

## Basle II: the bank improves its risk monitoring

Since January 1, 2008 and the coming into force of the directive for the "advanced internal rating-based approach", Basle II projects have been operational within banks. Here we present an explanation and a user's guide by Olivier Callens (ESLSCA 95), the head of credit ratings and methods within the Country and Portfolio Risk division of Calyon, Crédit Agricole's corporate and investment banking subsidiary.

The purpose of the regulations initiated by the first Basle agreement was to make the financial system more secure by introducing prudential standards. Unlike the previous regulatory Cooke ratio, which favored a flat-charge approach, the new Internal Rating-Based Approach allows banks to apply their own models for assessing credit risk as long as these internal rating systems specific to each bank are used internally and are robust and quantitatively justifiable so that they can be validated by the supervisory authorities. *"The idea is to measure both more accurately and more comprehensively the risks actually taken on by the bank and to ensure that equity is aligned with the risks,"* explains Olivier Callens. *"We can now see how logical that is! Previously risk assessment was less formal and more subjective. Now Basle II obliges us to look more closely at our analysis of credit risk and to break it down into several parameters – probability of client default, amount of exposure, maturity of the transaction, the taking into account of guarantees and collateral to minimize losses, etc. – and therefore to design models to measure each of these parameters as accurately as possible."*

Olivier Callens currently manages a staff of 22, half of whom are graduates of universities and business schools with the other half quants and statisticians trained in universities and engineering schools. This mixture of backgrounds is needed to understand the problems specific to Calyon's current business lines and organization, transform the resulting partitions into music through the use of models and then to follow the latter's performance. The main subject is credit risk which is of course the banker's core business. When a model is being developed, it is necessary to have an understanding of what the business line does in order to build an appropriate model. This is a good introduction for the many junior members of the team and an excellent way for them to learn about the bank.

The installation of the Basle II approach with the work carried out in a project mode with the help of consultants was an enriching experience in structuring the department's current way of working. *"We learned to set deadlines and to manage the process so that progress would proceed in line with the timing that was set, all the while dealing with operational constraints. Rather than out and out technicians, we favor people who are pragmatic, imaginative and effective but still have solid technical baggage."*

The particular nature of these regulatory matters is that they are new and have a structural impact on banks. Every bank has to feel its way and progresses at a different rate. The process involves informal meetings and exchanges. *"Calyon had very little time to fine-tune its models because of the merger between Crédit Agricole and Crédit Lyonnais. We nonetheless succeeded in obtaining approval in 2007 and are currently continuing to test the reliability of the system that was certified by the French Banking Commission. Our work involves improving the performance of our models and taking better account of the special requirements of certain business lines. We know that we are still working with the first versions of the models and that later versions will be improved. In addition, we are working to organize and improve the reliability of our collection of loss data, which is one of our ancillary functions and which will help us adjust our internal models."*

The department is also responsible for making RAROC calculations when new transactions are set up, based on the risk parameters measured by Calyon's internal models. RAROC calculations, which measure the risk-adjusted return on capital, are currently used by the bank to manage and orient its business activity. Today, with the

new needs for equity capital, optimizing its allocation has become a true challenge.  
*"Many business lines, such as specialized financing, are well aware of the importance of these subjects and come to us so that we can optimize our models to better cater to the specific nature of their activities. It's a real pleasure to work on such vital and structuring subjects."*

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