

User Guide for Technical Documents and Addenda

(Version: 27th June 2023)

Effective Date	Technical Documents and Addenda
27 th Jun' 23	Technical Report Version 2023 Update 1
14 th Sep' 22	Version 2021 Update 1 Addendum 5: Implementation of ratio treatment for the current liabilities and long-term debt calculation of China-domiciled banks
10 th May' 22	Version 2021 Update 1 Addendum 4: Implementation of Updated Smoothing Methodology for Weight in Distance-to-Default Calculations
26 th Apr' 22	Version 2021 Update 1 Addendum 3: Implementation of Default Correlations (DC) in the production of default-rate and default-number distributions
14 th Mar' 22	Version 2021 Update 1 Addendum 2: Switching Industry Classification Standard from NUS-CRI 2007 to NUS-CRI 2020 based on BICS 2007 and BICS 2020 respectively
4 th Sep'21	Version 2021 Update 1 Addendum 1: Replacement of Kazakhstan and Montenegro 1-year and 3-month interest rates
28 th May'21	Technical Report Version 2021 Update 1
19 th Apr'21	Version 2020 Update 2 Addendum 2: Introduction of an additional covariate for China's listed firms
5 th Nov'20	Version 2020 Update 2 Addendum 1: Replacement of Switzerland's 3-month and 1-year interest rates
14 th Sep'20	Technical Report Version 2020 Update 2
14 th Sep'20	Version 2020 Update 1 Addendum 1: Increase the updating frequency for one DTD parameter from monthly to daily
1 st Jul' 20	Technical Report Version 2020 Update 1
10 th May' 20	Version 2017 Update 1 Addendum 15: Replacement of stock index in Egypt
11 th Feb' 20	Version 2017 Update 1 Addendum 14: Replacement of stock index in Italy and Ghana's 1-year interest rate
14 th Oct' 19	Version 2017 Update 1 Addendum 13: Likelihood function for Indian default data
11 th Jun' 18	Version 2017 Update 1 Addendum 12: Expansion of coverage to Qatar

2 nd May '18	<u>Version 2017 Update 1 Addendum 11: Changes in parameter estimation method in the CRI Probability of Default model</u>
2 nd May '18	<u>Version 2017 Update 1 Addendum 10: Changes to treatment of interest rate in the CRI Probability of Default model</u>
2 nd May '18	<u>Version 2017 Update 1 Addendum 9: Addition of covariates to the CRI Probability of Default model and estimation change for North America and China</u>
16 th Apr '18	<u>Version 2017 Update 1 Addendum 8: Replacement of interest rates and stock index in Kuwait</u>
12 th Mar '18	<u>Version 2017 Update 1 Addendum 7: Replacement of Chile's 1-year and 3-month interest rate</u>
16 th Jan '18	<u>Version 2017 Update 1 Addendum 1*: The CRI Systemically Important Financial Institution (CriSIFI) with new credit cycle indices</u>
28 th Dec '17	<u>Version 2017 Update 1 Addendum 6: Winsorization of the stock index return in the three calibration groups</u>
18 th Dec '17	<u>Version 2017 Update 1 Addendum 5: Changes in parameter estimation</u>
18 th Dec '17	<u>Version 2017 Update 1 Addendum 4: Changes to covariates in the CRI Probability of Default model</u>
15 th Dec '17	<u>Version 2017 Update 1 Addendum 3: The CRI Probability of Default implied Rating (PDIR)</u>
10 th Oct '17	<u>Version 2017 Update 1 Addendum 2: Expansion of coverage to 9 additional African economies</u>
1 st Sep '17	<u>Version 2017 Update 1 Addendum 1: The CRI Systemically Important Financial Institution (CriSIFI)</u>
30 th May '17	<u>Technical Report Version 2017 Update 1</u>
28 th Mar '17	<u>Version 2016 Update 1 Addendum 2: Definition revision and statistics update on the corporate credit and other-exit events</u>
23 rd Feb '17	<u>Version 2016 Update 1 Addendum 1*: Revision to the parameter estimation on intercept and the DTD Level and their statistical inference for the Chinese sample</u>
23 rd Dec '16	<u>Technical Report Version 2016 Update 1 Addendum 1: Revision to the parameter estimation on intercept and the DTD Level for the Chinese sample</u>
26 th Aug '16	<u>Technical Report Version 2016 Update 1</u>
13 th Jun '16	<u>Technical Report Version 2015 Update 1 Addendum 6: Replacement of Romania stock index / Exclusion of an OTC market in Romania</u>
23 rd May '16	<u>Technical Report Version 2015 Update 1 Addendum 5: Definition revision and statistics update on the corporate credit and other-exit events</u>
17 th Mar '16	<u>Technical Report Version 2015 Update 1 Addendum 4: Revision to other liabilities fraction estimation in DTD computation</u>

18 th Feb '16	<u>Technical Report Version 2015 Update 1 Addendum 3: Replacement of Denmark's 1-year interest rate/ Replacement of Indonesia's 3-month interest rate</u>
15 th Jan '16	<u>Technical Report Version 2015 Update 1 Addendum 2: Identification of additional default events in India</u>
17 th Dec '15	<u>Technical Report Version 2015 Update 1 Addendum 1: Addition of discretionary credit events/ Replacement of Morocco stock index</u>
14 th Jul '15	<u>Technical Report Version 2015 Update 1</u>
14 th Jul '15	<u>Technical Report Version 2014 Update 1 Addendum 9: Update on the replacement of Romania stock index</u>
20 th Jun '15	<u>Technical Report Version 2014 Update 1 Addendum 8: Reclassification of economic regions</u>
9 th Feb '15	<u>Technical Report Version 2014 Update 1 Addendum 7: Replacement of Jordan's 3-month and 1-year interest rate</u>
12 th Jan '15	<u>Technical Report Version 2014 Update 1 Addendum 6: Replacement of interest rates/ CRI coverage expansion/ Revision to the missing value treatment for PD calculation/ Adjustment for Lithuania due to its entrance to Eurozone</u>
13 th Dec '14	<u>Technical Report Version 2014 Update 1 Addendum 5: Revision to the M&A treatment</u>
15 th Nov '14	<u>Technical Report Version 2014 Update 1 Addendum 4: Replacement of Thailand's 3-month interest rate/Revision to the treatment of 3-month interest rate variables and coefficients for Switzerland and Iceland/RMI increased coverage: Addition of Oman, Jamaica and Bangladesh</u>
18 th Oct '14	<u>Technical Report Version 2014 Update 1 Addendum 3: Revision to one of the financial statement priority rules/Replacement of India's 3-month and 1-year interest rate</u>
16 th Aug '14	<u>Technical Report Version 2014 Update 1 Addendum 2: Further exclusion OTC traded companies/Replacement Romania stock index</u>
8 th Jul '14	<u>Technical Report Version 2014 Update 1 Addendum 1: Revision to the aggregate PD calculation</u>
8 th Jul '14	<u>Technical Report Version 2014 Update 1</u>
1 st Jul '14	<u>Actuarial Spread, a new CRI measure: Scientific foundation and methodology</u> Note: As an additional background document, please read the <u>Actuarial Spread White Paper</u>
19 th Mar '14	<u>Technical Report Version 2013 Update 2b Addendum 5: Revision to balance sheet items used in distance-to-default(DTD)</u>
14 th Jan '14	<u>Technical Report Version 2013 Update 2b Addendum 4: Replacement of Sweden's risk-free rate</u>
11 th Dec '13	<u>Technical Report Version 2013 Update 2b Addendum 3: Replacement of Singapore's 3-month interest rate</u>
16 th Nov '13	<u>Technical Report Version 2013 Update 2b Addendum 2: Revision to financial statement priority rules for Taiwan/Replacement of Russia's 3-month interest rate</u>

12 th Oct '13	Technical Report Version 2013 Update 2b Addendum 1: Revisions to financial statement priority rules for Australia and South-Korea/Revisions to the winsorization for market-to-book ratio/Revisions to the monthly calibration for the emerging markets group/Reclassification of default events in Thailand /Replacement of Jordan' s stock index
17 th Sep '13	Technical Report Version 2013 Update 2b Note 1: Version 2013 Update 2b replaces the previously posted Version 2013 Update 2. Note 2: On 17/01/2014 a new update of the technical report has been uploaded after revisions to plots B.3.-B.8.
21 st Aug '13	Technical Report Version 2013 Update 1 Addendum1: Revisions to monthly parameter updates
10 th Jul '13	Technical Report Version 2013 Update 1 Note: Please read 'Technical Report Version 2013 Update 1' in conjunction with Addendum 8 released on 15th May 2013. Due to the publication schedule of the Global Credit Review this addendum is not included in this version of the technical report.
15 th May '13	Technical Report Version 2012 Update 2 Addendum 8: Changes to distance-to-default (DTD) computation
1 st Apr '13	Technical Report Version 2012 Update 2 Addendum 7: Extension to 5-year forecast horizon
12 th Mar '13	Technical Report Version 2012 Update 2 Addendum 6b: Level/Trend calculation
15 th Feb '13	Technical Report Version 2012 Update 2 Addendum 6: Missing value treatment
15 th Jan '13	Technical Report Version 2012 Update 2 Addendum 5: Daily sigma
5 th Dec '12	Technical Report Version 2012 Update 2 Addendum 4: Treatment of companies after default event
4 th Dec '12	Technical Report Version 2012 Update 2 Addendum 3: RMI global coverage
19 th Oct '12	Technical Report Version 2012 Update 2 Addendum 1: Financial statements/M&A treatment
15 th Aug '12	Technical Report Version 2012 Update 2 Addendum 2: RMI increased coverage: Addition of Vietnam and New Zealand
1 st Aug '12	Technical Report Version 2012 Update 2
12 th Jun '12	Technical Report Version 2012 Update 1 Addendum 1: Relative size computation
12 th Jun '12	Technical Report Version 2012 Update 1
15 th May '12	Technical Report Version 2011 Update 1 Addendum 4: DTD computation and net income variable
16 th Mar '12	Technical Report Version 2011 Update 1 Addendum 3: Data screening

- 13th Dec '11 — [Technical Report Version 2011 Update 1 Addendum 2: Calibration grouping](#)
[Technical Report Version 2011 Update 1 Addendum 1: Default definition](#)
- 7th Jul '11 — [Technical Report Version 2011 Update 1](#)
[Technical Report Version 2011 Update 1 Appendix](#)