18 February 2014 – Addendum 5 to the CRI Technical Report (Version: 2013, Update 2b)

This document updates the Technical Report (Version: 2013, Update 2b) and details (1) a revision to the balance sheet items used in distance-to-default (DTD). These changes have been implemented as of the probabilities of default (PD) released on 18th of February.

I. Revision to balance sheet items used in distance-to-default (DTD)

Due to our data provider moving to a more nuanced classification of balance sheet items for financial services firms, we have added a fourth Bloomberg field to the calculation of the current liability substitute used in our calculation of distance-to-default (DTD) for financial firms, the field BS_SEC_SOLD_REPO_AGRMNT. Thus, the current liability substitute becomes the sum of BS_ST_BOROW, BS_OTHER_ST_LIAB, BS_CUST_ACCPT_LIAB_CUSTDY_SEC (customers' acceptance and liabilities/custody securities) and BS_SEC_SOLD_REPO_AGRMNT. If one, two or three of these fields are missing, zero is inserted for those fields, but at least one of the four fields is required.

The net effect of this change is higher debt levels for financial firms with large stocks of repurchase agreements ("repos") on their books, in particular global broker-dealers. The following example illustrates how this change will generally affect RMI PDs of banks with large repo books, using the data for a global broker-dealer currently covered by RMI's PD model. The change is designed to avoid similar problems identified in the example.

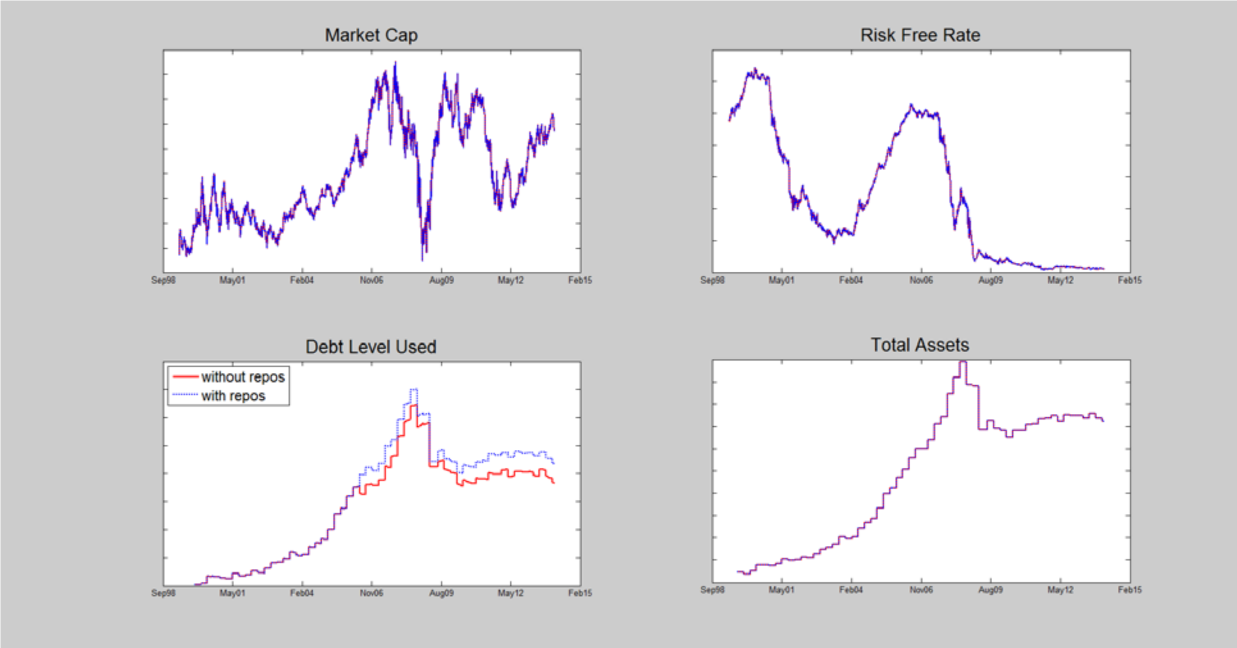

Figure 1: RMI distance-to-default (RMI DTD) inputs for a global broker-dealer. Note the growth in the debt level used with and without including the repurchase agreements ("repos"), due to changes in classifications which our data provider implemented from mid-2006 onwards.

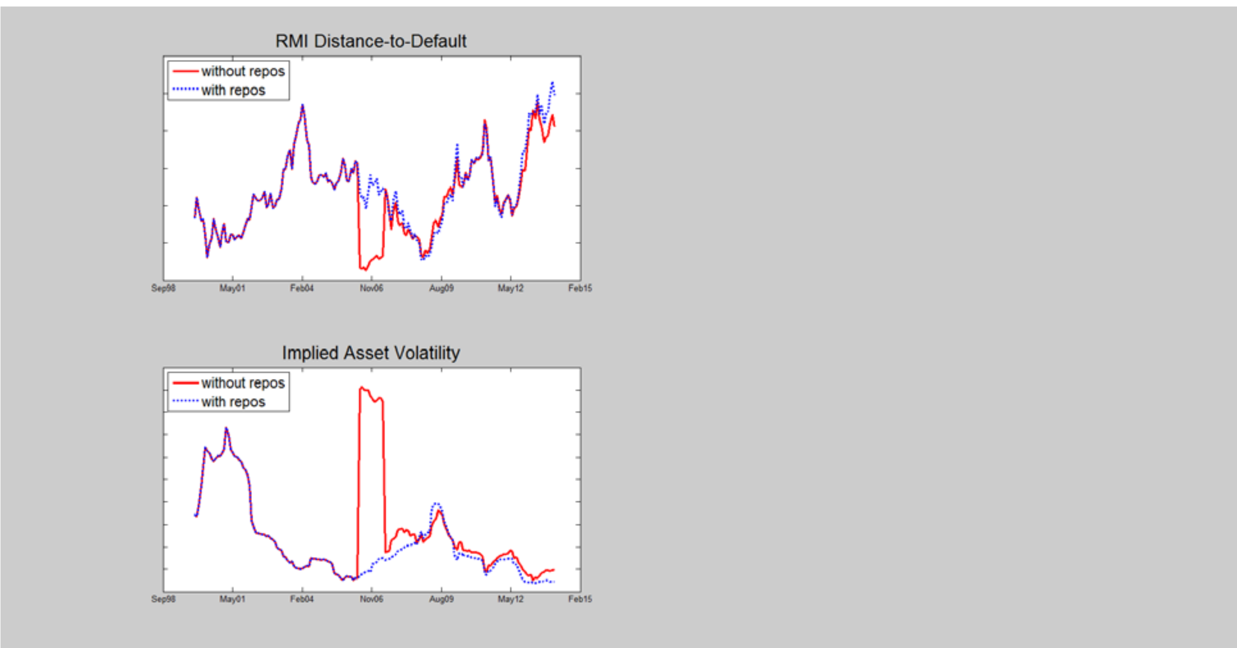

Figure 2: RMI distance-to-default (RMI DTD) and implies asset volatility for a global broker-dealer. Note the large spike in implied asset volatility that occurs at the exact moment our data provider changes to a more nuanced classification of broker-dealer liabilities in mid-2006, and the consequent decrease in the firm's RMI DTD.

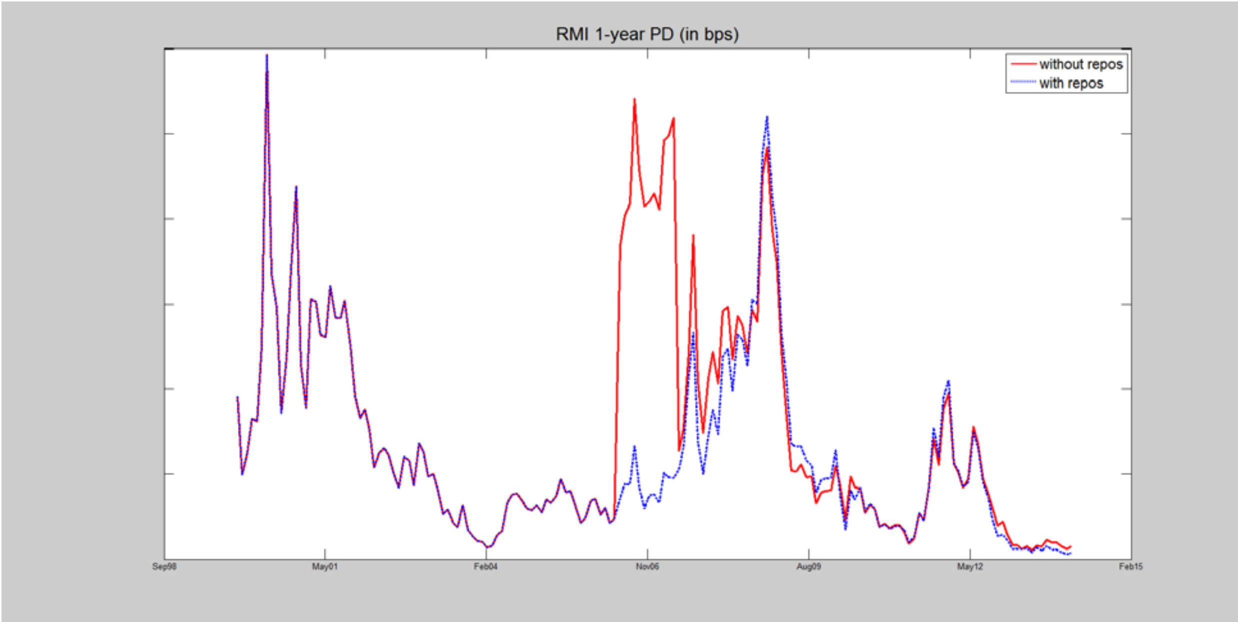

Figure 3: RMI 1-year probability of default (RMI PD, in bps) for a global broker-dealer. Adding back the repurchase agreements ("repos") to current liabilities has reduced implied asset volatility from mid-2006 onwards, leading to a decrease in the firm's DTD and a reduction in the firm's RMI PD. Including the repo book has also increased leverage, resulting in slightly higher RMI PDs for the firm during post-2006 periods of financial turmoil.