

# Discussion of Session 1 :The FIN-TECH project

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# Summary

- ▶ The actual financial landscape is characterised by a heavy use of technology. We cannot deal with the current financial framework without considering the crucial role of FinTech.
- ▶ The combination of financial services with modern, innovative technologies leads to the creation of new business models characterised by specific risk profiles.
- ▶ Different types of risk were considered: Credit and systemic risk, Market risk and Operational risk.
- ▶ Standard methods for risk evaluation are no more sufficient, hence the necessity to develop new models to evaluate and deal with them.
- ▶ Idea for model construction and evaluation were discussed
- ▶ Issues regarding implementation and dissemination of the proposed methodologies were also discussed.

# Discussion

- ▶ Both [Spelta](#) and [Härdle](#) present network models. How are these model constructed? Are these models based on probabilistic or a deterministic approach?
- ▶ [Spelta](#): Credit risk models are concerned with differentiating between vulnerable and safe institutions. The data at hand are usually unbalanced with a small number of zeros (low default rate). It is well known that measures based on ROC curves do not perform well in case of unbalanced data. How do you suggest to proceed?
- ▶ [Pagnottoni](#): What is the advantage of your model compared to previously proposed g in the Literature? What is the computational time? Have you tested your model with other cryptocurrencies data?

- ▶ **Cerchiello**: Cyber risk evaluation is a very interesting and actual topic, but data availability is a hard problem. Can you tell us something more about the sources and the collection of the data? Is there a standard way to classify the gravity of a cyber attack? In which way you extended IMF(2018) to take into account cardinality of the data?
- ▶ **Agosto**: AUROC and RMSE are measures that can be easily implemented but suffer from some drawbacks, for example in case of unbalanced data sets or in presence of outliers. Could these issues represent a problem when dealing with risk management data? Can you tell us something about Bayesian model evaluation?
- ▶ **Misheva**: Are you planning to implement ad hoc packages in R and share them between all R users?