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### **Introducing BEES: Banks, Enterprises and the Economy Simulation**

The ABM model proposed is thought as an engine for the study of the economic system and of the role played by its actors: consumers, enterprises, banks, and institutions like central banks and governments. The fulcrum of the model are banks, their intermediation function and their choices in terms of business and risk positioning.

Customers look for credit in order to fulfill their needs: each customer is characterized by a riskiness, and has to sustain a cost for his debts. On principle the remuneration that the bank asks should be proportional to the risk it bears: therefore a bank should be able to define a risk-earning frontier, both on its customers and on its assets. A decision making process based on this simple trade-off should be highly suitable, but is not always carried out. One of the main aims of the model is to endogenously determine the curve of demand of customers, and the risk earning frontier.

In our perspective, the frontier is the main instrument for analyzing the relationship among the actors in the model, and for depicting their behavior. Depending on exogenous and endogenous conditions the bank would decide how to shape its portfolio: the profile chosen should be coherent with the risk appetite of its stakeholders as well as the capability of the bank to perform well in a specific sector. According with this frontier, the bank decides how to allocate its capital: or in other words, where and how to grow. And as a consequence, how to relate with the market. Competition among banks, the market reaction and institutions intervention complete a framework that in its evolution can fit different kinds of analysis.