Article Title: ARCHIVE | Criteria | Insurance | Specialty: Default Table Used To Rate Insurance-Linked Securitizations Updated Data: (EDITOR'S NOTE: -This article is no longer current. It has been superseded by "Methodology And Assumptions For Insurance-Linked Securitizations," published Nov. 19, 2018.) Standard & Poor's Ratings Services has revised the default table it uses to rate insurance-linked securitizations. This is the first revision to the default table since we began using it in 1999. The updated table is based on observed historical corporate defaults and has been idealized to smooth statistically outlying data. We will use this table to rate all insurance-linked securitizations. Because of the limited number of insurance-linked transactions, Standard & Poor's has used observed historical corporate default data to update the table and at some rating levels applied idealized smoothing to statistically outlying data. The effect has been to remove some inherent clustering apparent across some rating categories and to better reflect Standard & Poor's current opinion about the likelihood of future defaults. We believe the updated table will enhance risk differentiation and transparency in the rating process. Specific to catastrophe bonds, we assign a rating to each note by comparing two rows of the table. The first row corresponds to the maturity of the note (or, in the case of a re-setting note, the re-set term); the second is a surrogate for the instantaneous probability of attachment. Standard & Poor's compares the note's lifetime and annual probabilities of attachment with the appropriate maturities and locates in each row the first rating category for which the likelihood of default exceeds the corresponding probability of attachment. The lesser of these ratings will be the maximum possible rating on the note. We will review this default table to insure that actual results are consistent with expectations. Therefore, the table could be subject to future periodic revisions, though we do not expect frequent changes. For the full default table download table 1. Table 1 Cumulative Default Probabilities (%) DEFAULT TABLE FOR INSURANCE-LINKED SECURITIZATIONS MATURITY (YEARS) AAA AA+ AA AA- A+ A A- BBB+ BBB BBB- BB+ BB BB- B+ B B- CCC+ CCC CCC- CC SD D 1 0.003 0.010 0.015 0.025 0.040 0.060 0.085 0.234 0.353 0.547 1.632 2.525 3.518 4.510 5.824 8.138 23.582 45.560 66.413 100.000 100.000 100.000 2 0.027 0.048 0.074 0.106 0.150 0.200 0.264 0.514 0.825 1.279 3.211 4.946 6.915 8.885 11.751 16.674 38.104 59.145 79.233 100.000 100.000 100.000 3 0.052 0.085 0.133 0.188 0.260 0.340 0.443 0.850 1.405 2.177 4.758 7.230 10.095 12.960 17.152 24.004 46.752 64.835 82.905 100.000 100.000 100.000 4 0.076 0.123 0.191 0.269 0.370 0.480 0.621 1.246 2.073 3.213 6.276 9.380 13.037 16.694 21.921 30.025 52.288 68.078 84.581 100.000 100.000 100.000 5 0.100 0.160 0.250 0.350 0.480 0.620 0.800 1.704 2.812 4.359 7.763 11.403 15.745 20.087 26.089 34.945 56.158 70.313 85.650 100.000 100.000 100.000 6 0.122 0.192 0.310 0.397 0.531 0.655 0.966 1.805 2.980 6.316 8.327 12.175 16.832 21.462 27.947 38.234 58.626 71.685 86.285 100.000 100.000 100.000 7 0.144 0.224 0.420 0.543 0.719 0.887 1.287 2.261 3.672 7.434 9.598 13.826 18.895 24.083 30.999 41.476 60.850 73.005 86.907 100.000 100.000 100.000 8 0.204 0.311 0.549 0.713 0.937 1.152 1.648 2.756 4.390 8.529 10.831 15.387 20.800 26.457 33.680 44.209 62.672 74.105 87.429 100.000 100.000 100.000 9 0.276 0.414 0.700 0.909 1.184 1.451 2.047 3.284 5.127 9.598 12.025 16.862 22.563 28.610 36.046 46.543 64.204 75.041 87.877 100.000 100.000 100.000 10 0.362 0.536 0.872 1.130 1.458 1.782 2.479 3.842 5.876 10.637 13.179 18.258 24.197 30.565 38.145 48.559 65.517 75.853 88.268 100.000 100.000 100.000 11 0.463 0.678 1.066 1.377 1.761 2.143 2.943 4.425 6.634 11.649 14.295 19.580 25.717 32.346 40.016 50.320 66.657 76.565 88.614 100.000 100.000 100.000 12 0.581 0.839 1.284 1.650 2.092 2.534 3.434 5.029 7.396 12.631 15.371 20.834 27.132 33.973 41.694 51.871 67.659 77.197 88.921 100.000 100.000 100.000 13 0.715 1.020 1.525 1.947 2.448 2.952 3.952 5.651 8.160 13.587 16.410 22.025 28.453 35.463 43.206 53.248 68.548 77.762 89.197 100.000 100.000 100.000 14 0.867 1.223 1.790 2.270 2.830 3.396 4.491 6.287 8.923 14.515 17.414 23.157 29.689 36.832 44.575 54.481 69.343 78.271 89.447 100.000 100.000 100.000 15 1.037 1.447 2.078 2.617 3.237 3.864 5.051 6.936 9.684 15.418 18.383 24.234 30.849 38.096 45.822 55.592 70.060 78.732 89.674 100.000 100.000 100.000 16 1.225 1.693 2.389 2.988 3.666 4.353 5.628 7.593 10.441 16.296 19.320 25.262 31.940 39.265 46.962 56.599 70.710 79.154 89.882 100.000 100.000 100.000 17 1.433 1.961 2.724 3.382 4.117 4.862 6.221 8.258 11.193 17.152 20.226 26.243 32.969 40.351 48.009 57.517 71.304 79.541 90.074 100.000 100.000 100.000 18 1.661 2.250 3.080 3.798 4.588 5.390 6.826 8.928 11.940 17.985 21.103 27.181 33.941 41.363 48.976 58.359 71.848 79.898 90.250 100.000 100.000 100.000 19 1.908 2.561 3.458 4.234 5.078 5.934 7.442 9.602 12.680 18.798 21.952 28.081 34.862 42.310 49.872 59.134 72.350 80.229

```
90.414 100.000 100.000 100.000 20 2.175 2.893 3.858 4.690 5.586 6.493 8.068 10.279 13.414 19.591
22.777 28.944 35.737 43.198 50.706 59.851 72.816 80.538 90.568 100.000 100.000 100.000 21 2.462
3.246 4.277 5.165 6.110 7.065 8.701 10.957 14.142 20.365 23.577 29.773 36.570 44.034 51.486
60.517 73.249 80.827 90.711 100.000 100.000 100.000 22 2.769 3.619 4.715 5.657 6.648 7.648 9.340
11.636 14.862 21.123 24.355 30.572 37.365 44.824 52.216 61.140 73.654 81.099 90.845 100.000
100.000 100.000 23 3.095 4.012 5.171 6.164 7.200 8.241 9.985 12.314 15.575 21.863 25.112 31.343
38.126 45.571 52.904 61.723 74.035 81.355 90.973 100.000 100.000 100.000 24 3.440 4.423 5.644
6.687 7.763 8.844 10.633 12.991 16.281 22.589 25.850 32.087 38.855 46.281 53.554 62.271 74.394
81.598 91.093 100.000 100.000 100.000 25 3.804 4.853 6.133 7.223 8.337 9.454 11.284 13.667
16.980 23.300 26.570 32.808 39.556 46.958 54.169 62.789 74.733 81.828 91.207 100.000 100.000
100.000 26 4.187 5.300 6.638 7.772 8.921 10.070 11.937 14.340 17.671 23.997 27.272 33.506 40.230
47.604 54.754 63.280 75.055 82.048 91.316 100.000 100.000 100.000 27 4.586 5.763 7.156 8.331
9.513 10.692 12.591 15.010 18.356 24.682 27.959 34.184 40.881 48.222 55.311 63.746 75.362
82.258 91.419 100.000 100.000 100.000 28 5.003 6.241 7.686 8.901 10.112 11.318 13.245 15.678
19.033 25.354 28.630 34.842 41.510 48.815 55.844 64.190 75.655 82.459 91.519 100.000 100.000
100.000 29 5.436 6.735 8.229 9.480 10.718 11.947 13.900 16.342 19.704 26.015 29.288 35.483
42.118 49.386 56.355 64.615 75.935 82.653 91.614 100.000 100.000 100.000 30 5.885 7.241 8.781
10.066 11.329 12.580 14.553 17.003 20.367 26.665 29.933 36.108 42.709 49.936 56.845 65.022
76.205 82.839 91.706 100.000 100.000 100.000 Table 1 Cumulative Default Probabilities (%)
DEFAULT TABLE FOR INSURANCE-LINKED SECURITIZATIONS MATURITY (YEARS) AAA AA+ AA
AA- A+ A A- BBB+ BBB BBB- BB+ BB BB- B+ B B- CCC+ CCC 1 0.003 0.010 0.015 0.025 0.040 0.060
0.085 0.234 0.353 0.547 1.632 2.525 3.518 4.510 5.824 8.138 23.582 45.560 2 0.027 0.048 0.074
0.106 0.150 0.200 0.264 0.514 0.825 1.279 3.211 4.946 6.915 8.885 11.751 16.674 38.104 59.145 3
0.052 0.085 0.133 0.188 0.260 0.340 0.443 0.850 1.405 2.177 4.758 7.230 10.095 12.960 17.152
24.004 46.752 64.835 4 0.076 0.123 0.191 0.269 0.370 0.480 0.621 1.246 2.073 3.213 6.276 9.380
13.037 16.694 21.921 30.025 52.288 68.078 5 0.100 0.160 0.250 0.350 0.480 0.620 0.800 1.704 2.812
4.359 7.763 11.403 15.745 20.087 26.089 34.945 56.158 70.313 6 0.122 0.192 0.310 0.397 0.531
0.655 0.966 1.805 2.980 6.316 8.327 12.175 16.832 21.462 27.947 38.234 58.626 71.685 7 0.144
0.224 0.420 0.543 0.719 0.887 1.287 2.261 3.672 7.434 9.598 13.826 18.895 24.083 30.999 41.476
60.850 73.005 8 0.204 0.311 0.549 0.713 0.937 1.152 1.648 2.756 4.390 8.529 10.831 15.387 20.800
26.457 33.680 44.209 62.672 74.105 9 0.276 0.414 0.700 0.909 1.184 1.451 2.047 3.284 5.127 9.598
12.025 16.862 22.563 28.610 36.046 46.543 64.204 75.041 10 0.362 0.536 0.872 1.130 1.458 1.782
2.479 3.842 5.876 10.637 13.179 18.258 24.197 30.565 38.145 48.559 65.517 75.853 11 0.463 0.678
1.066 1.377 1.761 2.143 2.943 4.425 6.634 11.649 14.295 19.580 25.717 32.346 40.016 50.320
66.657 76.565 12 0.581 0.839 1.284 1.650 2.092 2.534 3.434 5.029 7.396 12.631 15.371 20.834
27.132 33.973 41.694 51.871 67.659 77.197 13 0.715 1.020 1.525 1.947 2.448 2.952 3.952 5.651
8.160 13.587 16.410 22.025 28.453 35.463 43.206 53.248 68.548 77.762 14 0.867 1.223 1.790 2.270
2.830 3.396 4.491 6.287 8.923 14.515 17.414 23.157 29.689 36.832 44.575 54.481 69.343 78.271 15
1.037 1.447 2.078 2.617 3.237 3.864 5.051 6.936 9.684 15.418 18.383 24.234 30.849 38.096 45.822
55.592 70.060 78.732 16 1.225 1.693 2.389 2.988 3.666 4.353 5.628 7.593 10.441 16.296 19.320
25.262 31.940 39.265 46.962 56.599 70.710 79.154 17 1.433 1.961 2.724 3.382 4.117 4.862 6.221
8.258 11.193 17.152 20.226 26.243 32.969 40.351 48.009 57.517 71.304 79.541 18 1.661 2.250 3.080
3.798 4.588 5.390 6.826 8.928 11.940 17.985 21.103 27.181 33.941 41.363 48.976 58.359 71.848
79.898 19 1.908 2.561 3.458 4.234 5.078 5.934 7.442 9.602 12.680 18.798 21.952 28.081 34.862
42.310 49.872 59.134 72.350 80.229 20 2.175 2.893 3.858 4.690 5.586 6.493 8.068 10.279 13.414
19.591 22.777 28.944 35.737 43.198 50.706 59.851 72.816 80.538 21 2.462 3.246 4.277 5.165 6.110
7.065 8.701 10.957 14.142 20.365 23.577 29.773 36.570 44.034 51.486 60.517 73.249 80.827 22
2.769 3.619 4.715 5.657 6.648 7.648 9.340 11.636 14.862 21.123 24.355 30.572 37.365 44.824
52.216 61.140 73.654 81.099 23 3.095 4.012 5.171 6.164 7.200 8.241 9.985 12.314 15.575 21.863
25.112 31.343 38.126 45.571 52.904 61.723 74.035 81.355 24 3.440 4.423 5.644 6.687 7.763 8.844
10.633 12.991 16.281 22.589 25.850 32.087 38.855 46.281 53.554 62.271 74.394 81.598 25 3.804
4.853 6.133 7.223 8.337 9.454 11.284 13.667 16.980 23.300 26.570 32.808 39.556 46.958 54.169
62.789 74.733 81.828 26 4.187 5.300 6.638 7.772 8.921 10.070 11.937 14.340 17.671 23.997 27.272
```

33.506 40.230 47.604 54.754 63.280 75.055 82.048 27 4.586 5.763 7.156 8.331 9.513 10.692 12.591 15.010 18.356 24.682 27.959 34.184 40.881 48.222 55.311 63.746 75.362 82.258 28 5.003 6.241 7.686 8.901 10.112 11.318 13.245 15.678 19.033 25.354 28.630 34.842 41.510 48.815 55.844 64.190 75.655 82.459 29 5.436 6.735 8.229 9.480 10.718 11.947 13.900 16.342 19.704 26.015 29.288 35.483 42.118 49.386 56.355 64.615 75.935 82.653 30 5.885 7.241 8.781 10.066 11.329 12.580 14.553 17.003 20.367 26.665 29.933 36.108 42.709 49.936 56.845 65.022 76.205 82.839 Revisions And Updates This article was originally published on May 8, 2008. Changes introduced after original publication: Following our periodic review completed on Feb. 26, 2016, we updated the contact information. Following our periodic review completed on Feb. 24, 2017, we updated the contact information and added the "Related Criteria" section. Following our periodic review completed on Feb. 20, 2018, we updated the contact information. Related Criteria And Research Related Criteria Rating Natural Peril Catastrophe Bonds: Methodology And Assumptions, Dec. 18, 2013 Guide To Rating Insurance-Linked Mortality Catastrophe Bonds, Sept. 11, 2008 Debt Tranching And Ratings Caps In Global Insurance Securitization, Oct. 6, 2004 These criteria represent the specific application of fundamental principles that define credit risk and ratings opinions. Their use is determined by the issuer-specific or issue-specific facts, as well as Standard & Poor's assessment of the credit and, if applicable, structural risks for a given issuer or issue rating. Methodology and assumptions change from time to time as a result of market and economic conditions, issue-specific or issuer-specific factors, or new empirical evidence that would affect our credit judgment.