

| Year | Period | Coupon rate | Coupon payment (6-month) | YTM (BEY) | YTM (6-month) | Price | Spot rate (6-month) | Spot rate (BEY) | Spot rate (EAR) | P _{0,t} | PV of all but last CF |
|------|--------|-------------|-----------------------------|-----------|---------------|---------|------------------------|--------------------|--------------------|------------------|--------------------------|
| | 1 | 0.000% | 0 | 0.19% | 0.095% | 0.99905 | 0.095% | 0.190% | 0.190% | 0.9991 | 0 |
| 1 | 2 | 0.000% | 0 | 0.30% | 0.150% | 0.99701 | 0.150% | 0.300% | 0.300% | 0.9970 | 0 |
| | 3 | 0.565% | 0.002825 | 0.57% | 0.283% | 1.00000 | 0.283% | 0.566% | 0.567% | 0.9916 | 0.0056 |
| 2 | 4 | 0.875% | 0.004375 | 0.83% | 0.415% | 1.00089 | 0.416% | 0.833% | 0.834% | 0.9835 | 0.01 |
| | 5 | 1.080% | 0.0054 | 1.08% | 0.540% | 1.00000 | 0.543% | 1.085% | 1.088% | 0.9733 | 0.0214 |
| 3 | 6 | 1.375% | 0.006875 | 1.33% | 0.665% | 1.00132 | 0.670% | 1.340% | 1.345% | 0.9607 | 0.03 |
| | 7 | 1.563% | 0.0078125 | 1.56% | 0.781% | 1.00000 | 0.789% | 1.578% | 1.584% | 0.9465 | 0.0461 |
| 4 | 8 | 1.795% | 0.008975 | 1.80% | 0.898% | 1.00000 | 0.909% | 1.818% | 1.826% | 0.9302 | 0.06 |
| | 9 | 2.028% | 0.0101375 | 2.03% | 1.014% | 1.00000 | 1.030% | 2.061% | 2.071% | 0.9119 | 0.0789 |
| 5 | 10 | 2.375% | 0.011875 | 2.26% | 1.130% | 1.00541 | 1.154% | 2.308% | 2.322% | 0.8916 | 0.10 |
| | 11 | 2.450% | 0.01225 | 2.45% | 1.225% | 1.00000 | 1.254% | 2.508% | 2.524% | 0.8719 | 0.1174 |
| 6 | 12 | 2.640% | 0.0132 | 2.64% | 1.320% | 1.00000 | 1.356% | 2.712% | 2.731% | 0.8507 | 0.14 |
| | 13 | 2.830% | 0.01415 | 2.83% | 1.415% | 1.00000 | 1.460% | 2.920% | 2.941% | 0.8283 | 0.1600 |
| 7 | 14 | 3.000% | 0.015 | 3.02% | 1.510% | 0.99875 | 1.565% | 3.129% | 3.154% | 0.8046 | 0.18 |
| | 15 | 3.118% | 0.0155917 | 3.12% | 1.559% | 1.00000 | 1.618% | 3.237% | 3.263% | 0.7860 | 0.2018 |
| 8 | 16 | 3.217% | 0.0160833 | 3.22% | 1.608% | 1.00000 | 1.673% | 3.345% | 3.373% | 0.7669 | 0.22 |
| | 17 | 3.315% | 0.016575 | 3.32% | 1.658% | 1.00000 | 1.728% | 3.455% | 3.485% | 0.7474 | 0.2402 |
| 9 | 18 | 3.413% | 0.0170667 | 3.41% | 1.707% | 1.00000 | 1.783% | 3.567% | 3.599% | 0.7275 | 0.26 |
| | 19 | 3.512% | 0.0175583 | 3.51% | 1.756% | 1.00000 | 1.840% | 3.680% | 3.714% | 0.7072 | 0.2804 |
| 10 | 20 | 3.625% | 0.018125 | 3.61% | 1.805% | 1.00125 | 1.898% | 3.796% | 3.832% | 0.6866 | 0.30 |
| | 21 | 3.634% | 0.01817 | 3.63% | 1.817% | 1.00000 | 1.909% | 3.817% | 3.854% | 0.6723 | 0.3155 |
| 11 | 22 | 3.658% | 0.01829 | 3.66% | 1.829% | 1.00000 | 1.920% | 3.840% | 3.877% | 0.6581 | 0.33 |
| | 23 | 3.682% | 0.01841 | 3.68% | 1.841% | 1.00000 | 1.932% | 3.863% | 3.901% | 0.6440 | 0.3441 |
| 12 | 24 | 3.706% | 0.01853 | 3.71% | 1.853% | 1.00000 | 1.944% | 3.887% | 3.925% | 0.6300 | 0.36 |
| | 25 | 3.730% | 0.01865 | 3.73% | 1.865% | 1.00000 | 1.956% | 3.912% | 3.950% | 0.6161 | 0.3724 |
| 13 | 26 | 3.754% | 0.01877 | 3.75% | 1.877% | 1.00000 | 1.969% | 3.938% | 3.976% | 0.6024 | 0.39 |
| | 27 | 3.778% | 0.01889 | 3.78% | 1.889% | 1.00000 | 1.982% | 3.964% | 4.003% | 0.5887 | 0.4002 |
| 14 | 28 | 3.802% | 0.01901 | 3.80% | 1.901% | 1.00000 | 1.995% | 3.990% | 4.030% | 0.5751 | 0.41 |
| | 29 | 3.826% | 0.01913 | 3.83% | 1.913% | 1.00000 | 2.009% | 4.017% | 4.058% | 0.5617 | 0.4275 |
| 15 | 30 | 3.850% | 0.01925 | 3.85% | 1.925% | 1.00000 | 2.023% | 4.045% | 4.086% | 0.5484 | 0.44 |
| | 31 | 3.874% | 0.01937 | 3.87% | 1.937% | 1.00000 | 2.037% | 4.074% | 4.115% | 0.5352 | 0.45 |
| 16 | 32 | 3.898% | 0.01949 | 3.90% | 1.949% | 1.00000 | 2.051% | 4.102% | 4.145% | 0.5222 | 0.47 |
| | 33 | 3.922% | 0.01961 | 3.92% | 1.961% | 1.00000 | 2.066% | 4.132% | 4.175% | 0.5092 | 0.48 |
| 17 | 34 | 3.946% | 0.01973 | 3.95% | 1.973% | 1.00000 | 2.081% | 4.162% | 4.205% | 0.4964 | 0.49 |

| | | | | | | | | | | | |
|----|----|--------|----------|-------|--------|---------|--------|--------|--------|--------|------|
| | 35 | 3.970% | 0.01985 | 3.97% | 1.985% | 1.00000 | 2.096% | 4.193% | 4.237% | 0.4838 | 0.51 |
| 18 | 36 | 3.994% | 0.01997 | 3.99% | 1.997% | 1.00000 | 2.112% | 4.224% | 4.268% | 0.4712 | 0.52 |
| | 37 | 4.018% | 0.02009 | 4.02% | 2.009% | 1.00000 | 2.128% | 4.256% | 4.301% | 0.4589 | 0.53 |
| 19 | 38 | 4.042% | 0.02021 | 4.04% | 2.021% | 1.00000 | 2.144% | 4.288% | 4.334% | 0.4466 | 0.54 |
| | 39 | 4.066% | 0.02033 | 4.07% | 2.033% | 1.00000 | 2.160% | 4.321% | 4.368% | 0.4345 | 0.56 |
| 20 | 40 | 4.090% | 0.02045 | 4.09% | 2.045% | 1.00000 | 2.177% | 4.355% | 4.402% | 0.4225 | 0.57 |
| | 41 | 4.114% | 0.02057 | 4.11% | 2.057% | 1.00000 | 2.194% | 4.389% | 4.437% | 0.4107 | 0.58 |
| 21 | 42 | 4.138% | 0.02069 | 4.14% | 2.069% | 1.00000 | 2.212% | 4.424% | 4.473% | 0.3990 | 0.59 |
| | 43 | 4.162% | 0.02081 | 4.16% | 2.081% | 1.00000 | 2.230% | 4.459% | 4.509% | 0.3874 | 0.60 |
| 22 | 44 | 4.186% | 0.02093 | 4.19% | 2.093% | 1.00000 | 2.248% | 4.496% | 4.546% | 0.3760 | 0.62 |
| | 45 | 4.210% | 0.02105 | 4.21% | 2.105% | 1.00000 | 2.266% | 4.533% | 4.584% | 0.3648 | 0.63 |
| 23 | 46 | 4.234% | 0.02117 | 4.23% | 2.117% | 1.00000 | 2.285% | 4.571% | 4.623% | 0.3537 | 0.64 |
| | 47 | 4.258% | 0.02129 | 4.26% | 2.129% | 1.00000 | 2.305% | 4.609% | 4.663% | 0.3427 | 0.65 |
| 24 | 48 | 4.282% | 0.02141 | 4.28% | 2.141% | 1.00000 | 2.324% | 4.649% | 4.703% | 0.3319 | 0.66 |
| | 49 | 4.306% | 0.02153 | 4.31% | 2.153% | 1.00000 | 2.345% | 4.689% | 4.744% | 0.3212 | 0.67 |
| 25 | 50 | 4.330% | 0.02165 | 4.33% | 2.165% | 1.00000 | 2.365% | 4.731% | 4.787% | 0.3107 | 0.68 |
| | 51 | 4.354% | 0.02177 | 4.35% | 2.177% | 1.00000 | 2.386% | 4.773% | 4.830% | 0.3004 | 0.69 |
| 26 | 52 | 4.378% | 0.02189 | 4.38% | 2.189% | 1.00000 | 2.408% | 4.816% | 4.874% | 0.2901 | 0.70 |
| | 53 | 4.402% | 0.02201 | 4.40% | 2.201% | 1.00000 | 2.430% | 4.861% | 4.920% | 0.2801 | 0.71 |
| 27 | 54 | 4.426% | 0.02213 | 4.43% | 2.213% | 1.00000 | 2.453% | 4.906% | 4.966% | 0.2702 | 0.72 |
| | 55 | 4.450% | 0.02225 | 4.45% | 2.225% | 1.00000 | 2.476% | 4.953% | 5.014% | 0.2604 | 0.73 |
| 28 | 56 | 4.474% | 0.02237 | 4.47% | 2.237% | 1.00000 | 2.500% | 5.001% | 5.063% | 0.2508 | 0.74 |
| | 57 | 4.498% | 0.02249 | 4.50% | 2.249% | 1.00000 | 2.525% | 5.050% | 5.114% | 0.2414 | 0.75 |
| 29 | 58 | 4.522% | 0.02261 | 4.52% | 2.261% | 1.00000 | 2.550% | 5.101% | 5.166% | 0.2321 | 0.76 |
| | 59 | 4.546% | 0.02273 | 4.55% | 2.273% | 1.00000 | 2.576% | 5.153% | 5.219% | 0.2229 | 0.77 |
| 30 | 60 | 4.625% | 0.023125 | 4.57% | 2.285% | 1.00893 | 2.607% | 5.215% | 5.283% | 0.2134 | 0.79 |

| Year | Spot Rate (Year 1 Implied Yield Volatility | |
|------|---|-----------|
| | 1 | 0.0030023 |
| | 2 | 0.0083448 |
| | 3 | 0.0134466 |
| | 4 | 0.0182649 |
| | 5 | 0.0232166 |
| | 6 | 0.0273084 |
| | 7 | 0.0315395 |
| | 8 | 0.0337323 |
| | 9 | 0.0359858 |
| | 10 | 0.0383224 |

| | | |
|----|-----------|-------|
| 11 | 0.0387673 | 0.118 |
| 12 | 0.0392515 | 0.116 |
| 13 | 0.0397633 | 0.114 |
| 14 | 0.0403004 | 0.112 |
| 15 | 0.0408614 | 0.11 |
| 16 | 0.0414457 | 0.108 |
| 17 | 0.0420532 | 0.106 |
| 18 | 0.0426841 | 0.104 |
| 19 | 0.0433393 | 0.102 |
| 20 | 0.0440199 | 0.1 |
| 21 | 0.0447272 | 0.098 |
| 22 | 0.045463 | 0.096 |
| 23 | 0.0462296 | 0.094 |
| 24 | 0.0470294 | 0.092 |
| 25 | 0.0478656 | 0.09 |
| 26 | 0.0487418 | 0.088 |
| 27 | 0.0496621 | 0.086 |
| 28 | 0.0506316 | 0.084 |
| 29 | 0.0516563 | 0.082 |
| 30 | 0.0528279 | 0.08 |

| Implied 6-month forward rate | Year 1 implied yield volatility |
|------------------------------------|--|
| 0.095% | 0.00% |
| 0.205% | 0.00% |
| 0.549% | 0.00% |
| 0.818% | 8.00% |
| 1.050% | 10.00% |
| 1.309% | 12.00% |
| 1.506% | 13.00% |
| 1.754% | 14.00% |
| 2.006% | 15.00% |
| 2.275% | 16.00% |
| 2.258% | 14.50% |
| 2.488% | 13.00% |
| 2.712% | 11.50% |
| 2.938% | 10.00% |
| 2.374% | 10.33% |
| 2.488% | 10.67% |
| 2.611% | 11.00% |
| 2.737% | 11.33% |
| 2.866% | 11.67% |
| 3.007% | 12.00% |
| 2.119% | 11.90% |
| 2.158% | 11.80% |
| 2.189% | 11.70% |
| 2.221% | 11.60% |
| 2.254% | 11.50% |
| 2.287% | 11.40% |
| 2.321% | 11.30% |
| 2.355% | 11.20% |
| 2.390% | 11.10% |
| 2.426% | 11.00% |
| 2.463% | 10.90% |
| 2.500% | 10.80% |
| 2.539% | 10.70% |
| 2.578% | 10.60% |