8.1 INTRODUCTION

Broadly speaking, a rating is an assessment, for a given time horizon, of an obligor’s ability to honor its contractual obligations. External agency ratings, as well as banks’ judgmental rating grades, are usually ordinal measures of credit risk (as opposed to, for example, KMV Moody’s ‘expected default frequencies’ – EDFs), which have been determined by taking into account all relevant available information (both quantitative and qualitative). The ordinality allows for the ranking of obligors in terms of relative riskiness. To quantify obligors’ credit risk, probabilities of default are estimated for each rating category; the riskier a rating category is, the higher its PD estimate should be.

According to the Basel Committee, the IRB approach may prove to be particularly challenging for large, internationally active banks with loan books and business units located in many different countries. Banks’ internal credit risk measures are (should be) based on the assessment of the risk-related characteristics of both the borrower and the transaction type, but in practice most banks tend to base their risk management practices on internal default risk assessments. It is true that the probability of default is central to the IRB framework, but banks should also quantify how much they might lose in case of actual default events.
Measuring expected losses requires – in addition to PD estimates – two further elements:

- the loss given default (LGD), expressed as a percentage of the exposure;
- the exposure at default (EAD).²

The recovery rate on a defaulted exposure is equal to one minus the issue-specific LGD, while the global recovery rate is defined as the rate of overall recovery on the totality of an obligor’s liabilities.

The three risk components PD, LGD and EAD allow the calculation of quantitative measures for both expected and unexpected loss. The formula for the derivation of risk-weighted assets in the IRB approach also foresees a maturity adjustment.

In this chapter, we shall analyze judgment-based rating and PD estimation through a detailed description of the entire rating process, moving from calculating a stand-alone rating (combining both quantitative and qualitative criteria) to determining possible rating adjustments, to take into account support provided by other legal entities.

### 8.2 Obligor ‘Corporate’ Definition

Banks that use the IRB approach for the calculation of their regulatory capital requirements should categorize their banking-book exposures into the following five broad asset classes: corporate; sovereign; bank; retail; and equity.³

Methods and parameters for the calculation of risk-weighted assets differ from one asset class to another. As a consequence, required capital might change significantly depending on how the bank performed its segmentation of the banking-book exposures into asset classes. This is why the regulator requires IRB banks to demonstrate to their supervisors that they consistently use an appropriate methodology for the classification of their exposures.⁴

In most banks, internal judgmental rating models are used to manage the credit risk of corporate exposures. From one bank to another, however, the term ‘corporate’ can take on very different meanings. A broad definition might encompass not only corporate issuers, but also banks and financial institutions, and even sovereigns. In this case, an exposure is defined as ‘corporate’ whenever it is not classifiable as retail, or to put it differently, whenever the number of loans belonging to the same asset class is too small (and their average size too big) for a purely quantitative and automated approach to risk quantification.