

Article Title: Sector And Industry Variables | Criteria | Structured Finance | General: Methodology To Derive Stressed Interest Rates In Structured Finance Data: (Editor's note: This report updates the previous version, "Sector And Industry Variables: Methodology To Derive Stressed Interest Rates In Structured Finance," published April 21, 2023. In particular, we added a clarification for some alternative interest rates (synthetic dollar LIBOR and synthetic sterling LIBOR). We will further update this report to incorporate the June 30, 2023, discontinuation of remaining dollar LIBOR settings.)

Overview And Scope This article provides additional information on the variables we use primarily when applying the criteria "Methodology To Derive Stressed Interest Rates In Structured Finance," published Oct. 18, 2019. It is intended to be read and applied in conjunction with those criteria. For a further explanation of sector and industry variables reports, please see the description at the end of this article. We may revise these sector and industry variables--including the stressed interest rate curves--from time to time, when market dynamics warrant reevaluating the quantitative assumptions, to include additional transparency about how we apply our criteria or additional indices. Key Publication Information This article is related to "Methodology To Derive Stressed Interest Rates In Structured Finance," published Oct. 18, 2019. We will update this publication when market conditions warrant.

Sector And Industry Variables We use the framework established in the criteria to derive sets of stressed interest rate curves for several indices in different currencies as listed in table 1. We may update this list to include additional indices in the future. Table 1 - List of indices across currencies

INDEX HYPERLINK TO STRESSED INTEREST RATE CURVE AUSTRALIAN DOLLAR One-month Bank Bill Swap Rate (BBSW)  
[https://www.spglobal.com/ratings/\\_division-assets/excel/01OnemonthBBSW.xls](https://www.spglobal.com/ratings/_division-assets/excel/01OnemonthBBSW.xls) Three-month BBSW  
[https://www.spglobal.com/ratings/\\_division-assets/excel/02threemonthBBSW.xls](https://www.spglobal.com/ratings/_division-assets/excel/02threemonthBBSW.xls) BRAZILIAN REAL Overnight Interbank Deposit (DI) Rate  
<https://disclosure.spglobal.com/ratings/en/regulatory/article/-/view/sourceId/101569369> CHINESE RENMINBI One-year People's Bank Of China (PBOC) Benchmark Lending Rate  
[https://www.spglobal.com/ratings/\\_division-assets/excel/04OneYearPBOC.xls](https://www.spglobal.com/ratings/_division-assets/excel/04OneYearPBOC.xls) One- to five-year PBOC Benchmark Lending Rate  
[https://www.spglobal.com/ratings/\\_division-assets/excel/05onetofiveyrPBOC.xls](https://www.spglobal.com/ratings/_division-assets/excel/05onetofiveyrPBOC.xls) Over-five-year PBOC Benchmark Lending Rate  
[https://www.spglobal.com/ratings/\\_division-assets/excel/06OverfiveyrPBOC.xls](https://www.spglobal.com/ratings/_division-assets/excel/06OverfiveyrPBOC.xls) EUROZONE EURO One-month Euro Interbank Offered Rate (EURIBOR)  
[https://www.spglobal.com/ratings/\\_division-assets/excel/07OnemonthEURIBOR.xls](https://www.spglobal.com/ratings/_division-assets/excel/07OnemonthEURIBOR.xls) Three-month EURIBOR  
[https://www.spglobal.com/ratings/\\_division-assets/excel/08ThreemoEURIBOR.xls](https://www.spglobal.com/ratings/_division-assets/excel/08ThreemoEURIBOR.xls) Six-month EURIBOR  
[https://www.spglobal.com/ratings/\\_division-assets/excel/09SixmoEURIBOR.xls](https://www.spglobal.com/ratings/_division-assets/excel/09SixmoEURIBOR.xls) 12-month EURIBOR  
[https://www.spglobal.com/ratings/\\_division-assets/excel/10TwelvemoEURIBOR.xls](https://www.spglobal.com/ratings/_division-assets/excel/10TwelvemoEURIBOR.xls) HONG KONG DOLLAR One-month Hong Kong Interbank Offered Rate (HIBOR)  
[https://www.spglobal.com/ratings/\\_division-assets/excel/11OnemoHIBOR.xls](https://www.spglobal.com/ratings/_division-assets/excel/11OnemoHIBOR.xls) HUNGARIAN FORINT Three-month Budapest Interbank Offered Rate (BUBOR)  
<https://disclosure.spglobal.com/ratings/en/regulatory/article/-/view/sourceId/101575712> JAPANESE YEN One-month Tokyo Interbank Offered Rate (TIBOR)  
[https://www.spglobal.com/\\_assets/documents/ratings/excel/JPY1MTIBORMasterSheet.xlsx](https://www.spglobal.com/_assets/documents/ratings/excel/JPY1MTIBORMasterSheet.xlsx) Three-month TIBOR  
[https://www.spglobal.com/\\_assets/documents/ratings/excel/JPY3MTIBORMasterSheet.xlsx](https://www.spglobal.com/_assets/documents/ratings/excel/JPY3MTIBORMasterSheet.xlsx) Six-month TIBOR  
[https://www.spglobal.com/\\_assets/documents/ratings/excel/JPY6MTIBORMasterSheet.xlsx](https://www.spglobal.com/_assets/documents/ratings/excel/JPY6MTIBORMasterSheet.xlsx) One-month Tokyo Overnight Average Rate (TONA)  
[https://www.spglobal.com/\\_assets/documents/ratings/excel/JPY1MTONAMasterSheet.xlsx](https://www.spglobal.com/_assets/documents/ratings/excel/JPY1MTONAMasterSheet.xlsx) Three-month TONA  
[https://www.spglobal.com/\\_assets/documents/ratings/excel/JPY3MTONAMasterSheet.xlsx](https://www.spglobal.com/_assets/documents/ratings/excel/JPY3MTONAMasterSheet.xlsx) Six-month TONA  
[https://www.spglobal.com/\\_assets/documents/ratings/excel/JPY6MTONAMasterSheet.xlsx](https://www.spglobal.com/_assets/documents/ratings/excel/JPY6MTONAMasterSheet.xlsx) One-month Tokyo Term Risk Free Rate (TORF)  
[https://www.spglobal.com/\\_assets/documents/ratings/excel/JPY1MTORFMasterSheet.xlsx](https://www.spglobal.com/_assets/documents/ratings/excel/JPY1MTORFMasterSheet.xlsx) Three-month TORF

[https://www.spglobal.com/\\_assets/documents/ratings/excel/JPY3MTORFMasterSheet.xlsx](https://www.spglobal.com/_assets/documents/ratings/excel/JPY3MTORFMasterSheet.xlsx) Six-month TORF  
[https://www.spglobal.com/\\_assets/documents/ratings/excel/JPY6MTORFMasterSheet.xlsx](https://www.spglobal.com/_assets/documents/ratings/excel/JPY6MTORFMasterSheet.xlsx) Three-year Swap Rate  
[https://www.spglobal.com/\\_assets/documents/ratings/excel/JPY3YSWAPMasterSheet.xlsx](https://www.spglobal.com/_assets/documents/ratings/excel/JPY3YSWAPMasterSheet.xlsx) Short-term Prime Rate  
[www.spglobal.com/\\_assets/documents/ratings/excel/JPYShorttermPrimeRateMasterSheet.xlsx](https://www.spglobal.com/_assets/documents/ratings/excel/JPYShorttermPrimeRateMasterSheet.xlsx) KOREAN WON Cost Of Funds Index (COFIX)  
[https://www.spglobal.com/ratings/\\_division-assets/excel/13COFIX.xls](https://www.spglobal.com/ratings/_division-assets/excel/13COFIX.xls) Six-month Korea Financial I (Bank) Debenture Rate  
[https://www.spglobal.com/ratings/\\_division-assets/excel/14SixmoKoreaFin1.xls](https://www.spglobal.com/ratings/_division-assets/excel/14SixmoKoreaFin1.xls) MEXICAN PESO 28-day Interbank Equilibrium Interest Rate (TIIE)  
<https://disclosure.spglobal.com/ratings/en/regulatory/article/-/view/sourceId/101569373> 91-day TIIE  
<https://disclosure.spglobal.com/ratings/en/regulatory/article/-/view/sourceId/101569374> NEW ZEALAND DOLLAR One-month Bank Bill Benchmark Rate (BKBM)  
[https://www.spglobal.com/ratings/\\_division-assets/excel/17OnemoBKBM.xls](https://www.spglobal.com/ratings/_division-assets/excel/17OnemoBKBM.xls) Three-month BKBM  
[https://www.spglobal.com/ratings/\\_division-assets/excel/18ThreemoBKBM.xls](https://www.spglobal.com/ratings/_division-assets/excel/18ThreemoBKBM.xls) PANAMANIAN BALBOA Benchmark Mortgage Reference Interest Rate  
[https://www.spglobal.com/ratings/\\_division-assets/excel/19PABBenchmarkRIR.xls](https://www.spglobal.com/ratings/_division-assets/excel/19PABBenchmarkRIR.xls) SINGAPOREAN DOLLAR One-month Swap Offered Rate (SOR)  
[https://www.spglobal.com/ratings/\\_division-assets/excel/20OnemoSOR.xls](https://www.spglobal.com/ratings/_division-assets/excel/20OnemoSOR.xls) Three-month SOR  
[https://www.spglobal.com/ratings/\\_division-assets/excel/21ThreemoSOR.xls](https://www.spglobal.com/ratings/_division-assets/excel/21ThreemoSOR.xls) Six-month SOR  
[https://www.spglobal.com/ratings/\\_division-assets/excel/22SixmoSOR.xls](https://www.spglobal.com/ratings/_division-assets/excel/22SixmoSOR.xls) One-month Singapore Interbank Offered Rate (SIBOR)  
[https://www.spglobal.com/ratings/\\_division-assets/excel/23OnemoSIBOR.xls](https://www.spglobal.com/ratings/_division-assets/excel/23OnemoSIBOR.xls) Three-month SIBOR  
[https://www.spglobal.com/ratings/\\_division-assets/excel/24ThreemoSIBOR.xls](https://www.spglobal.com/ratings/_division-assets/excel/24ThreemoSIBOR.xls) One-month Singapore Overnight Rate Average (SORA)  
<https://ratings.spglobal.com/rs/583-TMS-002/images/OnemoSORA.xlsx> Three-month SORA  
<https://ratings.spglobal.com/rs/583-TMS-002/images/ThreemoSORA.xlsx> Six-month SORA  
<https://ratings.spglobal.com/rs/583-TMS-002/images/SixmoSORA.xlsx> SOUTH AFRICAN RAND Three-month Johannesburg Interbank Average Rate (JIBAR)  
<https://disclosure.spglobal.com/ratings/en/regulatory/article/-/view/sourceId/100684679> U.K. POUND One-month SONIA\*  
[https://www.spglobal.com/ratings/\\_division-assets/excel/30OnemoSONIA.xls](https://www.spglobal.com/ratings/_division-assets/excel/30OnemoSONIA.xls) Three-month SONIA\*  
[https://www.spglobal.com/ratings/\\_division-assets/excel/31ThreemoSONIA.xls](https://www.spglobal.com/ratings/_division-assets/excel/31ThreemoSONIA.xls) Six-month SONIA\*  
[https://www.spglobal.com/ratings/\\_division-assets/excel/32SixmoSONIA.xls](https://www.spglobal.com/ratings/_division-assets/excel/32SixmoSONIA.xls) 12-month SONIA\*  
[https://www.spglobal.com/ratings/\\_division-assets/excel/33TwelvemoSONIA.xls](https://www.spglobal.com/ratings/_division-assets/excel/33TwelvemoSONIA.xls) U.S. DOLLAR One-month LIBOR  
[https://www.spglobal.com/ratings/\\_division-assets/excel/34USOnemoLIBOR.xls](https://www.spglobal.com/ratings/_division-assets/excel/34USOnemoLIBOR.xls) Three-month LIBOR  
[https://www.spglobal.com/ratings/\\_division-assets/excel/35USThreemoLIBOR.xls](https://www.spglobal.com/ratings/_division-assets/excel/35USThreemoLIBOR.xls) Six-month LIBOR  
[https://www.spglobal.com/ratings/\\_division-assets/excel/36USSixmoLIBOR.xls](https://www.spglobal.com/ratings/_division-assets/excel/36USSixmoLIBOR.xls) 12-month LIBOR  
[https://www.spglobal.com/ratings/\\_division-assets/excel/37USTwelvemoLIBOR.xls](https://www.spglobal.com/ratings/_division-assets/excel/37USTwelvemoLIBOR.xls) One-month SOFR\*  
[https://www.spglobal.com/ratings/\\_division-assets/excel/38OnemoSOFR.xls](https://www.spglobal.com/ratings/_division-assets/excel/38OnemoSOFR.xls) Three-month SOFR\*  
[https://www.spglobal.com/ratings/\\_division-assets/excel/39ThreemoSOFR.xls](https://www.spglobal.com/ratings/_division-assets/excel/39ThreemoSOFR.xls) Six-month SOFR\*  
[https://www.spglobal.com/ratings/\\_division-assets/excel/40SixmoSOFR.xls](https://www.spglobal.com/ratings/_division-assets/excel/40SixmoSOFR.xls) 12-month SOFR\*  
[https://www.spglobal.com/ratings/\\_division-assets/excel/41TwelvemoSOFR.xls](https://www.spglobal.com/ratings/_division-assets/excel/41TwelvemoSOFR.xls) Three-month T-bill  
[https://www.spglobal.com/ratings/\\_division-assets/excel/42ThreemoTbill.xls](https://www.spglobal.com/ratings/_division-assets/excel/42ThreemoTbill.xls) Six-month T-bill  
[https://www.spglobal.com/ratings/\\_division-assets/excel/43SixmoTbill.xls](https://www.spglobal.com/ratings/_division-assets/excel/43SixmoTbill.xls) 12-month T-bill  
[https://www.spglobal.com/ratings/\\_division-assets/excel/44TwelvemoTbill.xls](https://www.spglobal.com/ratings/_division-assets/excel/44TwelvemoTbill.xls) Three-year Swap Rate  
[https://www.spglobal.com/ratings/\\_division-assets/excel/45ThreeyrSwapRate.xls](https://www.spglobal.com/ratings/_division-assets/excel/45ThreeyrSwapRate.xls) Five-year Swap Rate  
[https://www.spglobal.com/ratings/\\_division-assets/excel/46FiveyrSwapRate.xls](https://www.spglobal.com/ratings/_division-assets/excel/46FiveyrSwapRate.xls) Seven-year Swap Rate  
[https://www.spglobal.com/ratings/\\_division-assets/excel/47SevenyrSwapRate.xls](https://www.spglobal.com/ratings/_division-assets/excel/47SevenyrSwapRate.xls) 10-year Swap Rate  
[https://www.spglobal.com/ratings/\\_division-assets/excel/48TenyrSwapRate.xls](https://www.spglobal.com/ratings/_division-assets/excel/48TenyrSwapRate.xls) Prime  
[https://www.spglobal.com/ratings/\\_division-assets/excel/49Primerate.xls](https://www.spglobal.com/ratings/_division-assets/excel/49Primerate.xls) One-year Constant Maturity Treasury (CMT) Rate  
[https://www.spglobal.com/ratings/\\_division-assets/excel/50OneyrCMT.xls](https://www.spglobal.com/ratings/_division-assets/excel/50OneyrCMT.xls) Five-year CMT Rate  
[https://www.spglobal.com/ratings/\\_division-assets/excel/51FiveyrCMT.xls](https://www.spglobal.com/ratings/_division-assets/excel/51FiveyrCMT.xls) Cost Of

Funds Index (COFI) Rate [https://www.spglobal.com/ratings/\\_division-assets/excel/52COFIrate.xls](https://www.spglobal.com/ratings/_division-assets/excel/52COFIrate.xls)

Federal Funds Rate [https://www.spglobal.com/ratings/\\_division-assets/excel/53FedFundsrate.xls](https://www.spglobal.com/ratings/_division-assets/excel/53FedFundsrate.xls)

Securities Industry And Financial Markets Association (SIFMA) Rate

[https://www.spglobal.com/ratings/\\_division-assets/excel/54SIFMA.xls](https://www.spglobal.com/ratings/_division-assets/excel/54SIFMA.xls) One-year Monthly Treasury Average (MTA) Rate

<https://disclosure.spglobal.com/ratings/en/regulatory/article/-/view/sourceId/101474210> \*The stressed curves are applicable to both compounded and term rates. The relevant set of stressed curves is selected based on the starting interest rate, which may be a compounded or term rate as reflected in the transaction documents. §The stressed curves plus the appropriate spread adjustment are applicable to synthetic dollar LIBOR. †The stressed curves plus the appropriate spread adjustment are applicable to synthetic sterling LIBOR. We generally use the set of stressed curves with a corresponding starting rate that is closest to the interest rate for the following interest payment date, rounded to the nearest 50 basis points. If the rate is exactly halfway between two consecutive starting rates, we generally round it up. For example, if the rate were 2.75%, we would typically round up to a 3.00% start rate. We may also derive some indices by adding or subtracting a fixed differential from another index. The adjustment would result in a parallel shift relative to the reference rate in table 1. For example, for some transactions that reference the Australian Dollar Overnight Index Average (AONIA) (one-month compounded daily Australian Dollar Interbank Overnight Cash Rate) and the one-month Australian Dollar Bank Bill Swap (BBSW), we may adjust the applicable interest rate curve from table 1 by subtracting a differential from the one-month Australian Dollar Bank Bill Swap (BBSW) rate, as shown in table 2. The interest rate curves derived using this methodology are analytically consistent with those from table 1. Table 2 - Compounded daily cash rate (AONIA) adjustment from Australian dollar BBSW rate AUSTRALIAN DOLLAR BBSW TENOR ADJUSTMENT (BPS) One-month (6) AONIA--Australian Dollar Overnight Index Average. BBSW--Bank Bill Swap. Bps--Basis points. Related Criteria Methodology To Derive Stressed Interest Rates In Structured Finance, Oct. 18, 2019 Related Research Evolution Of The Methodologies Framework: Introducing Sector And Industry Variables Reports, Oct. 1, 2021 Japanese Securitizations: Time Ticking On LIBOR Transition, March 17, 2021 Credit Rating Model: CIR Model, Oct. 18, 2019 How Might Negative Interest Rates Affect Floating-Rate Securitizations?, Sept. 14, 2016 This is a sector and industry variables report. A sector and industry variables report is a publicly available criteria-related publication that describes sector, industry, asset class, or regional variables that we expect to periodically update mainly to reflect our views on changing macroeconomic and market conditions. Sector and industry variables reports are not criteria because they do not establish a methodological framework for determining credit ratings.