

IARIW-CIGI Conference on “The Valuation of Data” November 2-3, 2023, Waterloo, Ontario, Canada

Background and Motivation

The International Association for Research in Income and Wealth (IARIW), established in 1947, organizes conferences on topics related to income and wealth throughout the world, generally in partnership with national statistical offices.¹ In addition to its biennial General Conference, the IARIW also organizes two smaller special conferences, with a regional or topic/theme dimension in non-General Conference years.

The IARIW is partnering with the Centre for International Governance Innovation (CIGI) in partnering with the IARIW on a project on the valuation of data. CIGI is an independent, non-partisan think tank based in Waterloo Ontario.²

A special IARIW-CIGI conference will take place November 2-3, 2023 at the CIGI building in Waterloo, Ontario. The conference will follow the standard IARIW template for a special conference: approval of a conference proposal by Council, appointment of a program committee chair (s) and members of the committee, a formal call for papers, selection of papers, the conference, and publication of a supplementary peer-reviewed issue of the Association’s journal, the *Review of Income and Wealth* based on selected papers from the conference.

From the IARIW perspective, the measurement of the value of data is a topic of interest to many IARIW members. It is also part of the agenda on the current SNA update to be finalized in 2025. Research from the conference can potentially be used for the SNA update.

Challenges in the Valuation of Data

¹ For example, national statistical offices that have co-organized or are organizing special conferences with the IARIW include the National Bureau of Statistics of China (2007), Statistics South Africa (2011), the Brazilian statistical office or IBGE (2013), and the Egyptian statistical office or CAPMAS (2015), the Bank of Korea (2017), the Tanzania National Bureau of Statistics (2022) and the Bank of Italy (2023). The IARIW has also co-organized two special conferences with the OECD (2011 and 2015) and with universities (University of New South Wales, 2013, National Research University Higher School of Economics in Moscow, 2019), one with the World Bank (2019) and two with research institutes (Indian Council for Research on International Economic Relations, 2017, and Economic Statistics Centre of Excellence (ESCoE), 2021). Since 2006, IARIW General Conferences have been co-organized with Statistics Finland (2006), Statistics Slovenia (2008), the Swiss Federal Statistical Office (2010), the US Bureau of Economic Analysis (2012), Statistics Netherlands (2014), the Federal Statistical Office of Germany (2016), Statistics Denmark (2018), Statistics Norway (2021), STATEC (2022) and the UK Office of National Statistics/ESCoE (2024)..

² According to the CIGI website, its peer-reviewed research and analysis influence policy makers to innovate. Its global network of multidisciplinary researchers and strategic partnerships provide policy solutions for the digital era with one goal: to improve people’s lives everywhere. CIGI has received support from the Government of Canada, the Government of Ontario and founder Jim Balsillie. Annual reports can be found [here](#).

Data forms a powerful value chain: data, and especially big data, can be used with artificial intelligence technologies to create powerful analytics that can vastly improve policy and business decision making. Digital technology firms that are first movers in big data have tremendous advantages through economies of scale and scope, network effects and information asymmetries and these characteristics have driven up their value. At the same time, the value of data itself does not appear on the balance sheet of any firm nor in the national balance sheets of countries. Importantly, given the characteristics of the data-driven economy, externalities arise, and the social value and private value of data can diverge in both positive and negative ways and these externalities are rarely considered and valued.

There are a number of methods to value data (cost-based, income based, and market based) and these methods have been applied in a number of studies (for example Deloitte 2017, CPA Canada 2021, Statistics Canada 2019). But, as Coyle and Manley (2022) and OECD (2022) note, no ideal or agreed upon methodology has yet emerged to measure data's value, largely because its value depends on its usefulness in a particular context. That context is framed by governance – the rules and regulations that determine how data can be used. The latter includes the many regulations in place, that will vary across jurisdictions, but it also reflects an absence of regulation, or the inability to enforce it, especially around uses of personal data. There has been much focus on the non-rivalrous nature of data, but less focus has been on its excludability. This excludability exists for many different reasons, both legal and de facto -- including regulations such as intellectual property rules, privacy and data governance regulations, but also access to capital and skills.

More generally, there is a lack of information about data assets. Thus, to fully unleash the value of data – for individuals, for firms, for society – requires appropriate governance, which requires regulations several areas – at the national and international levels -- including for privacy and cyber security as well as those around areas such as data portability and platform interoperability. In turn, regulations depend upon clear and consistent standards and metrics to provide decision-makers with the means to determine how best to govern this critically important asset. Regulation and governance will also be shaped and constrained by technical possibilities.

Topics for Call for Papers

There is a growing need to be able to value data, to both encourage data investment and use, and to understand the impact of data on the economy, enabling productive and socially valuable uses. However, there remain relatively few robust empirical approaches, and certainly no consensus about which to apply for different purposes. Existing valuation methodologies for data all have drawbacks. There is both a need and an opportunity to further develop methodologies able to empirically capture the economically valuable characteristics of data, both the private value and – for policy purposes – the wider social value. Against this background, this conference will address a wide range of topics covering methodology, applications and regulation and policies needed to unleash the value of data.

The nature of this work is multidisciplinary, with submissions welcome from researchers in all fields, including economics, accountancy, science and technology, computer science and law.

Topics on which proposals are welcome include the following:

- Assessment and comparison of methodologies to value data, and the development of new ones;
- Developments in the System of National Accounts to value data as an asset: strengths and weaknesses (deflation, depreciation, quality adjustment...);
- Other sources to measure the value of data and its applications; e.g. tax records, labour statistics, trade, earnings reports, platform revenue-sharing agreements etc; conversely, implications of the value of data for trade and investment statistics, productivity measurement, income and wealth inequality;
- Data value streams; economic and social value of data sharing; data as a public or semi-public commons;
- Private vs social/aggregate value of data; assessing and measurement of spillovers – economies of scale, scope, network effects, information asymmetries;
- Assessing the value of data via private markets (e.g. data brokers, data unions, data exchanges, insurance, licensing, risk management, litigation) vs public markets e.g. open government data initiatives;
- Accounting for data assets in corporate evaluation and by markets;
- Respective importance of personal and non-personal data and challenges of defining such boundaries (e.g. anonymisation);
- Digital platform business models – behavioural advertising and data value;
- Value of cross border data flows;
- Data and complementary investments;
- Relationship between data ownership, control and market power, and value;
- Specific applications of data valuation methodologies (e.g. healthcare, transportation, ...);
- Developing country perspectives on the value of data and how this may differ from developed countries; data realms and data sovereignty, and geopolitics;
- Intellectual property law and its relationship to the value of data;
- Data governance and standards and relationship to value of data;
- Frameworks for responsible data-sharing within and among data communities (commons, cooperatives, trusts, ...);
- Impact of localization policies, protectionism policies etc on data value;
- Technological affordances and possibilities e.g. interoperability, protocols and standards, privacy, security and their implications for data use and value; and
- Role of policies to unleash the value of data, e.g. competition, privacy, cybersecurity, open/public data initiatives, standard setting

Conference Organization

Program Committee

Diane Coyle from Cambridge University has agreed to serve as co-chair of the program committee from the IARIW side. Diane is a member of the IARIW Council. She is an expert in the data valuation field, having produced many studies on the topic, including the recent survey (Coyle and Manley, 2022). Bob Fay, Director of Digital Economic Research at CIGI, will serve as co-chair of the program committee from the CIGI side.

The program committee includes both IARIW and CIGI representatives. Members appointed by the IARIW are Wendy Li from Moon Economics, Richard Heys from the UK Office of National Statistics and Marshall Reinsdorf, recently retired from the IMF. These individuals are involved in the work on data valuation related to the SNA update. Members appointed by CIGI are Alison Gillwald, Executive Director at Research ICT Africa and Carolina Rossini, Director of Partnerships and Research at the Datasphere Initiative.

The key activities of the program committee will be development of the call for papers, solicitation of proposals for the conference and evaluation of proposals for acceptance into the conference program.

Conference Program

Papers will be presented over a two- day period. There will be a reception the evening of the first day of the conference and a farewell dinner the evening of the second day. There is the possibility of an excursion the third day (Elora Gorge, St. Jacob's Farmers Market).

The conference program will include paper sessions, keynote addresses, panels and a farewell dinner. It is expected that there will be 20-24 papers presented in plenary sessions. If there are a large number of high-quality submissions, parallel sessions or a poster session may be organized.

Conference Size

The number of delegates attending IARIW special conferences in the past has been around 100. A similar number is expected for this conference.

Conference Venue and Timing

The IARIW has not had a conference in Canada since 1992. This in-person conference is planned for November 2 to 4, 2023 at the CIGI building in Waterloo, Ontario, which is around 100 kilometers from Toronto. CIGI will organize pick-up of conference delegates at the Toronto airport.

Organizational Responsibilities

The organization of the conference will be divided between the IARIW secretariat and the local organizer, CIGI. The IARIW secretariat will assume responsibility for communications with all conference paper givers and maintain the conference program on the IARIW

website. The local organizer will assume responsibility for the conference website, conference registration, and local arrangements.

The conferences expenses will be divided between the IARIW and local organizer. The IARIW will cover expenses for paper givers from the developed world on a needs basis. The Association will also pay for a special issue of the *Review of Income and Wealth* that will contain selected papers from the conference. The local organizer CIGI will cover the expenses of keynote speakers and paper givers from the developing world. It will also cover expenses for the conference venue, audio-visual arrangements, coffee breaks, and meals.

In order to spare the host organization the administrative burden of collecting registration fees, IARIW special conferences normally do not charge such a fee. Conference delegates other than those exempted from the membership requirement by CIGI, must be or become IARIW members.

Delegates are responsible for their own travel and hotel costs. CIGI will arrange transportation from the Toronto airport to the conference venue in Waterloo, Ontario

RIW Special Issue

Selected papers from IARIW special conferences are normally published in special issues of the *Review of Income and Wealth*, edited by a sub-set (one or two persons) of the members of the program committee. To be considered for the special issue, paper givers must submit a revised version of their paper by a specified date after the conference, generally within three months of the conference.

Procedures for Proposal Submission

Persons interested in presenting a paper at the conference are asked to submit a proposal of less than 1,000 words through the web tool posted on the IARIW website.

Timelines for the Conference

October 31, 2022	Announcement of Call for Papers
January 31, 2023	Deadline for Receipt of Paper Proposals
March 15, 2023	Decisions on Proposals and Release of Preliminary Conference Program
March 31, 2023	Deadline for Applications for Financial Assistance
April 15, 2023	Decisions on Financial Assistance
October 13, 2023	Deadline for Submission of papers (three weeks before conference)
November 2-3 2023	Conference
January 31, 2024	Deadline for Submission for RIW Special Issue
Second Half of 2025	Release of special issue

References

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