



User Guide for Technical Documents and Addenda

(Version: 8th September 2021)

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| Effective Date | Technical Documents and Addenda |
| 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 | <u>Version 2020 Update 2 Addendum 2: Introduction of an additional covariate for China's listed</u> |
| | <u>firms</u> |
| Eth N /20 | Version 2020 Update 2 Addendum 1: Replacement of Switzerland's 3-month and 1-year |
| 5 th Nov'20 | <u>interest rates</u> |
| 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 —— | Version 2017 Update 1 Addendum 11: Changes in parameter estimation method in the CRI Probability of Default model |
| 2 nd May' 18 —— | Version 2017 Update 1 Addendum 10: Changes to treatment of interest rate in the CRI Probability of Default model |
| 2 nd May' 18 | Version 2017 Update 1 Addendum 9: Addition of covariates to the CRI Probability of Default model and estimation change for North America and China |
| 16 th Apr' 18 | Version 2017 Update 1 Addendum 8: Replacement of interest rates and stock index in Kuwait |
| 12 th Mar' 18 —— | Version 2017 Update 1 Addendum 7: Replacement of Chile's 1-year and 3-month interest rate |





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| 16 th Jan '18 —— | Version 2017 Update 1 Addendum 1*: The CRI Systemically Important Financial Institution (CriSIFI) with new credit cycle indices |
| 28 th Dec '17 —— | Version 2017 Update 1 Addendum 6: Winsorization of the stock index return in the three calibration groups |
| 18 th Dec '17 | Version 2017 Update 1 Addendum 5: Changes in parameter estimation |
| 18 th Dec '17 —— | Version 2017 Update 1 Addendum 4: Changes to covariates in the CRI Probability of Default model |
| 15 th Dec '17 | Version 2017 Update 1 Addendum 3: The CRI Probability of Default implied Rating (PDiR) |
| 10 th Oct '17 | Version 2017 Update 1 Addendum 2: Expansion of coverage to 9 additional African economies |
| 1 st Sep '17 —— | Version 2017 Update 1 Addendum 1: The CRI Systemically Important Financial Institution (CriSIFI) |
| 30 th May '17 —— | Technical Report Version 2017 Update 1 |
| 28 th Mar '17 —— | Version 2016 Update 1 Addendum 2: Definition revision and statistics update on the corporate credit and other-exit events |
| 23 rd Feb '17 —— | 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 |
| 23 rd Dec '16 —— | Technical Report Version 2016 Update 1 Addendum 1: Revision to the parameter estimation on intercept and the DTD Level for the Chinese sample |
| 26 th Aug '16 —— | Technical Report Version 2016 Update 1 |
| 13 th Jun '16 —— | Technical Report Version 2015 Update 1 Addendum 6: Replacement of Romania stock index / |
| | Exclusion of an OTC market in Romania |
| 23 rd May '16 —— | |
| 23 rd May '16 ——————————————————————————————————— | Exclusion of an OTC market in Romania Technical Report Version 2015 Update 1 Addendum 5: Definition revision and statistics update |
| | Exclusion of an OTC market in Romania Technical Report Version 2015 Update 1 Addendum 5: Definition revision and statistics update on the corporate credit and other-exit events Technical Report Version 2015 Update 1 Addendum 4: Revision to other liabilities fraction |
| 17 th Mar '16 —— | Exclusion of an OTC market in Romania Technical Report Version 2015 Update 1 Addendum 5: Definition revision and statistics update on the corporate credit and other-exit events Technical Report Version 2015 Update 1 Addendum 4: Revision to other liabilities fraction estimation in DTD computation Technical Report Version 2015 Update 1 Addendum 3: Replacement of Denmark's 1-year |
| 17 th Mar '16 ——————————————————————————————————— | Exclusion of an OTC market in Romania Technical Report Version 2015 Update 1 Addendum 5: Definition revision and statistics update on the corporate credit and other-exit events Technical Report Version 2015 Update 1 Addendum 4: Revision to other liabilities fraction estimation in DTD computation Technical Report Version 2015 Update 1 Addendum 3: Replacement of Denmark's 1-year interest rate/ Replacement of Indonesia's 3-month interest rate Technical Report Version 2015 Update 1 Addendum 2: Identification of additional default |
| 17 th Mar '16 ——————————————————————————————————— | Exclusion of an OTC market in Romania Technical Report Version 2015 Update 1 Addendum 5: Definition revision and statistics update on the corporate credit and other-exit events Technical Report Version 2015 Update 1 Addendum 4: Revision to other liabilities fraction estimation in DTD computation Technical Report Version 2015 Update 1 Addendum 3: Replacement of Denmark's 1-year interest rate/ Replacement of Indonesia's 3-month interest rate Technical Report Version 2015 Update 1 Addendum 2: Identification of additional default events in India Technical Report Version 2015 Update 1 Addendum 1: Addition of discretionary credit events/ |





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| 20 th Jun '15 —— | Technical Report Version 2014 Update 1 Addendum 8: Reclassification of economic regions |
| 9 th Feb '15 —— | Technical Report Version 2014 Update 1 Addendum 7: Replacement of Jordan's 3-month and |
| | 1-year interest rate |
| 12 th Jan '15 —— | 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 |
| 13 th Dec '14 —— | Technical Report Version 2014 Update 1 Addendum 5: Revision to the M&A treatment |
| 15 th Nov '14 —— | 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 |
| 18 th Oct '14 —— | 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 |
| 16 th Aug '14 | Technical Report Version 2014 Update 1 Addendum 2: Further exclusion OTC traded |
| J | companies/Replacement Romania stock index |
| . He is a second | |
| 8 th Jul '14 | Technical Report Version 2014 Update 1 Addendum 1: Revision to the aggregate PD calculation |
| 8 th Jul '14 —— | Technical Report Version 2014 Update 1 |
| 1 st Jul '14 —— | Actuarial Spread, a new CRI measure: Scientific foundation and methodology |
| | Note: As an additional background document, please read the <u>Actuarial Spread White Paper</u> |
| 19 th Mar '14 —— | Technical Report Version 2013 Update 2b Addendum 5: Revision to balance sheet items used in |
| | distance-to-default(DTD) |
| 14 th Jan '14 | Technical Report Version 2013 Update 2b Addendum 4: Replacement of Sweden's risk-free rate |
| | |
| 11 th Dec '13 | Technical Report Version 2013 Update 2b Addendum 3: Replacement of Singapore's 3-month interest rate |
| | interestrate |
| 16 th Nov '13 —— | Technical Report Version 2013 Update 2b Addendum 2: Revision to financial statement priority |
| | rules for Taiwan/Replacement of Russia's 3-month interest rate |
| 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.3B.8. |
| 21 st Aug '13 —— | Technical Papart Version 2013 Undate 1 Addendum 1. Povisions to monthly parameter |
| 21 Aug 13 | Technical Report Version 2013 Update 1 Addendum1: Revisions to monthly parameter updates |
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10th Jul '13

<u>Technical Report Version 2013 Update 1</u>

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.

| | 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 |
| 13 th Dec '11 | Technical Report Version 2011 Update 1 Addendum 2: Calibration grouping Technical Report Version 2011 Update 1 Addendum 1: Default definition |
| 7 th Jul '11 —— | Technical Report Version 2011 Update 1 Technical Report Version 2011 Update 1 Appendix |