

Publication Date: 10 Oct 2012

Effective Date: 19 Oct 2012

Addendum 1 to the CRI Technical Report, (Version: 2012, Update 2)

This document updates the *Technical Report (Version: 2012, Update 2)* and details the following changes: (1) the date when financial statement (FS) variables are first used in the in-sample data set which is with effect on 17 October; and (2) the manner in which we deal with M&A events which is with effect on 19 October.

I. Changes to treatment of financial statements in monthly calibration

Up until the October 2012 calibration, financial statement variables appear in the in-sample data set starting from the period end of the financial statement lagged by three months. This treatment is based on the conservative assumption that the financial statements for companies typically become available no more than three months after the period end. So we assume that, for example, a financial statement reflecting the book year 2011 becomes available at the end of March 2012. The in-sample data set is used in calibrating the forward intensity parameters as well as for the back-calculated RMI PD.

The three month lag is overly conservative and many companies release their financial statements earlier. Hence, in order to reflect the most up-to-date information, we have modified the treatment of FS variables. In our new logic, we start using the values in a FS when its latest revision is input into the RMI database, unless the FS is released after more than 3 months. Only the values in the latest revision are used so that the same quantity does not change in time. If there are no revisions to a FS, the originally released FS is used.

In cases where the latest revision is available more than 3 months after the period end, we revert to the previous logic of using the latest FS lagged by 3 months from the period end. We start including the FS before the latest revision was actually available as a compromise, to avoid situations where later minor revisions of the FS are holding back more up-to-date information.

It should be noted that this new approach is only applied for FS input into the RMI database after February 2011, when the revision date was explicitly recorded. More specifically, due to a lack of accurate revision dates before February 2011, we still apply the old approach and lag the FS input by 3 months before that date. This new logic is an interim step, before we ultimately move to incorporating the recorded update or announcement date of a FS.

II. Exclusion rule for M&A events

M&A events are a common occurrence. When an important M&A deal is closed, the Market Capitalization (MC) of the acquirer changes immediately as the market cap of the acquirer will now reflect the joint value of the acquirer and the target. However, the financial statement will not immediately reflect the new situation. In these cases, the Distance-to-Default (DTD) and market-to-book ratio, which are important inputs for the PD computation, will be distorted due to a mismatch in the MC and the financial statements variables. These distorted values will result in inaccurate PDs. In order to ensure accuracy and reliability of our PD estimates, we apply a rule to disable PDs for companies that are involved in important M&A deals.

An important M&A deal is defined as an M&A event for which all three of the following criteria apply:

1. After the deal completion, the acquiring company owns 20% or more of the target company;
2. The size of the deal is material to the acquirer. This is measured in terms of total assets. If α is the percentage of the target that is being acquired, then the size is considered material if α times the total assets of the target is greater than or equal to 20% of the total assets of the acquirer.
3. The change in MC is material, with the largest absolute daily MC return within 20 days of the M&A completion day larger than or equal to 5%.

In case of an important M&A event, the PDs of the acquirer will be not be computed until we are able to include financial statement variables reflecting the new situation (typically between 3 and 6 months after deal completion). The RMI CRI-team is currently developing a method to deal with M&A cases more systematically. This new method is expected to be in place as of the November 2012 calibration and will avoid having to disable PDs for companies involved in an important M&A deal.