REPORT

Title of the workshop

SUPTECH WORKSHOP I. BDA, Contagion and financial stability

Venue

ONLINE

On the virtual campus (http://campus.ief.es) of the Institute of Fiscal Studies (https://www.ief.es/) through the ZOOM software.

It was carried out in this way because of the COVID-19 pandemic.

Madrid (Spain)

Date

June 9, 2020.

Hosting university

Complutense University of Madrid

Regulator/supervisor

DIR. GRAL. DE SEGUROS Y FONDOS DE PENSIONES. MINISTERIO DE ASUNTOS ECONÓMICOS Y TRANSFORMACIÓN DIGITAL.

The speakers

1. Javier Arroyo Gallardo
2. Miller Janny Ariza Garzón

Number of participants

30

The main topics:

Use case I_III: Spatial regression models to improve P2P credit risk management (Agosto, Giudici and Leach, UNIPV, 2019)

Use case II_V: Measuring bank contagion in Europe using binary spatial regression models (Calabrese, Elkink and Giudici, BSUE, UCD, UNIPV, 2017)

The main results

They express a special concern to understand how AI and ML are being applied in the sector and the country. Understanding how these tools are being used and implemented in the industry and how they permeate and develop the insurance market. They do not consider that there are updated figures on their use in the country.

They know that there is a digital revolution, which comes with new tools, such as cloud computing, big data, artificial intelligence, among others, not only for data analysis but brings new technology and computer concepts, evolving markets, ways to manage information and business, generating new products, new paradigms, increasingly tailored to the needs and preferences of consumers.

New insights and main takeaways

Therefore, it is reflected that, as regulators, they need to be in line with these advances and developments. For example, putting the regulators on the same level of knowledge and development of the industry and the market, as regards the use of AI and ML for actuarial calculations, improves risk management, and establishes policies and actions for regulating the insurance market.

They recognise that the industry is increasingly using these types of tools at the level of insurers. They mention how various companies are using diverse and innovative information, including the estimation of default and the valuation of premiums, for example, the use of data derived from GPS in car accident insurance, improving management and generating greater satisfaction by having ad hoc products of the real risk of insurance consumers

Further remarks

They believe that today they do not take advantage and perform all the predictive analysis that could be done with the information they manage and receive from the companies on a quarterly basis, for example, balance sheet and risk management information. They are aware of the added value they would generate if they include all the data that the sector currently has.

The issue of interpretability is recognized as one of the elements necessary to generate peace of mind, confidence and transparency when using new analysis tools with AI or ML.

Complement Report

BDA– MADRID – DIRECTORATE-GENERAL FOR INSURANCE AND PENSION FUNDS. MINISTRY OF ECONOMIC AFFAIRS AND DIGITAL TRANSFORMATION– JUNE 9, 2020

- Parties participating, their roles and their responsibilities:

  - Balance sheet and risk analysis area
  - Inspection equipment
  - Subdirectorate General for Solvency
  - Area of Studies.

  The role of the participants: Directors, head of division, informatics and state insurance inspectors.

- how will they stay involved? They have access to the platform to see the exposed cases, other use cases and all the tools and material provided by the project. They receive the papers with the use cases, the presentations and the codes as material derived from the seminars. They receive continuous sending of the summaries of other use cases, from the different WPs, to evaluate their interest and the possibility of new seminars, considering that they are different regulatory bodies and different departments. We are committed to providing participants with a report that collects comments and feedback from the same seminars in other EU countries. We share our publications so that they can see results of the feedback given, collect feedback on their applied approach, and carry out knowledge transfer. They have been invited to participate in different suptech and regtech events.
- what is their feedback on the use cases presented? There were not many comments on the cases, only that the methodologies could be applied to predict default and support premium estimates in the area of insurance.
- are the selected use cases, in the end, the ones that meet the expectations and requirements at most? Although specifically, the cases are not directly applicable in their

areas, they consider that they show some developments and ideas that allow them to glimpse the advance that data analysis has had in risk management, along with the possibilities that they could take advantage of with the amount of data and the varied information that they receive from the companies' reports.

Annex. Event photo