

Speaker: Prof. Guillaume Bagnarosa

Talk Title: Credit risk management for agri-business under weather uncertainty

Talk Abstract:

We propose in this paper a bottom up model of the credit risk associated to agricultural business taking into consideration the impact of weather conditions on the expected and unexpected losses of a loans portfolio. In order to build and calibrate this model, a large French fertilizer company gives us access to its highly detailed database. Combining these financial and farming data about a set of Romanian farmers with weather and yields information we managed to estimate what we call a local default risk, associated to the region weather conditions uncertainty, and a global default risk, which is rather related to the prices of the internationally traded agricultural commodities.

Speaker Bio:

Guillaume Bagnarosa is a professor of finance at the Rennes School of Business (in France), where he is the director of the Area of Excellence on Agribusiness. He is also a member of a joint research program in Agri-Finance between RSB, Agrocampus Ouest and the French National Institute for Agricultural Research (INRA). He worked for 15 years in the research departments of several hedge funds and investment banks both in Paris and London. He is a research associate of the statistics department of UCL in London. Professor Bagnarosa received a Ph.D. in economics from the University of Paris I Panthéon-Sorbonne.