Event summary and report of supervisors and regulators

Title of the workshop: Smart Data Analytics (26-27.06.2019)

Regulator/Supervisor

The main topics and their comprehensibility

1) Scagnostics – Scatterplot diagnostics: methodology, application to SME default data

2) Network analysis: methodology

3) Introduction to P2P lending platforms

4) ML and network analysis: applications in Credit Risk Modelling. FINTECH use cases

5) Introduction to text mining: LDA Latent Dirichlet Analysis, Sentiment

extraction, DTM Dynamic Topic Modeling

The main results and their significance for your institution

1)Extensive introduction to the modern techniques of data analysis were presented.

2) Codes for presented use cases and methods were given and demonstrated.

3) A lot of illustrations and results of application of network analysis, visualisation and ML methods

4) Incorporating of network information into a credit scoring model could improve predictive accuracy (Use cases 1-3) and provide an explainable

5) Use case 4: two phase model demonstrated that Machine Learning can be applied to automate processes in P2P (and regular) lending

New insights and main take aways:

The HU Berlin team provided insights into a wide spectrum of modern data analysis techniques, including codes as well as visualization methods. Moreover, machine learning and network analysis methods and use cases from the financial industry were introduced.

The international group of participants from across Europe consisted of experts from various central banking and supervision authorities functions (micro and macro supervision, statistics, IT, etc.).

Key insights and main take aways have been that synergies can be realized by having a collaborative, cross-institutional approach, by sharing best-practices via international teams of colleagues that are confronted with similar challenges. Rather than “re-inventing the wheel” within each respective institution, there is a benefit of having a cross-European best practice exchange of how to address the challenges related to effectively and efficiently dealing with big data. Another main take away is to apply the techniques and theory in practice and to get started by actually working with the codes.

Further remarks:

Prof Haerdle and his team provided a very comprehensive package of learning material, codes and an impressive spectrum of insights, both from a theoretical as well as practical perspective.