR and "Open Data" principles are not synonymous. FAIR does not mandate completely open and free access to scientific content; it just emphasizes the importance of making data findable, accessible, interoperable, and reusable for machines.

It should be noted, for example, that FAIR guiding principles such as A1.1 (open protocol for data access) or R1.1 (requiring a license to access digital assets without specifying their type) do not necessarily advocate for complete openness of the research content; just for the protocol or the license to access data. Digital articles usually have access restrictions based on ethical, legal, or contractual constraints, yet may still exhibit a high level of FAIRness if data and metadata are digitally accessible.

Open data policies, on the other hand, focus on making data open by default. However, many existing metadata standards for statistical datasets do not fully align with FAIR principles. For instance, the SDMX Guidelines lack instructions on generating globally unique identifiers for metadata and on referring to machine-understandable reuse licenses and therefore need to be updated to address the FAIR principles adequately.

The primary argument for embracing the open data movement lies in its potential to democratize knowledge. By removing paywalls and subscription fees for users, research becomes freely accessible to anyone with an internet connection, breaking down barriers that hinder information flow.[4] Open access aligns with the core principles of scientific research – the dissemination of knowledge for the advancement of societal welfare.

Open access facilitates the broader dissemination of research findings, fostering global collaboration. Researchers from developing countries, where institutional subscriptions are often a financial burden, gain equal access to cutting-edge research. This inclusivity can lead to a more diverse and robust scientific community, benefiting from a wide range of perspectives and methodologies.

Lastly, open access increases the visibility and impact of research. Articles that are freely accessible tend to receive more citations, contributing to the academic impact of the journal. This increased visibility can attract a wider readership and a larger pool of contributors, potentially increasing the influence and reach of the SJIAOS in the global statistical community.

[4] Chun-Kai (Karl) Huang, Cameron Neylon and Lucy Montgomery: "Open access works – 420 million citations show OA outputs are cited by more researchers from more places", at http://blogs.lse.ac.uk/impactofsocialsciences/2024/01/30/open-access-works-420-million-citations-show-oa-outputs-are-cited-by-more-researchers-from-more-places/.

Despite recent progress at the global level in the adoption of open data policies, demonstrated by the increase in the global Open Data Inventory (ODIN) score,[5] the move to a completely free access model has been slow both in national and international statistical organizations. Several challenges impede the realization of the "open by default" principle, including concerns about privacy, commercial use, and inequalities.

Open data policies must navigate the delicate balance between transparency and the safeguarding of citizens' rights to privacy. Inadequate data privacy and protection governance in many countries discourages or prevents data dissemination and sharing. In line with the protection of privacy and confidentiality, the SJIAOS should establish and enforce clear guidelines for authors to anonymize data effectively, minimizing the risk of re-identification. Additionally, the journal should facilitate a transparent and open dialogue on the ethical implications of Open Data, acknowledging at the same time the cultural and legal differences regarding data sharing across countries.

Fears that open data may benefit large companies and exacerbate inequalities often lead to data licenses preventing commercial use. On the other hand, it should be recognized that limiting commercial use might hinder innovation and create more inequalities. A global position of the UN System on open data licenses could provide a cohesive framework to address this issue.

But more importantly, at present the focus on open data is limited to statistical datasets, leaving a gap in addressing the analytical products derived from these datasets. The "open by default" principle should extend beyond statistical data to cover analytical products generated from them, such as scientific publications.

Access to the journal

Over the last five years, the SJIAOS has made great strides to increase the proportion of published articles that can be accessed for free by any user. Five full issues and two special topics' sections have been sponsored by international or regional organizations. In addition, five full issues and the annual section dedicated to the winners of the Young Statisticians Award have been given free access based on the ISI-IOS Press publishing agreement. This agreement has also ensured that one article per issue selected by the editor-in-chief (plus the editorial and the discussion) has been made freely available. Lastly, the IOS Press has generously decided to sponsor the accessibility of all articles concerning the impact of COVID-19 (around 70 manuscripts since March 2020). In summary, during the last five years, the journal has provided free access to over 60% of the total number of published articles.

Regarding open access,[6] the journal offers all authors the option to purchase open access publication for their article so that the final published version becomes freely and indefinitely available to anyone worldwide, under a Creative Commons license. The open access fee of an article is waived completely in a few cases when the IOS Press has a formal agreement with the corresponding authors' institution. These agreements in addition to giving authors unlimited open access publishing, also allow staff from eligible institutions to get access to research published in IOS Press journals.

To advance towards fully free and open accessibility, the journal should undergo transformative changes in its business model. A radical proposal is for the SJIAOS to transition to a fully open access model. By earning a scientific rating and making access completely free and open for readers, the journal could significantly enhance its impact and outreach. However, this transition requires addressing the challenge of cost recovery for the publisher.

The primary challenge in moving to a freeaccess model is financial sustainability. The traditional publishing model relies on subscription fees or article access charges to cover operational costs. Eliminating these fees could result in a significant loss of revenue for the SJIAOS, jeopardizing its ability to maintain editorial standards and ensure the overall quality of published content.

The emerging model of charging authors for publication, on the other hand, could probably reduce the number of contributions, especially from young statisticians, freelance consultants, retirees, and authors from developing countries. This raises ethical concerns regarding inclusivity and the potential exclusion of voices from non-institutionalized groups of statisticians. Therefore, a careful and equitable strategy is required to recover lost resources without creating barriers to entry. In this context, the special position of the SJIAOS as the flag-

[5] Francesca Perucci and Eric Swanson: "Building Trust and Facilitating Use of Data", included in this issue of the journal.

[6] Open access can be distinguished from free access as it is formally licensed (CC BY-NC 4.0) providing the unlimited possibility to anyone to read and reproduce the content. This means open access content will always be free to read and requires no permission to reuse (unless for commercial purposes).

ship journal of the ISI/IAOS and not a normal academic journal, should be taken into account.

The SJIAOS could explore different potential solutions for resource recovery. Firstly, the partnerships now occasionally established with international and regional statistical institutions could be turned into structural partnerships and extended to national statistical institutions. These institutions could be asked to pay an annual membership fee, on the basis of a shared commitment to open access and the advancement of statistical knowledge, which would benefit not only their staff but all official statisticians. In this way, the journal could secure at least most of the required financial support to offset the costs of publication. Moreover, these partnerships could potentially not only enhance the journal's financial resilience, but also its access to data repositories, statistical software, and expertise, contributing to a more interconnected and collaborative research environment.

The implementation of a differential fee structure, where institutions from economically developed regions contribute more to support open access, can be a fair and effective further refinement of this approach. In this way, economic disparities among institutions and countries would be acknowledged while ensuring that financial contributions were aligned with their respective capacities.

In addition, external funding through grants and funding opportunities from foundations and government agencies that support open access to scholarly publishing and equitable knowledge opportunities, could be another avenue for resource recovery actively pursued by the SJIAOS, being always mindful of potential conflicts of interest. Grant funding could be earmarked for specific initiatives, such as supporting the publication of research from developing countries or underwriting the costs associated with high-impact, socially relevant studies.

Lastly, engaging directly with the IAOS community through an open membership program, linked to the voluntary payment of a separate membership fee (from the one already paid to the IAOS) to be transferred to the publisher could provide an additional alternative source of financial support. A community-supported model relies on the collective commitment of official statisticians, institutions, and stakeholders to fund the journal's operations. This approach fosters a sense of ownership among contributors and readers, transforming the journal even more into a community-driven platform.

As the SJIAOS rethinks its role in the rapidly evolving landscape of scholarly publishing, the adoption of FAIR principles and a transition toward full open access become a necessity. Navigating the complexities of implementing the FAIR principles requires investment in the adoption of convergent standards and platforms as well as a commitment to provide free access to the full content of the journal, including its associated digital resources. On the other side, the proposal to transition the SJIAOS to open access for all published articles and associated digital resources, while ambitious, aligns with the spirit of equal access to knowledge and promotion of global collaboration in scientific research. The challenge lies in finding sustainable models for resource recovery that do not impact authors, particularly those not supported by statistical or research institutions.

To navigate this transition successfully, the SJIAOS should explore a combination of innovative resource recovery approaches. Partnerships with national and international statistical institutions, differential membership fees, grants and funding opportunities, and statistical community support are potential avenues that can be pursued alongside each other. By adopting a multifaceted strategy, the journal can mitigate the risk of financial strain, ensure inclusivity in authorship, and maintain the high standards of scholarly publishing.

The journey toward open access is a collective effort that requires the collaboration and commitment of the entire community of official statisticians. In finding a balance between financial sustainability and accessibility, the SJIAOS can contribute to a more equitable and interconnected landscape of statistical research.

2. The content of this issue

2.1. Statistical leadership

This issue of the SJIAOS starts with an article reporting on a panel discussion held at the last ISI World Statistics Congress in Ottawa.

In the article "Reflections on Statistical Leadership: Summary of a Panel Discussion at the WSC" Stephen Penneck (Former President ISI and Former Director General, Office for National Statistics, UK), John Bailer (Dept. of Statistics, Miami University, USA and Former President ISI), Ed Humpherson (Director General of Regulation, UK Statistics Authority), Mariana Kotzeva (Director General, Eurostat) and Denise Silva (National School of Statistical Sciences, Brazil & ISI Vice-President) share their insights and experiences by responding to five key questions on statistics leadership. Firstly, is leadership just needed by top management

or do all statisticians have a role? Secondly, do statisticians naturally make good leaders? Thirdly, did you work for people who were not good leaders? Fourthly, is it harder for women and for other under-represented groups to become leaders? And finally, what message do you have for young statisticians aspiring to leadership roles? In summary, the panelists stressed the collective responsibility of leadership for statisticians at all levels, the importance of continuous skill development, the positive influence of role models among managers, the challenges faced by under-represented groups and the need for promoting inclusivity, and, lastly, offered valuable advice for statisticians aspiring to attain leadership positions in academia, business, industry, and government.

2.2. *Register-based Population Statistics (by Jean-Michel Durr)*

This section of the journal focuses on the constant evolution of Population and housing censuses to reduce costs, improve data quality, and shorten processing times. The latest rounds, in 2010 and 2020, saw the widespread use of geographical information systems and electronic data collection techniques, using tablets in the case of collection by interviewer, or web-based in the case of self-response. In addition, countries are increasingly resorting to the use of administrative sources to supplement or even replace traditional data collection. While the exercise is made easier by the presence of a population register, as in northern European countries, the absence of such a register means that several administrative sources must be cross-checked. This raises issues of record linkage, matching and decision-making in the event of discrepancies between sources. Advanced data science techniques are increasingly used to address these issues. The following three articles illustrate these developments.

The first article in this section is "A register-based statistical system in New Zealand: progress and opportunities" by Celeste Cutting, Michael Alspach, Sarah Cowell, Michael Judd, Simon McBeth, and Mathew Page (all from Stats NZ). This paper outlines Stats NZ plans to move to a register-based statistical system, in line with its new strategy to give priority to administrative data. As observed in other countries, the main drivers of this development are the rising cost of surveys and the growing reluctance of the population to provide information to government institutions, particularly on the part of minority groups. The 2022 new data legislation that allows Stats NZ to request data from public sector agencies for producing official statistics will facilitate the shift to a registers system. However, the use of administrative data requires transparency towards the public on how their data is used, otherwise public trust in the statistical office could be seriously affected. Stats NZ is currently determining the best approach to engaging with the public to evaluate its acceptability and shape the project accordingly. In particular, the organization will work with Māori to include indigenous voices and experience in the design of the register system. It is well established that such a system is based on three main registers: an address register, a business register, and a person register. New Zealand's business register is the most mature, while the location register, set up from the previous censuses, will be based on property, not address. The person register will be developed and updated using vital events, tax data and other administrative data.

The second article is "Address Matching Using Machine Learning Methods: An Application to Register-Based Census" by Zahra Rezaei Ghahroodi (School of Mathematics, Statistics and Computer Science, University of Tehran), Hassan Ranji and Alireza Rezaee (Statistics Centre of Iran). The paper presents an application of machine learning techniques to match a statistical address to a postal address in Iran, to establish a link between register-based censuses and traditional censuses. Following the example of other countries, Iran has decided to implement a register-based census in the coming years. To maintain continuity of results with the traditional census at the smallest possible geographical levels (blocks and villages), it requires linking the statistical code of these areas, as maintained by the Statistical Centre, and the Geocoded National Address File (GNAF) of the National Post Company of the Islamic Republic of Iran. Since there is no unique identifier to directly map the records from the two different databases, text-based machine learning was used. Based on the postal addresses of 68% of the postal geocodes already matched with statistical block codes, supervised machine learning models were used to predict the most probable statistical code or statistical address of each of the new or unlinked postal addresses. Seven different methods were tested and two methods of combining duplicate-based approaches for different levels of aggregation and combining duplicate-based approaches with a nonlinear support vector machine appear to be the two best-performing methods.

The third article is "Comparisons of administrative record rosters to census self-responses and NRFU household member responses" by Mary Mulry, Cristina

Tello Trillo, Vincent Mule and Andrew Keller (all from the U.S. Census Bureau). The study shows how the use of administrative data can improve the coverage and process of the traditional census. For the 2020 census, the U.S. Census Bureau created household rosters from administrative records (AR) to reduce the cost of enumerating addresses for which no response has been obtained, whether by mail, telephone, or internet, instead of sending field staff to the address in question. However, the pandemic caused delays in the supply of tax files, with the risk of a mismatch with the situation on the ground. The Census Bureau therefore investigated the quality of the AR rosters and their suitability to supplement field enumeration. The analysis focused on addresses that had both an AR roster and a census roster and examined whether the two files agreed in terms of household size. The results show that administrative records can improve census enumeration methodology and will be useful for planning the 2030 census. The Census Bureau will continue its research to identify important factors in the creation of AR lists for census enumeration and to refine the methods used in the construction of AR lists.

2.3. New Developments in Science Publishing in Official Statistics

This section reflects the discussion that took place at the last ISI World Statistics Congress in Ottawa, in the Invited Paper Session "New developments in science publishing in Official Statistics", organized by Pieter Everaers, at the time Editor-in-Chief of the SJIAOS. In the dedicated section of the journal, Pieter provides a guest editorial and an introduction to the four papers presented at that session. In "Open Science and the Impact of Open Access, Open Data, and FAIR Publishing Principles on Data-driven Academic Research" Gaby Umbach (Robert Schuman Centre for Advanced Studies, European University Institute) offers a conceptual discussion on the four academic openness paradigms, their meanings and interrelations, as well as potential benefits and challenges arising from their application in data-driven research. In "Building Trust and Facilitating Use of Data", Francesca Perucci and Eric Swanson (both from Open Data Watch) identify key factors that promote expanding open data adoption: the modernization of data governance, the increased importance of citizens' contribution to data production throughout the entire value chain and the work of watchdog organizations monitoring the progress of countries and agencies. In "Open Data Dissemination at Eurostat – State of the Art" Christine Laaboudi, Martin Karlberg, and Maja Islam (all from Eurostat, European Commission) describe the new Eurostat approach to open data dissemination, the challenges faced, and the initiatives undertaken to adopt a Linked Open Data approach. Finally, in "Open and FAIR: Trends in Scientific Publishing and the Implications for Official Statistics" Gregory Arofan (CODATA) makes the case for a greater involvement of the official statistics community with the FAIR movement and initiatives and lists a series of projects and activities that provide a starting point for any specific organization that wishes to evaluate its value.

2.4. Miscellaneous topics

In this section the wide variety in the nature of the studies mirrors the richness and breadth inherent to the methodological research carried out in statistical and academic institutions. The focus of the papers ranges from testing the multivariate distributional accuracy of state-of-the-art imputation methods to introducing an open-source tool for efficient computation of Kantorovich-Wasserstein Distance between spatial distributions; from assessing data quality in blended data on three health-related case studies to proposing a new methodology for measuring inflation in Kazakhstan; from analysing grape farm efficiency in Armenia to highlighting the mutual benefits of establishing partnerships between NSOs and academia. These diverse papers, either proposing new tools and methods, or applying them to a variety of use-cases or domains, offer valuable insights that significantly contribute to the field of official statistics.

The first paper in this section is "Assessing the multivariate distributional accuracy of common imputation methods" by Florian Dumpert (Federal Statistical Office of Germany), Maria Thurow, Burim Ramosaj and Markus Pauly (all from Dortmund University, Germany). This study evaluates the ability of six state-of-the-art imputation methods to replicate multivariate correlations and distributions, using the anonymized data set of the Structure of Earnings Survey 2010 provided by the Federal Statistical Office of Germany. Through a comprehensive simulation study, the paper provides initial insights and practical recommendations for researchers and practitioners seeking informed choices in their analyses. Out of the six approaches, two stood out as those showing the best performance: the Multivariate Imputation by Chained Equations, which uses multiple imputation techniques to fill in the missing data and then combines the results to produce a final imputed

dataset; and the Random Forestbased imputation. Findings emphasize the importance of assessing the multivariate distributional accuracy of imputation methods and contribute valuable insights for their effective application.

The second paper is "The Kantorovich-Wasserstein Distance for spatial statistics: the Spatial-KWD library" by Fabio Ricciato (European Commission, Eurostat) and Stefano Gualandi (University of Pavia, Italy). The paper introduces the Spatial-KWD, an open-source tool for efficient computation of the Kantorovich-Wasserstein Distance (KWD) between spatial distributions. KWD measures dissimilarity between histograms of non-negative variables, useful in spatial statistics for assessing spatial distribution similarity. Spatial-KWD, overcoming previous computational challenges that prevented the computation of the exact value of KWD for very large maps. Spatial-KWD can be used to perform model-to-data comparison or to quantify the temporal changes in the spatial distribution of physical or social quantities, similarly to what is being pioneered in several Earth Science fields. The authors encourage the statistical community to use the tool and provide feedback for further development. Future work may explore Wasserstein distance as a summarization tool for sets of spatial distributions, particularly in the context of pattern recognition and spatial statistics.

The third paper "Evaluating data quality for blended data using a data quality framework" is by Jennifer Parker (U.S. Department of Health and Human Services), Lisa Mirel (National Science Foundation, USA), Phillip Lee, Andrew Tungate, Ambarish Vaidyanathan (all from the U.S. Department of Health and Human Services) and Ryan Mintz. This paper discusses the application of the U.S. Federal Committee on Statistical Methodology (FCSM) Framework for Data Quality to blended data, focusing on three health-related case studies. The study reveals that data quality assessments are more complex in practice than anticipated, emphasizing the importance of documentation expert guidance. Another key finding is that each data quality dimension may not be equally important for different uses, and assessments can be subjective. While quantitative tools could aid in explaining results, they may be tied to the dataset's intended use. Finally, for some threats to quality there are common trade-offs and mitigations among quality dimensions. The paper suggests that further evaluations and testing are needed to enhance the understanding of the FCSM Framework's applicability to specific use-cases. The work underscores the significance of assessing and communicating data quality in blended data for informed policymaking.

The fourth paper is "Analysing Grape Farm Efficiency in Armavir Region (Armenia) by Using a Two-Stage Empirical Approach" by Hovhannes Asatryan (M. Kotanyan Institute of Economics, National Academy of Sciences, Yerevan), Vardan Aleksanyan (Faculty of Economics and Management, Yerevan State University), Samvel Asatryan (Armenian National Agrarian University, Yerevan) and Meri Manucharyan (M. Kotanyan Institute of Economics, National Academy of Sciences, Yerevan). This paper empirically assesses the economic efficiency of grape-producing farms in Armenia using frontier analysis, offering insights for policymakers, researchers, investors, and credit companies. A two-stage approach of DEA technique and Tobit modelling is used to analyse the efficiency of grape farms in the Armavir region. One of the main findings is that the average efficiency score is 0.72, suggesting room for a 28% improvement in economic performance. Key determinants of efficiency include grape varieties, farm size, and selling prices. The study's findings align with similar studies conducted in other countries, emphasizing the positive impact of farm size on efficiency. Notably, smaller farms (0.1–0.5 ha) with family-based labor show above-average efficiency. The study also underscores the importance of the price factor, and variables like gender and age of grape producers in determining efficiency. Moreover, the specialization in table grape cultivation enhances efficiency compared to wine and brandy varieties. While the study provides valuable insights, it recommends further research including comparisons with other Armenian viticulture regions and examination of efficiency dynamics over time.

In the fifth paper "Methodological and procedural characteristics of measuring inflation in Kazakhstan", Assel Zhunussova and Raushan Dulambayeva (both from the Academy of Public Administration, Republic of Kazakhstan) address the key issues that affect the current measurement of inflation in Kazakhstan and propose a new methodology for calculating regional and national inflation. The paper highlights differences in consumption patterns across regions and rural/urban areas and the need to adopt regional weights for different goods and services in calculating price indices, clustering regions on the basis of similar consumption structures. The paper advocates for compliance with international recommendations regarding the sampling of settlements and the provision of full documentation on the methodology adopted.

The last paper "Cooperation between national statistics offices and academia: Benefits, areas of cooper-

ations, conditions, funding, and practical level experience in countries" is by Charlotte Juul Hansen (UN Statistics Division/DESA), Lina Maria Sanchez Cespedes (National Administrative Department of Statistics – DANE, Colombia), Leonardo Trujillo Oyola (National Administrative Department of Statistics - DANE, Colombia), Xeni Kristine Dimakos (Statistics Norway), Bianca Walsh (National School of Statistical Sciences, Brazilian Institute of Geography and Statistics), Renata Souza Bueno (National School of Statistical Sciences, Brazilian Institute of Geography and Statistics), and Vibeke Oestreich Nielsen (UN Statistics Division/DESA). This article underscores the advantages of establishing partnerships between National Statistical Offices (NSOs) and academia, emphasizing the mutual benefits and the importance of collaboration in the evolving data ecosystem. A successful partnership relies on creating a collaborative environment where each partner sees the benefits and contributions. The areas of collaboration are categorized into education and learning, research, promotion of data use in society, and providing services to each other. The article explores the benefits and conditions essential for a successful collaboration. Practical experiences and lessons learned from Brazil, Colombia, Ghana, and Norway are provided as examples at the country level.

3. SJIAOS discussion platform

With the release of this issue of the journal (March 2024), the 19th discussion will be launched. This discussion '**What qualities are needed by statisticians to achieve top leadership positions?**', invites readers to react with their opinion on the content of the article published in this issue "Reflections on Statistical Leadership: Summary of a Panel Discussion at the WSC" with contributions from Stephen Penneck, John Bailer, Ed Humpherson, Mariana Kotzeva and Denise Silva The manuscript reports from a panel discussion held at the ISI World Statistics Conference in Ottawa in July 2023. During this session as summarized in the manuscript, five panelists shared their opinions and experiences by responding to five key questions on statistics leadership. The readers are invited to react to the statements contained in the article but are also free to give their overall opinion on this issue at: www.officialstatistics.com.

4. Call for papers

For one of the upcoming Special Issues of the SJIAOS, we are inviting authors to send manuscripts on "**Understanding and Assessing the Value of Official Statistics**".

With declining budgets, increasing demands, and a proliferation of alternative players in the arena of statistics, producers of official statistics are under ever more pressure to stake their claim on public funds by proving and even quantifying the value of their products. But recent work under the Conference of European Statisticians suggests that in order to prove that something has value, organisations need to properly understand what value means. Value means different things to different people, necessitating decisions about which needs, and whose needs, we are trying to fulfil, how, and why. Any indicators we use to quantify value must be clearly grounded in the concepts they are supposed to measure.

This shift in perspective calls for an entirely novel approach to understanding the value of official statistics– one that calls for critical self-assessment and wide-ranging consultation, instead of starting out with the assumption that the value of official statistics is a given.

The key questions that authors may want to address are: What is the impact of official statistics on decision-making? How can we measure the use of official statistics in policy processes and investment decisions? What is the development impact of these informed-based policies and decisions? Or what would be the cost of the lack of essential statistical information? How can the importance of official statistics be communicated to policymakers? How can a business case for justifying an investment in a major statistical operation be built?

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