

Fourth Statistics Conference: “Post-Pandemic Statistics”

Opening remarks by Mario Marcel, Governor of the Central Bank of Chile

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Good morning everyone to all participants in this Fourth Biennial Statistics Conference, organized by the Central Bank of Chile. A special welcome to speakers and participants representing international organizations, statistical offices and central banks that are joining us from Europe, the Americas, in different time zones.

This event, whose first version was held in 2015, has established itself as a space for the analysis and reflection of leading experts in the preparation of macroeconomic statistics. We hope to honor this record in an edition dedicated to “Post-pandemic statistics”. Despite its title, this conference will be held entirely by video conference.

Post-Pandemic Statistics may be considered an overly optimistic title. Although 21 months have passed since the first case of Covid-19 in the world, the pandemic is still far from over, especially in countries that are lagging behind in the vaccination process. The economic and social effects of this episode will be with us for a long time.

The Covid-19 pandemic has caused profound changes in the way of living and producing and, statistical work is not an exception to that. Uncertainty in confronting a health, economic and social shock of unprecedented magnitude has raised exponentially the demand for real-time information. In the case of economic data we have generated and received an unprecedented demand for earlier and more frequent indicators.

Social distancing and lockdowns, however, also affected traditional mechanisms of collecting data. The usual flow of information was abruptly altered, due both to the impossibility of carrying out survey fieldwork and paralyzed activities of many reporters, like air travel companies, restaurants and hotels, and leisure services, among others.

In this scenario, statistical offices and central banks reacted by speeding up the development and use of new indicators, based on less traditional and high-frequency sources of information—such as administrative records and open data available on the Internet— whose access and management was possible thanks to the application of advanced analytical techniques, and providing more timely and granular information than conventional statistics.

Such work was not entirely new. In 2019, many statistical offices and central banks were already using Big Data, web scrapping, machine learning and text analysis techniques, for the collection and transformation of data on prices, job vacancies or characterization of companies. This undoubtedly formed the basis of what was to come.

New indicators were integrated into the information delivered to the public, under the label of “experimental statistics,” thus expanding the access to less explored areas of economic behavior, such as mobility statistics or sentiment analysis.

Meanwhile, as I mentioned before, the use of administrative records was expanded and deepened, whose main advantage is the complete or almost complete coverage of the target population, given that most of them are collected under legal mandate. Indeed, during the pandemic, its collection and transmission through digital media was consolidated; and the authorities in charge knew the benefits of sharing the information, committing themselves to provide a continuous flow for the production of statistics.

This allowed to counteract the difficulties faced by some surveys and censuses that, in certain cases, had to be postponed and, in others, adapted towards telephone or web formats instead of face-to-face and with shorter questionnaires.

The Central Bank of Chile has not been alien to this pre- and post-pandemic trend. Our statistics team has been busy preparing new statistics, delivering new breakdowns and deepening microdata analysis, most of which had already started with our 2018-2022 Strategic Plan.

Indeed, in mid-2019, we began to publish our Internet Job Postings Index, built from the main job portals. In addition, we began efforts to broaden our access to tax data, such as digital bills and invoices, accessing unprecedented granularity with respect to traditional sources of information.

This enriched our work in national accounting, including a greater disaggregation of our monthly indicator of economic activity (Imacec).

The richness of tax information is almost endless. This helped us to monitor the behavior of sales during the crisis, the chain impact of firm closures, as well as the distinct impact of the crisis throughout the territory.

In the case of firms, we integrated the use of sales data, access to bank credit and markups, which is not commonly available in every country, to assess the role played by macroeconomic policies. This allowed us to observe that Chilean companies suffered a very significant and heterogeneous shock across sectors, with sharp drops in sales and a big increase in the number of businesses that did not report sales in the most critical period of the pandemic. Later, with the gradual adaptation of individuals and businesses to the new sanitary conditions, plus the boost to consumption from fiscal transfers, the withdrawal of pension funds and the credit programs to firms, a recovery of the economy began to show up through sales, with heterogeneity in their sectoral composition, size and hiring intensity. This recovery was also clearly visible in the business relationships between the firms and their suppliers.

In the case of the labor market, to overcome the limitations inherent in the publication of surveys, exposed to fieldwork constraints and usual time delays, we have supplemented the official information with data on pension fund contributions or unemployment insurance applications.

However, survey-based information has been especially useful during the pandemic. Additional, to the historical surveys carried out by the Central Bank, such as the Bank Lending Survey and the Economic Expectations Survey, we added the qualitative information collected in the framework of our Business Perception Report, which has provided relevant background for policy formulation.

As the access to new large-volume databases, and the use of granular data almost always poses the challenge of confidentiality, the Central Bank has sought to implement best practices and safeguards to exploit such information. For this reason, we established a Data Governance Agenda, led by a Strategic Committee that reports directly to the Board, and whose executive management is based in the Statistics Division.

Likewise, we launched the Big Data Strategic Project, which considers a centralized data repository to be accessed by all user areas. It should be noted, however, that a centralized platform providing access to harmonized and integrated granular information is not free from challenges. The most relevant are to develop and maintain a complex IT infrastructure and to ensure that the data stored is of high quality and safeguarded.

During this Conference we will learn from the experience of other institutions in these same issues and address the challenges that the production of statistics will face in the years ahead.

I would like to take this opportunity to stress how important it is for a country to have a statistical institutional infrastructure. The Central Bank of Chile considers positive and relevant the proposals under discussion to this end. The draft bill currently in Congress, creates a new institutional framework for the National Statistical System, in accordance with the best international practices. It recognizes the roles of the National Statistics Institute and the Central Bank as the main entities responsible for compiling and publishing economic statistics in our country. It also promotes collaboration, coordination, and exchange of information between both entities.

Finally, and with a longer-term horizon in mind, I would like to comment on two aspects of the future development of statistics. First, the serious global environmental events of recent years, as well as the United Nations Climate Report published in August, make it a priority to include climate change and the quantification of biodiversity and ecosystem services in economic analysis, to ensure that the development of our economies is sustainable as it protects nature and ensures the well-being of future generations. To this end, it is essential to have official statistics that meet the growing demand for information to determine the social and economic impact of climate change and to control the financial vulnerabilities arising from physical and transitory risks. As a first step in this direction, the Central Bank of Chile has joined the Natural Capital Committee --a body created by the Ministry of the Environment and supported by the National Council for Science, Technology, Knowledge and Innovation-- to advise and provide recommendations for the measurement of Chile's natural assets.

I would also like to mention the growing interest in distributional analysis that links aspects of inequality to macroeconomic evolution. The international experience shows that central banks, mainly those from advanced economies, have begun to focus on these issues, for example, by publishing statistical distributions of household income, consumption and wealth, traditionally published in aggregate form within the framework provided by the system of national accounts. In this context, and by virtue of the increasing availability of microdata, we will initiate a project whose results will include distribution measures comparable and consistent with national accounts measurements.

I conclude by saying that the availability of high-quality and timely statistics has been invaluable for understanding the spread of the pandemic and its impact on the economy. The Central Bank of Chile will continue to contribute to the understanding of relevant macroeconomic phenomena based on the growing analytical possibilities that open up with the availability of microdata.

I finish by thanking José Francisco Fernández, Helen Parker and Beatriz Velásquez, for putting together this conference. I also thank María José Reyes for her help in managing the logistics of it all and to Erika Arraño for her coordinating role.

As a user of macroeconomic statistics, I look forward to the debates today and tomorrow. I have no doubt that this conference will enrich our knowledge of alternative sources of information, to further appreciate the importance and richness of the exchange of information among institutions and to show us the way into the future of statistics.

Thank you.