**Appendix-A:** Risk and return characteristics of 178 sample stocks and the benchmark market index (DSEX)

| **Stock No.** | **Name** | **Mean Return** | **Variance** | **Standard Deviation** | **Covariance** | **Beta** |
| --- | --- | --- | --- | --- | --- | --- |
| 1 | AB Bank Limited | -0.00260 | 0.01528 | 0.12360 | 0.00339 | 0.22182 |
| 2 | The City Bank Ltd. | 0.01113 | 0.01217 | 0.11032 | 0.00347 | 0.28493 |
| 3 | IFIC Bank Ltd. | -0.00070 | 0.02645 | 0.16264 | 0.00326 | 0.12338 |
| 4 | Islami Bank Bd Ltd | 0.00209 | 0.01626 | 0.12751 | 0.00250 | 0.15359 |
| 5 | National Bank Ltd. | -0.00479 | 0.01138 | 0.10666 | 0.00262 | 0.23006 |
| 6 | Pubali Bank Ltd. | -0.00084 | 0.00694 | 0.08332 | 0.00188 | 0.27022 |
| 7 | Rupali Bank Ltd. | 0.00042 | 0.01736 | 0.13175 | 0.00322 | 0.18556 |
| 8 | United Commercial Bank Ltd. | 0.00287 | 0.01029 | 0.10145 | 0.00288 | 0.28005 |
| 9 | Uttara Bank Ltd. | 0.00001 | 0.00809 | 0.08996 | 0.00265 | 0.32736 |
| 10 | Eastern Bank Ltd. | 0.00650 | 0.00485 | 0.06963 | 0.00174 | 0.35953 |
| 11 | Al-Arafah Islami Bank Ltd. | 0.00484 | 0.01143 | 0.10692 | 0.00305 | 0.26704 |
| 12 | Prime Bank Ltd. | -0.00472 | 0.00863 | 0.09288 | 0.00168 | 0.19448 |
| 13 | Southeast Bank Ltd. | 0.00426 | 0.00812 | 0.09009 | 0.00259 | 0.31930 |
| 14 | Dhaka Bank Ltd. | -0.00096 | 0.01042 | 0.10209 | 0.00341 | 0.32680 |
| 15 | National Credit and Commerce Bank Ltd. | 0.00091 | 0.00520 | 0.07214 | 0.00208 | 0.39944 |
| 16 | Social Islami Bank Ltd. | 0.00599 | 0.00553 | 0.07434 | 0.00134 | 0.24267 |
| 17 | Dutch-Bangla Bank Ltd. | 0.00311 | 0.00657 | 0.08106 | 0.00215 | 0.32799 |
| 18 | Mutual Trust Bank Ltd. | 0.01123 | 0.00808 | 0.08991 | 0.00217 | 0.26881 |
| 19 | Standard Bank Ltd. | -0.00235 | 0.00887 | 0.09419 | 0.00288 | 0.32447 |
| 20 | One Bank Limited | 0.00212 | 0.00805 | 0.08971 | 0.00296 | 0.36771 |
| 21 | Bank Asia Ltd. | 0.00429 | 0.00826 | 0.09086 | 0.00196 | 0.23776 |
| 22 | Mercantile Bank Ltd. | 0.00689 | 0.00882 | 0.09391 | 0.00213 | 0.24136 |
| 23 | Export Import (Exim) Bank of Bangladesh Ltd. | -0.00260 | 0.00646 | 0.08035 | 0.00203 | 0.31399 |
| 24 | Jamuna Bank Ltd. | 0.00131 | 0.00565 | 0.07516 | 0.00160 | 0.28406 |
| 25 | BRAC Bank Ltd. | 0.02030 | 0.00971 | 0.09852 | 0.00209 | 0.21499 |
| 26 | Shahjalal Islami Bank Ltd. | 0.00553 | 0.00910 | 0.09539 | 0.00199 | 0.21899 |
| 27 | Premier Bank Ltd. | 0.00008 | 0.00854 | 0.09241 | 0.00235 | 0.27575 |
| 28 | Trust Bank Ltd. | 0.01457 | 0.01406 | 0.11857 | 0.00323 | 0.22960 |
| 29 | First Security Islami Bank Ltd. | -0.00085 | 0.00919 | 0.09588 | 0.00268 | 0.29198 |
| 30 | IDLC Finance Limited | 0.00461 | 0.01739 | 0.13186 | 0.00480 | 0.27608 |
| 31 | United Finance Limited | -0.00221 | 0.01157 | 0.10756 | 0.00361 | 0.31180 |
| 32 | Uttara Finance and Investments Limited. | -0.00008 | 0.00815 | 0.09029 | 0.00328 | 0.40203 |
| 33 | Premier Leasing & Finance Limited. | 0.00417 | 0.01478 | 0.12157 | 0.00337 | 0.22791 |
| 34 | Islamic Finance & Investment Ltd. | 0.00183 | 0.01323 | 0.11500 | 0.00361 | 0.27282 |
| 35 | LankaBangla Finance Ltd. | 0.00469 | 0.02970 | 0.17233 | 0.00560 | 0.18862 |
| 36 | IPDC Finance Limited | 0.01908 | 0.01299 | 0.11399 | 0.00294 | 0.22657 |
| 37 | Union Capital Ltd. | 0.00067 | 0.02101 | 0.14493 | 0.00406 | 0.19313 |
| 38 | Bangladesh Finance and Investment Co. Ltd. | 0.00371 | 0.02006 | 0.14165 | 0.00466 | 0.23210 |
| 39 | Phoenix Finance and Investments Ltd. | 0.00683 | 0.02006 | 0.14162 | 0.00495 | 0.24701 |
| 40 | Bay Leasing & Investment Ltd. | 0.00281 | 0.01693 | 0.13011 | 0.00360 | 0.21247 |
| 41 | GSP Finance Company (Bangladesh) Limited | 0.00478 | 0.02556 | 0.15987 | 0.00384 | 0.15041 |
| 42 | Aftab Automobiles Limited | 0.00066 | 0.01322 | 0.11499 | 0.00374 | 0.28280 |
| 43 | Bangladesh Lamps Limited | 0.01305 | 0.01277 | 0.11302 | 0.00206 | 0.16122 |
| 44 | Eastern Cables Ltd. | 0.03165 | 0.01617 | 0.12718 | 0.00113 | 0.06957 |
| 45 | Monno Jute Stafflers Ltd. | 0.03474 | 0.01998 | 0.14137 | -0.00091 | -0.04531 |
| 46 | Singer Bangladesh Ltd. | 0.00873 | 0.01435 | 0.11977 | 0.00329 | 0.22916 |
| 47 | Atlas Bangladesh Ltd. | 0.00279 | 0.01168 | 0.10808 | 0.00238 | 0.20380 |
| 48 | Quasem Drycells Ltd. | 0.01912 | 0.01982 | 0.14077 | 0.00327 | 0.16512 |
| 49 | Renwick Jajneswar & Co (Bd) Ltd. | 0.04892 | 0.04320 | 0.20785 | 0.00031 | 0.00714 |
| 50 | National tubes Ltd. | 0.03079 | 0.02582 | 0.16070 | 0.00331 | 0.12802 |
| 51 | Anwar Galvanizing Ltd. | 0.03342 | 0.02169 | 0.14729 | -0.00049 | -0.02251 |
| 52 | Rangpur Foundry Ltd. | 0.01526 | 0.00618 | 0.07862 | 0.00115 | 0.18526 |
| 53 | S. Alam Cold Rolled Steels Ltd. | -0.00368 | 0.00830 | 0.09110 | 0.00276 | 0.33294 |
| 54 | National Polymer Industries Ltd | 0.01611 | 0.00984 | 0.09920 | 0.00182 | 0.18475 |
| 55 | BSRM Steels Limited | 0.00718 | 0.01438 | 0.11994 | 0.00432 | 0.30040 |
| 56 | Navana CNG Limited | 0.00088 | 0.01116 | 0.10566 | 0.00378 | 0.33858 |
| 57 | Deshbandhu Polymer Limited | 0.00194 | 0.01373 | 0.11719 | 0.00221 | 0.16092 |
| 58 | GPH Ispat Ltd. | 0.00326 | 0.01568 | 0.12520 | 0.00425 | 0.27131 |
| 59 | Olympic Industries Limited | 0.02206 | 0.01165 | 0.10793 | 0.00158 | 0.13604 |
| 60 | Apex Foods Limited | 0.02311 | 0.01623 | 0.12740 | 0.00195 | 0.11994 |
| 61 | British American Tobacco Bangladesh Company Ltd. | 0.02554 | 0.00556 | 0.07457 | 0.00038 | 0.06771 |
| 62 | Gemini Sea Food Ltd. | 0.03379 | 0.04662 | 0.21592 | -0.00223 | -0.04778 |
| 63 | National Tea Company Limited | -0.00264 | 0.00489 | 0.06994 | 0.00031 | 0.06378 |
| 64 | Agricultural Marketing Company Ltd. (Pran) | 0.01419 | 0.01050 | 0.10245 | 0.00110 | 0.10499 |
| 65 | Fu Wang Food Ltd. | 0.00218 | 0.01547 | 0.12438 | 0.00316 | 0.20425 |
| 66 | Rangpur Dairy & Food Products Limited | -0.00021 | 0.01674 | 0.12937 | 0.00325 | 0.19446 |
| 67 | Linde Bangladesh Limited | 0.01745 | 0.00811 | 0.09004 | 0.00166 | 0.20492 |
| 68 | Padma Oil Co.Ltd. | 0.01029 | 0.01505 | 0.12269 | 0.00310 | 0.20622 |
| 69 | Eastern Lubricants Ltd. | 0.04159 | 0.05485 | 0.23421 | -0.00094 | -0.01710 |
| 70 | Summit Power Ltd. | -0.00089 | 0.01099 | 0.10482 | 0.00401 | 0.36483 |
| 71 | Dhaka Electric Supply Company Ltd. | -0.00548 | 0.00734 | 0.08568 | 0.00206 | 0.28067 |
| 72 | Power Grid Company of Bangladesh Ltd. | 0.00283 | 0.00827 | 0.09094 | 0.00220 | 0.26586 |
| 73 | Jamuna Oil Com. Ltd. | 0.00520 | 0.00647 | 0.08042 | 0.00139 | 0.21505 |
| 74 | Meghna Petroleum Ltd. | 0.00688 | 0.00945 | 0.09721 | 0.00182 | 0.19282 |
| 75 | Titas Gas Trans. & Dist. Co. Ltd. | -0.00547 | 0.00374 | 0.06117 | 0.00154 | 0.41024 |
| 76 | Khulna Power Company Ltd. | 0.00630 | 0.00871 | 0.09334 | 0.00237 | 0.27241 |
| 77 | Baraka Power Limited | 0.00537 | 0.01206 | 0.10981 | 0.00349 | 0.28984 |
| 78 | MJL Bangladesh Limited | 0.00831 | 0.00921 | 0.09598 | 0.00224 | 0.24299 |
| 79 | GBB Power Limited | -0.00711 | 0.00969 | 0.09845 | 0.00354 | 0.36546 |
| 80 | Northern Jute Manufacturing Co. Ltd. | 0.08227 | 0.07274 | 0.26969 | -0.00044 | -0.00611 |
| 81 | Sonali Aansh Industries Limited | 0.01719 | 0.01276 | 0.11296 | 0.00103 | 0.08073 |
| 82 | Al-Haj Textile Mills Limited | 0.02320 | 0.02898 | 0.17023 | 0.00093 | 0.03196 |
| 83 | Stylecraft Limited | 0.02568 | 0.03174 | 0.17815 | -0.00033 | -0.01040 |
| 84 | Rahim Textile Mills Ltd. | 0.02361 | 0.02932 | 0.17122 | 0.00282 | 0.09635 |
| 85 | Saiham Textile Mills Ltd. | -0.00421 | 0.00634 | 0.07964 | 0.00218 | 0.34376 |
| 86 | Desh Garments Ltd. | 0.05439 | 0.05976 | 0.24447 | -0.00093 | -0.01552 |
| 87 | Apex Spinning & Knitting Mills Limited | 0.01626 | 0.01211 | 0.11003 | 0.00170 | 0.14013 |
| 88 | Delta Spinners Ltd. | -0.01595 | 0.01623 | 0.12739 | 0.00230 | 0.14202 |
| 89 | Prime Textile Spinning Mills Ltd. | 0.00495 | 0.00908 | 0.09530 | 0.00218 | 0.23979 |
| 90 | Anlima Yarn Dyeing Ltd. | 0.01299 | 0.01568 | 0.12523 | 0.00123 | 0.07836 |
| 91 | H.R. Textile Ltd. | 0.00762 | 0.01759 | 0.13263 | 0.00307 | 0.17462 |
| 92 | Alif Manufacturing Company Ltd. | -0.00579 | 0.02221 | 0.14902 | 0.00299 | 0.13463 |
| 93 | Square Textiles Limited | -0.00935 | 0.00297 | 0.05449 | 0.00106 | 0.35771 |
| 94 | R.N. Spinning Mills Ltd. | -0.00971 | 0.01274 | 0.11287 | 0.00128 | 0.10019 |
| 95 | Malek Spinning Mills Ltd. | 0.00250 | 0.00885 | 0.09409 | 0.00184 | 0.20731 |
| 96 | Zahintex Industries Limited | -0.00638 | 0.01283 | 0.11327 | 0.00170 | 0.13270 |
| 97 | Saiham Cotton Mills Limited | -0.00905 | 0.00538 | 0.07334 | 0.00163 | 0.30217 |
| 98 | Generation Next Fashions Limited | -0.01481 | 0.01303 | 0.11415 | 0.00250 | 0.19177 |
| 99 | Envoy Textiles Limited | -0.00498 | 0.00458 | 0.06767 | 0.00098 | 0.21435 |
| 100 | Ambee Pharma Ltd. | 0.01582 | 0.01131 | 0.10635 | 0.00048 | 0.04265 |
| 101 | Beximco Pharmaceuticals Ltd. | 0.01334 | 0.00852 | 0.09230 | 0.00260 | 0.30569 |
| 102 | GlaxoSmithKline(GSK) Bangladesh Limited | 0.02127 | 0.00843 | 0.09181 | 0.00115 | 0.13605 |
| 103 | ACI Limited. | 0.02278 | 0.01222 | 0.11054 | 0.00187 | 0.15302 |
| 104 | Renata Ltd. | 0.01314 | 0.00881 | 0.09385 | 0.00074 | 0.08427 |
| 105 | Reckitt Benckiser (Bd.)Ltd. | 0.01783 | 0.00943 | 0.09711 | 0.00131 | 0.13937 |
| 106 | Pharma Aids Ltd. | 0.02614 | 0.00944 | 0.09717 | 0.00047 | 0.05015 |
| 107 | Kohinoor Chemicals Company (Bangladesh) Ltd. | 0.01758 | 0.01209 | 0.10994 | 0.00015 | 0.01278 |
| 108 | The IBN SINA Pharmaceutical Industry Ltd. | 0.02298 | 0.01390 | 0.11791 | 0.00130 | 0.09345 |
| 109 | Libra Infusions Limited | 0.02678 | 0.02097 | 0.14481 | 0.00055 | 0.02627 |
| 110 | Orion Infusion Ltd. | 0.00861 | 0.01110 | 0.10535 | 0.00191 | 0.17229 |
| 111 | Square Pharmaceuticals Ltd. | 0.01167 | 0.00390 | 0.06247 | 0.00123 | 0.31474 |
| 112 | Keya Cosmetics Ltd. | -0.01192 | 0.01373 | 0.11718 | 0.00288 | 0.20939 |
| 113 | ACI Formulations Ltd. | 0.02209 | 0.02144 | 0.14641 | 0.00367 | 0.17129 |
| 114 | Marico Bangladesh Ltd. | 0.02138 | 0.00943 | 0.09709 | 0.00076 | 0.08022 |
| 115 | Active Fine Chemicals Ltd. | -0.00861 | 0.00926 | 0.09624 | 0.00240 | 0.25872 |
| 116 | Samorita Hospital Ltd. | 0.00859 | 0.00945 | 0.09722 | 0.00126 | 0.13350 |
| 117 | Eastern Housing Limited | 0.00561 | 0.00847 | 0.09202 | 0.00243 | 0.28701 |
| 118 | Summit Alliance Port Limited | 0.01253 | 0.02854 | 0.16893 | 0.00435 | 0.15249 |
| 119 | Unique Hotel & Resorts Limited | 0.00657 | 0.04854 | 0.22033 | 0.00449 | 0.09248 |
| 120 | Heidelberg Cement Bangladesh Ltd. | 0.01060 | 0.00916 | 0.09571 | 0.00210 | 0.22901 |
| 121 | Confidence Cement Ltd. | 0.01100 | 0.01109 | 0.10533 | 0.00354 | 0.31933 |
| 122 | Meghna Cement Mills Ltd | 0.00562 | 0.01827 | 0.13515 | 0.00374 | 0.20473 |
| 123 | Lafarge Surma Cement Ltd. | 0.01623 | 0.01639 | 0.12801 | 0.00290 | 0.17688 |
| 124 | M.I. Cement Factory Limited | 0.00162 | 0.00526 | 0.07252 | 0.00198 | 0.37557 |
| 125 | BDCOM Online Ltd. | 0.01447 | 0.02435 | 0.15606 | 0.00199 | 0.08163 |
| 126 | Intech Limited | 0.00470 | 0.01326 | 0.11514 | 0.00288 | 0.21731 |
| 127 | Agni Systems Ltd. | 0.00136 | 0.00948 | 0.09736 | 0.00324 | 0.34223 |
| 128 | Daffodil Computers Ltd. | 0.01811 | 0.01386 | 0.11771 | 0.00136 | 0.09811 |
| 129 | aamra technologies limited | 0.00559 | 0.01429 | 0.11955 | 0.00356 | 0.24921 |
| 130 | Grameenphone Ltd. | 0.04033 | 0.07562 | 0.27499 | 0.00239 | 0.03157 |
| 131 | Apex Tannery Limited | 0.01635 | 0.01434 | 0.11976 | 0.00324 | 0.22622 |
| 132 | Bata Shoe Company (Bangladesh) Limited | 0.01575 | 0.00558 | 0.07470 | 0.00123 | 0.22110 |
| 133 | Apex Footwear Limited | 0.01076 | 0.01119 | 0.10579 | 0.00230 | 0.20568 |
| 134 | Legacy Footwear Ltd. | 0.04283 | 0.08907 | 0.29845 | 0.00080 | 0.00902 |
| 135 | Monno Ceramic Industries Ltd. | 0.03555 | 0.02916 | 0.17078 | 0.00143 | 0.04893 |
| 136 | Fu-Wang Ceramic Industries Ltd. | 0.00094 | 0.01036 | 0.10179 | 0.00260 | 0.25127 |
| 137 | RAK Ceramics (BD) Ltd. | 0.00204 | 0.01278 | 0.11303 | 0.00364 | 0.28468 |
| 138 | Bangladesh General Insurance Company Ltd. | -0.00183 | 0.01372 | 0.11712 | 0.00375 | 0.27374 |
| 139 | Green Delta Insurance Company Ltd. | 0.00062 | 0.00888 | 0.09422 | 0.00200 | 0.22480 |
| 140 | United Insurance Company Ltd. | -0.00136 | 0.01537 | 0.12399 | 0.00408 | 0.26563 |
| 141 | Peoples Insurance Company Ltd. | -0.00215 | 0.00622 | 0.07889 | 0.00222 | 0.35636 |
| 142 | Eastern Insurance Co. Ltd. | -0.00274 | 0.00632 | 0.07948 | 0.00251 | 0.39755 |
| 143 | Phoenix Insurance Company Ltd. | -0.00962 | 0.01097 | 0.10474 | 0.00263 | 0.23969 |
| 144 | Eastland Insurance Company Limited | -0.01261 | 0.00995 | 0.09975 | 0.00310 | 0.31146 |
| 145 | Central Insurance Company Limited | -0.00573 | 0.00663 | 0.08143 | 0.00139 | 0.20969 |
| 146 | Karnaphuli Insurance Co. Ltd. | -0.00853 | 0.00577 | 0.07593 | 0.00191 | 0.33039 |
| 147 | Rupali Insurance Company Ltd. | -0.01092 | 0.01173 | 0.10832 | 0.00342 | 0.29158 |
| 148 | National Life Insurance Co Ltd | -0.00689 | 0.00952 | 0.09757 | 0.00178 | 0.18738 |
| 149 | Reliance Insurance Ltd. | -0.00418 | 0.00596 | 0.07720 | 0.00198 | 0.33274 |
| 150 | Purabi Gen. Insurance Company Ltd. | -0.01711 | 0.01308 | 0.11436 | 0.00300 | 0.22962 |
| 151 | Delta Life Insurance Co. Ltd | -0.01578 | 0.03089 | 0.17576 | 0.00374 | 0.12120 |
| 152 | Pragati Insurance Ltd. | -0.00832 | 0.00944 | 0.09715 | 0.00264 | 0.27977 |
| 153 | Sandhani Life Insurance Ltd | -0.01503 | 0.01121 | 0.10589 | 0.00278 | 0.24798 |
| 154 | Prime Insurance Company Limited | -0.00360 | 0.01679 | 0.12958 | 0.00356 | 0.21221 |
| 155 | Pioneer Insurance company Ltd. | -0.01376 | 0.00623 | 0.07894 | 0.00125 | 0.20022 |
| 156 | Mercantile Insurance Co. Ltd. | -0.00224 | 0.00992 | 0.09959 | 0.00261 | 0.26278 |
| 157 | Agrani Insurance Co Ltd. | -0.00354 | 0.01143 | 0.10689 | 0.00241 | 0.21098 |
| 158 | Popular Life Insurance Company Ltd. | -0.00241 | 0.01622 | 0.12737 | 0.00269 | 0.16608 |
| 159 | Fareast Islami Life Insurance Co. Ltd. | -0.00355 | 0.00784 | 0.08855 | 0.00287 | 0.36616 |
| 160 | Meghna Life Insurance Co. Ltd. | -0.00709 | 0.01119 | 0.10580 | 0.00343 | 0.30623 |
| 161 | Nitol Insurance Co. Ltd. | 0.00132 | 0.01083 | 0.10405 | 0.00310 | 0.28661 |
| 162 | Asia Pacific General Insurance Co. Ltd. | -0.00219 | 0.01044 | 0.10216 | 0.00330 | 0.31658 |
| 163 | Sonar Bangla Insurance Ltd. | -0.00769 | 0.00722 | 0.08494 | 0.00213 | 0.29561 |
| 164 | Pragati Life Insurance Ltd. | 0.00530 | 0.01903 | 0.13796 | 0.00222 | 0.11649 |
| 165 | Prime Islami life Insurance Ltd. | -0.00410 | 0.01936 | 0.13915 | 0.00296 | 0.15289 |
| 166 | Paramount Insurance Co. Ltd. | -0.00236 | 0.01021 | 0.10104 | 0.00148 | 0.14503 |
| 167 | City General Insurance Co. Ltd. | -0.00785 | 0.01200 | 0.10953 | 0.00324 | 0.26965 |
| 168 | Continental Insurance Ltd. | -0.00123 | 0.01732 | 0.13162 | 0.00338 | 0.19511 |
| 169 | Takaful Islami Insurance Ltd. | -0.00403 | 0.01048 | 0.10239 | 0.00129 | 0.12321 |
| 170 | Standard Insurance Ltd. | -0.00292 | 0.01117 | 0.10570 | 0.00188 | 0.16809 |
| 171 | Northern General Insurance Co. Ltd. | -0.00475 | 0.01937 | 0.13918 | 0.00486 | 0.25091 |
| 172 | Republic Insurance Company Ltd. | -0.00391 | 0.01574 | 0.12545 | 0.00329 | 0.20893 |
| 173 | Asia Insurance Co. Ltd. | -0.00481 | 0.01039 | 0.10191 | 0.00276 | 0.26595 |
| 174 | Rupali Life Insurance Co.Ltd. | -0.01071 | 0.01135 | 0.10654 | 0.00219 | 0.19293 |
| 175 | Islami Insurance BD. Ltd. | 0.00309 | 0.00885 | 0.09409 | 0.00270 | 0.30455 |
| 176 | Provati Insurance Company ltd. | -0.00725 | 0.00609 | 0.07802 | 0.00161 | 0.26502 |
| 177 | Dhaka Insurance Co. Ltd. | -0.01203 | 0.00779 | 0.08826 | 0.00272 | 0.34932 |
| 178 | Padma Islami Life Insurance Limited | -0.00215 | 0.01256 | 0.11208 | 0.00295 | 0.23507 |
| **179** | **Market Index (DSEX)** | **0.00681** | **0.00248** | **0.04985** | **0.00248** | **1.00000** |

**Appendix-B:** Breakdown of each firm’s return and risk into unique and market-related part

| **Stock No.** | **Name** |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 1 | AB Bank Limited | -0.00411 | 0.00151 | -0.00260 | 0.01515 | 0.00012 | 0.01528 |
| 2 | The City Bank Ltd. | 0.00918 | 0.00194 | 0.01113 | 0.01197 | 0.00020 | 0.01217 |
| 3 | IFIC Bank Ltd. | -0.00154 | 0.00084 | -0.00070 | 0.02642 | 0.00004 | 0.02645 |
| 4 | Islami Bank Bd Ltd | 0.00104 | 0.00105 | 0.00209 | 0.01620 | 0.00006 | 0.01626 |
| 5 | National Bank Ltd. | -0.00636 | 0.00157 | -0.00479 | 0.01124 | 0.00013 | 0.01138 |
| 6 | Pubali Bank Ltd. | -0.00268 | 0.00184 | -0.00084 | 0.00676 | 0.00018 | 0.00694 |
| 7 | Rupali Bank Ltd. | -0.00084 | 0.00126 | 0.00042 | 0.01727 | 0.00009 | 0.01736 |
| 8 | United Commercial Bank Ltd. | 0.00096 | 0.00191 | 0.00287 | 0.01010 | 0.00019 | 0.01029 |
| 9 | Uttara Bank Ltd. | -0.00222 | 0.00223 | 0.00001 | 0.00783 | 0.00027 | 0.00809 |
| 10 | Eastern Bank Ltd. | 0.00406 | 0.00245 | 0.00650 | 0.00453 | 0.00032 | 0.00485 |
| 11 | Al-Arafah Islami Bank Ltd. | 0.00302 | 0.00182 | 0.00484 | 0.01126 | 0.00018 | 0.01143 |
| 12 | Prime Bank Ltd. | -0.00605 | 0.00132 | -0.00472 | 0.00853 | 0.00009 | 0.00863 |
| 13 | Southeast Bank Ltd. | 0.00209 | 0.00218 | 0.00426 | 0.00786 | 0.00025 | 0.00812 |
| 14 | Dhaka Bank Ltd. | -0.00319 | 0.00223 | -0.00096 | 0.01016 | 0.00027 | 0.01042 |
| 15 | National Credit and Commerce Bank Ltd. | -0.00181 | 0.00272 | 0.00091 | 0.00481 | 0.00040 | 0.00520 |
| 16 | Social Islami Bank Ltd. | 0.00433 | 0.00165 | 0.00599 | 0.00538 | 0.00015 | 0.00553 |
| 17 | Dutch-Bangla Bank Ltd. | 0.00088 | 0.00223 | 0.00311 | 0.00630 | 0.00027 | 0.00657 |
| 18 | Mutual Trust Bank Ltd. | 0.00940 | 0.00183 | 0.01123 | 0.00790 | 0.00018 | 0.00808 |
| 19 | Standard Bank Ltd. | -0.00456 | 0.00221 | -0.00235 | 0.00861 | 0.00026 | 0.00887 |
| 20 | One Bank Limited | -0.00038 | 0.00250 | 0.00212 | 0.00771 | 0.00034 | 0.00805 |
| 21 | Bank Asia Ltd. | 0.00267 | 0.00162 | 0.00429 | 0.00812 | 0.00014 | 0.00826 |
| 22 | Mercantile Bank Ltd. | 0.00525 | 0.00164 | 0.00689 | 0.00867 | 0.00014 | 0.00882 |
| 23 | Export Import (Exim) Bank of Bangladesh Ltd. | -0.00474 | 0.00214 | -0.00260 | 0.00621 | 0.00024 | 0.00646 |
| 24 | Jamuna Bank Ltd. | -0.00063 | 0.00194 | 0.00131 | 0.00545 | 0.00020 | 0.00565 |
| 25 | BRAC Bank Ltd. | 0.01884 | 0.00146 | 0.02030 | 0.00959 | 0.00011 | 0.00971 |
| 26 | Shahjalal Islami Bank Ltd. | 0.00404 | 0.00149 | 0.00553 | 0.00898 | 0.00012 | 0.00910 |
| 27 | Premier Bank Ltd. | -0.00180 | 0.00188 | 0.00008 | 0.00835 | 0.00019 | 0.00854 |
| 28 | Trust Bank Ltd. | 0.01301 | 0.00156 | 0.01457 | 0.01393 | 0.00013 | 0.01406 |
| 29 | First Security Islami Bank Ltd. | -0.00284 | 0.00199 | -0.00085 | 0.00898 | 0.00021 | 0.00919 |
| 30 | IDLC Finance Limited | 0.00273 | 0.00188 | 0.00461 | 0.01720 | 0.00019 | 0.01739 |
| 31 | United Finance Limited | -0.00434 | 0.00212 | -0.00221 | 0.01133 | 0.00024 | 0.01157 |
| 32 | Uttara Finance and Investments Limited. | -0.00282 | 0.00274 | -0.00008 | 0.00775 | 0.00040 | 0.00815 |
| 33 | Premier Leasing & Finance Limited. | 0.00262 | 0.00155 | 0.00417 | 0.01465 | 0.00013 | 0.01478 |
| 34 | Islamic Finance & Investment Ltd. | -0.00002 | 0.00186 | 0.00183 | 0.01304 | 0.00018 | 0.01323 |
| 35 | LankaBangla Finance Ltd. | 0.00341 | 0.00128 | 0.00469 | 0.02961 | 0.00009 | 0.02970 |
| 36 | IPDC Finance Limited | 0.01754 | 0.00154 | 0.01908 | 0.01287 | 0.00013 | 0.01299 |
| 37 | Union Capital Ltd. | -0.00065 | 0.00132 | 0.00067 | 0.02091 | 0.00009 | 0.02101 |
| 38 | Bangladesh Finance and Investment Co. Ltd. | 0.00213 | 0.00158 | 0.00371 | 0.01993 | 0.00013 | 0.02006 |
| 39 | Phoenix Finance and Investments Ltd. | 0.00515 | 0.00168 | 0.00683 | 0.01990 | 0.00015 | 0.02006 |
| 40 | Bay Leasing & Investment Ltd. | 0.00137 | 0.00145 | 0.00281 | 0.01682 | 0.00011 | 0.01693 |
| 41 | GSP Finance Company (Bangladesh) Limited | 0.00376 | 0.00102 | 0.00478 | 0.02550 | 0.00006 | 0.02556 |
| 42 | Aftab Automobiles Limited | -0.00127 | 0.00193 | 0.00066 | 0.01302 | 0.00020 | 0.01322 |
| 43 | Bangladesh Lamps Limited | 0.01195 | 0.00110 | 0.01305 | 0.01271 | 0.00006 | 0.01277 |
| 44 | Eastern Cables Ltd. | 0.03117 | 0.00047 | 0.03165 | 0.01616 | 0.00001 | 0.01617 |
| 45 | Monno Jute Stafflers Ltd. | 0.03505 | -0.00031 | 0.03474 | 0.01998 | 0.00001 | 0.01998 |
| 46 | Singer Bangladesh Ltd. | 0.00716 | 0.00156 | 0.00873 | 0.01421 | 0.00013 | 0.01435 |
| 47 | Atlas Bangladesh Ltd. | 0.00140 | 0.00139 | 0.00279 | 0.01158 | 0.00010 | 0.01168 |
| 48 | Quasem Drycells Ltd. | 0.01799 | 0.00112 | 0.01912 | 0.01975 | 0.00007 | 0.01982 |
| 49 | Renwick Jajneswar & Co (Bd) Ltd. | 0.04887 | 0.00005 | 0.04892 | 0.04320 | 0.00000 | 0.04320 |
| 50 | National tubes Ltd. | 0.02992 | 0.00087 | 0.03079 | 0.02578 | 0.00004 | 0.02582 |
| 51 | Anwar Galvanizing Ltd. | 0.03357 | -0.00015 | 0.03342 | 0.02169 | 0.00000 | 0.02169 |
| 52 | Rangpur Foundry Ltd. | 0.01400 | 0.00126 | 0.01526 | 0.00610 | 0.00009 | 0.00618 |
| 53 | S. Alam Cold Rolled Steels Ltd. | -0.00595 | 0.00227 | -0.00368 | 0.00802 | 0.00028 | 0.00830 |
| 54 | National Polymer Industries Ltd | 0.01485 | 0.00126 | 0.01611 | 0.00976 | 0.00008 | 0.00984 |
| 55 | BSRM Steels Limited | 0.00514 | 0.00205 | 0.00718 | 0.01416 | 0.00022 | 0.01438 |
| 56 | Navana CNG Limited | -0.00143 | 0.00231 | 0.00088 | 0.01088 | 0.00028 | 0.01116 |
| 57 | Deshbandhu Polymer Limited | 0.00085 | 0.00110 | 0.00194 | 0.01367 | 0.00006 | 0.01373 |
| 58 | GPH Ispat Ltd. | 0.00141 | 0.00185 | 0.00326 | 0.01549 | 0.00018 | 0.01568 |
| 59 | Olympic Industries Limited | 0.02113 | 0.00093 | 0.02206 | 0.01160 | 0.00005 | 0.01165 |
| 60 | Apex Foods Limited | 0.02229 | 0.00082 | 0.02311 | 0.01620 | 0.00004 | 0.01623 |
| 61 | British American Tobacco Bangladesh Company Ltd. | 0.02508 | 0.00046 | 0.02554 | 0.00555 | 0.00001 | 0.00556 |
| 62 | Gemini Sea Food Ltd. | 0.03411 | -0.00033 | 0.03379 | 0.04662 | 0.00001 | 0.04662 |
| 63 | National Tea Company Limited | -0.00307 | 0.00043 | -0.00264 | 0.00488 | 0.00001 | 0.00489 |
| 64 | Agricultural Marketing Company Ltd. (Pran) | 0.01347 | 0.00072 | 0.01419 | 0.01047 | 0.00003 | 0.01050 |
| 65 | Fu Wang Food Ltd. | 0.00078 | 0.00139 | 0.00218 | 0.01537 | 0.00010 | 0.01547 |
| 66 | Rangpur Dairy & Food Products Limited | -0.00154 | 0.00132 | -0.00021 | 0.01664 | 0.00009 | 0.01674 |
| 67 | Linde Bangladesh Limited | 0.01606 | 0.00140 | 0.01745 | 0.00800 | 0.00010 | 0.00811 |
| 68 | Padma Oil Co.Ltd. | 0.00888 | 0.00140 | 0.01029 | 0.01495 | 0.00011 | 0.01505 |
| 69 | Eastern Lubricants Ltd. | 0.04170 | -0.00012 | 0.04159 | 0.05485 | 0.00000 | 0.05485 |
| 70 | Summit Power Ltd. | -0.00337 | 0.00249 | -0.00089 | 0.01066 | 0.00033 | 0.01099 |
| 71 | Dhaka Electric Supply Company Ltd. | -0.00739 | 0.00191 | -0.00548 | 0.00714 | 0.00020 | 0.00734 |
| 72 | Power Grid Company of Bangladesh Ltd. | 0.00102 | 0.00181 | 0.00283 | 0.00810 | 0.00018 | 0.00827 |
| 73 | Jamuna Oil Com. Ltd. | 0.00373 | 0.00146 | 0.00520 | 0.00635 | 0.00011 | 0.00647 |
| 74 | Meghna Petroleum Ltd. | 0.00556 | 0.00131 | 0.00688 | 0.00936 | 0.00009 | 0.00945 |
| 75 | Titas Gas Trans. & Dist. Co. Ltd. | -0.00827 | 0.00279 | -0.00547 | 0.00332 | 0.00042 | 0.00374 |
| 76 | Khulna Power Company Ltd. | 0.00444 | 0.00186 | 0.00630 | 0.00853 | 0.00018 | 0.00871 |
| 77 | Baraka Power Limited | 0.00340 | 0.00197 | 0.00537 | 0.01185 | 0.00021 | 0.01206 |
| 78 | MJL Bangladesh Limited | 0.00665 | 0.00166 | 0.00831 | 0.00907 | 0.00015 | 0.00921 |
| 79 | GBB Power Limited | -0.00960 | 0.00249 | -0.00711 | 0.00936 | 0.00033 | 0.00969 |
| 80 | Northern Jute Manufacturing Co. Ltd. | 0.08231 | -0.00004 | 0.08227 | 0.07274 | 0.00000 | 0.07274 |
| 81 | Sonali Aansh Industries Limited | 0.01664 | 0.00055 | 0.01719 | 0.01274 | 0.00002 | 0.01276 |
| 82 | Al-Haj Textile Mills Limited | 0.02298 | 0.00022 | 0.02320 | 0.02898 | 0.00000 | 0.02898 |
| 83 | Stylecraft Limited | 0.02575 | -0.00007 | 0.02568 | 0.03174 | 0.00000 | 0.03174 |
| 84 | Rahim Textile Mills Ltd. | 0.02295 | 0.00066 | 0.02361 | 0.02929 | 0.00002 | 0.02932 |
| 85 | Saiham Textile Mills Ltd. | -0.00656 | 0.00234 | -0.00421 | 0.00605 | 0.00029 | 0.00634 |
| 86 | Desh Garments Ltd. | 0.05449 | -0.00011 | 0.05439 | 0.05976 | 0.00000 | 0.05976 |
| 87 | Apex Spinning & Knitting Mills Limited | 0.01531 | 0.00095 | 0.01626 | 0.01206 | 0.00005 | 0.01211 |
| 88 | Delta Spinners Ltd. | -0.01692 | 0.00097 | -0.01595 | 0.01618 | 0.00005 | 0.01623 |
| 89 | Prime Textile Spinning Mills Ltd. | 0.00331 | 0.00163 | 0.00495 | 0.00894 | 0.00014 | 0.00908 |
| 90 | Anlima Yarn Dyeing Ltd. | 0.01246 | 0.00053 | 0.01299 | 0.01567 | 0.00002 | 0.01568 |
| 91 | H.R. Textile Ltd. | 0.00643 | 0.00119 | 0.00762 | 0.01752 | 0.00008 | 0.01759 |
| 92 | Alif Manufacturing Company Ltd. | -0.00670 | 0.00092 | -0.00579 | 0.02216 | 0.00005 | 0.02221 |
| 93 | Square Textiles Limited | -0.01179 | 0.00244 | -0.00935 | 0.00265 | 0.00032 | 0.00297 |
| 94 | R.N. Spinning Mills Ltd. | -0.01039 | 0.00068 | -0.00971 | 0.01272 | 0.00002 | 0.01274 |
| 95 | Malek Spinning Mills Ltd. | 0.00108 | 0.00141 | 0.00250 | 0.00875 | 0.00011 | 0.00885 |
| 96 | Zahintex Industries Limited | -0.00728 | 0.00090 | -0.00638 | 0.01279 | 0.00004 | 0.01283 |
| 97 | Saiham Cotton Mills Limited | -0.01111 | 0.00206 | -0.00905 | 0.00515 | 0.00023 | 0.00538 |
| 98 | Generation Next Fashions Limited | -0.01612 | 0.00131 | -0.01481 | 0.01294 | 0.00009 | 0.01303 |
| 99 | Envoy Textiles Limited | -0.00644 | 0.00146 | -0.00498 | 0.00446 | 0.00011 | 0.00458 |
| 100 | Ambee Pharma Ltd. | 0.01553 | 0.00029 | 0.01582 | 0.01131 | 0.00000 | 0.01131 |
| 101 | Beximco Pharmaceuticals Ltd. | 0.01126 | 0.00208 | 0.01334 | 0.00829 | 0.00023 | 0.00852 |
| 102 | GlaxoSmithKline(GSK) Bangladesh Limited | 0.02034 | 0.00093 | 0.02127 | 0.00838 | 0.00005 | 0.00843 |
| 103 | ACI Limited. | 0.02173 | 0.00104 | 0.02278 | 0.01216 | 0.00006 | 0.01222 |
| 104 | Renata Ltd. | 0.01257 | 0.00057 | 0.01314 | 0.00879 | 0.00002 | 0.00881 |
| 105 | Reckitt Benckiser (Bd.)Ltd. | 0.01688 | 0.00095 | 0.01783 | 0.00938 | 0.00005 | 0.00943 |
| 106 | Pharma Aids Ltd. | 0.02580 | 0.00034 | 0.02614 | 0.00944 | 0.00001 | 0.00944 |
| 107 | Kohinoor Chemicals Company (Bangladesh) Ltd. | 0.01749 | 0.00009 | 0.01758 | 0.01209 | 0.00000 | 0.01209 |
| 108 | The IBN SINA Pharmaceutical Industry Ltd. | 0.02234 | 0.00064 | 0.02298 | 0.01388 | 0.00002 | 0.01390 |
| 109 | Libra Infusions Limited | 0.02660 | 0.00018 | 0.02678 | 0.02097 | 0.00000 | 0.02097 |
| 110 | Orion Infusion Ltd. | 0.00743 | 0.00117 | 0.00861 | 0.01102 | 0.00007 | 0.01110 |
| 111 | Square Pharmaceuticals Ltd. | 0.00953 | 0.00214 | 0.01167 | 0.00366 | 0.00025 | 0.00390 |
| 112 | Keya Cosmetics Ltd. | -0.01335 | 0.00143 | -0.01192 | 0.01362 | 0.00011 | 0.01373 |
| 113 | ACI Formulations Ltd. | 0.02092 | 0.00117 | 0.02209 | 0.02136 | 0.00007 | 0.02144 |
| 114 | Marico Bangladesh Ltd. | 0.02084 | 0.00055 | 0.02138 | 0.00941 | 0.00002 | 0.00943 |
| 115 | Active Fine Chemicals Ltd. | -0.01037 | 0.00176 | -0.00861 | 0.00910 | 0.00017 | 0.00926 |
| 116 | Samorita Hospital Ltd. | 0.00768 | 0.00091 | 0.00859 | 0.00941 | 0.00004 | 0.00945 |
| 117 | Eastern Housing Limited | 0.00366 | 0.00196 | 0.00561 | 0.00826 | 0.00020 | 0.00847 |
| 118 | Summit Alliance Port Limited | 0.01149 | 0.00104 | 0.01253 | 0.02848 | 0.00006 | 0.02854 |
| 119 | Unique Hotel & Resorts Limited | 0.00594 | 0.00063 | 0.00657 | 0.04852 | 0.00002 | 0.04854 |
| 120 | Heidelberg Cement Bangladesh Ltd. | 0.00904 | 0.00156 | 0.01060 | 0.00903 | 0.00013 | 0.00916 |
| 121 | Confidence Cement Ltd. | 0.00883 | 0.00218 | 0.01100 | 0.01084 | 0.00025 | 0.01109 |
| 122 | Meghna Cement Mills Ltd | 0.00422 | 0.00139 | 0.00562 | 0.01816 | 0.00010 | 0.01827 |
| 123 | Lafarge Surma Cement Ltd. | 0.01503 | 0.00120 | 0.01623 | 0.01631 | 0.00008 | 0.01639 |
| 124 | M.I. Cement Factory Limited | -0.00094 | 0.00256 | 0.00162 | 0.00491 | 0.00035 | 0.00526 |
| 125 | BDCOM Online Ltd. | 0.01391 | 0.00056 | 0.01447 | 0.02434 | 0.00002 | 0.02435 |
| 126 | Intech Limited | 0.00322 | 0.00148 | 0.00470 | 0.01314 | 0.00012 | 0.01326 |
| 127 | Agni Systems Ltd. | -0.00098 | 0.00233 | 0.00136 | 0.00919 | 0.00029 | 0.00948 |
| 128 | Daffodil Computers Ltd. | 0.01745 | 0.00067 | 0.01811 | 0.01383 | 0.00002 | 0.01386 |
| 129 | aamra technologies limited | 0.00389 | 0.00170 | 0.00559 | 0.01414 | 0.00015 | 0.01429 |
| 130 | Grameenphone Ltd. | 0.04012 | 0.00022 | 0.04033 | 0.07562 | 0.00000 | 0.07562 |
| 131 | Apex Tannery Limited | 0.01481 | 0.00154 | 0.01635 | 0.01421 | 0.00013 | 0.01434 |
| 132 | Bata Shoe Company (Bangladesh) Limited | 0.01425 | 0.00151 | 0.01575 | 0.00546 | 0.00012 | 0.00558 |
| 133 | Apex Footwear Limited | 0.00935 | 0.00140 | 0.01076 | 0.01109 | 0.00011 | 0.01119 |
| 134 | Legacy Footwear Ltd. | 0.04277 | 0.00006 | 0.04283 | 0.08907 | 0.00000 | 0.08907 |
| 135 | Monno Ceramic Industries Ltd. | 0.03522 | 0.00033 | 0.03555 | 0.02916 | 0.00001 | 0.02916 |
| 136 | Fu-Wang Ceramic Industries Ltd. | -0.00077 | 0.00171 | 0.00094 | 0.01020 | 0.00016 | 0.01036 |
| 137 | RAK Ceramics (BD) Ltd. | 0.00010 | 0.00194 | 0.00204 | 0.01258 | 0.00020 | 0.01278 |
| 138 | Bangladesh General Insurance Company Ltd. | -0.00369 | 0.00186 | -0.00183 | 0.01353 | 0.00019 | 0.01372 |
| 139 | Green Delta Insurance Company Ltd. | -0.00091 | 0.00153 | 0.00062 | 0.00875 | 0.00013 | 0.00888 |
| 140 | United Insurance Company Ltd. | -0.00317 | 0.00181 | -0.00136 | 0.01520 | 0.00018 | 0.01537 |
| 141 | Peoples Insurance Company Ltd. | -0.00458 | 0.00243 | -0.00215 | 0.00591 | 0.00032 | 0.00622 |
| 142 | Eastern Insurance Co. Ltd. | -0.00545 | 0.00271 | -0.00274 | 0.00592 | 0.00039 | 0.00632 |
| 143 | Phoenix Insurance Company Ltd. | -0.01126 | 0.00163 | -0.00962 | 0.01083 | 0.00014 | 0.01097 |
| 144 | Eastland Insurance Company Limited | -0.01473 | 0.00212 | -0.01261 | 0.00971 | 0.00024 | 0.00995 |
| 145 | Central Insurance Company Limited | -0.00716 | 0.00143 | -0.00573 | 0.00652 | 0.00011 | 0.00663 |
| 146 | Karnaphuli Insurance Co. Ltd. | -0.01078 | 0.00225 | -0.00853 | 0.00549 | 0.00027 | 0.00577 |
| 147 | Rupali Insurance Company Ltd. | -0.01291 | 0.00199 | -0.01092 | 0.01152 | 0.00021 | 0.01173 |
| 148 | National Life Insurance Co Ltd | -0.00817 | 0.00128 | -0.00689 | 0.00943 | 0.00009 | 0.00952 |
| 149 | Reliance Insurance Ltd. | -0.00645 | 0.00227 | -0.00418 | 0.00569 | 0.00028 | 0.00596 |
| 150 | Purabi Gen. Insurance Company Ltd. | -0.01867 | 0.00156 | -0.01711 | 0.01295 | 0.00013 | 0.01308 |
| 151 | Delta Life Insurance Co. Ltd | -0.01661 | 0.00083 | -0.01578 | 0.03086 | 0.00004 | 0.03089 |
| 152 | Pragati Insurance Ltd. | -0.01023 | 0.00191 | -0.00832 | 0.00924 | 0.00019 | 0.00944 |
| 153 | Sandhani Life Insurance Ltd | -0.01672 | 0.00169 | -0.01503 | 0.01106 | 0.00015 | 0.01121 |
| 154 | Prime Insurance Company Limited | -0.00504 | 0.00145 | -0.00360 | 0.01668 | 0.00011 | 0.01679 |
| 155 | Pioneer Insurance company Ltd. | -0.01512 | 0.00136 | -0.01376 | 0.00613 | 0.00010 | 0.00623 |
| 156 | Mercantile Insurance Co. Ltd. | -0.00403 | 0.00179 | -0.00224 | 0.00975 | 0.00017 | 0.00992 |
| 157 | Agrani Insurance Co Ltd. | -0.00497 | 0.00144 | -0.00354 | 0.01131 | 0.00011 | 0.01143 |
| 158 | Popular Life Insurance Company Ltd. | -0.00354 | 0.00113 | -0.00241 | 0.01616 | 0.00007 | 0.01622 |
| 159 | Fareast Islami Life Insurance Co. Ltd. | -0.00605 | 0.00249 | -0.00355 | 0.00751 | 0.00033 | 0.00784 |
| 160 | Meghna Life Insurance Co. Ltd. | -0.00918 | 0.00209 | -0.00709 | 0.01096 | 0.00023 | 0.01119 |
| 161 | Nitol Insurance Co. Ltd. | -0.00063 | 0.00195 | 0.00132 | 0.01062 | 0.00020 | 0.01083 |
| 162 | Asia Pacific General Insurance Co. Ltd. | -0.00435 | 0.00216 | -0.00219 | 0.01019 | 0.00025 | 0.01044 |
| 163 | Sonar Bangla Insurance Ltd. | -0.00970 | 0.00201 | -0.00769 | 0.00700 | 0.00022 | 0.00722 |
| 164 | Pragati Life Insurance Ltd. | 0.00451 | 0.00079 | 0.00530 | 0.01900 | 0.00003 | 0.01903 |
| 165 | Prime Islami life Insurance Ltd. | -0.00514 | 0.00104 | -0.00410 | 0.01930 | 0.00006 | 0.01936 |
| 166 | Paramount Insurance Co. Ltd. | -0.00335 | 0.00099 | -0.00236 | 0.01016 | 0.00005 | 0.01021 |
| 167 | City General Insurance Co. Ltd. | -0.00969 | 0.00184 | -0.00785 | 0.01182 | 0.00018 | 0.01200 |
| 168 | Continental Insurance Ltd. | -0.00256 | 0.00133 | -0.00123 | 0.01723 | 0.00009 | 0.01732 |
| 169 | Takaful Islami Insurance Ltd. | -0.00487 | 0.00084 | -0.00403 | 0.01045 | 0.00004 | 0.01048 |
| 170 | Standard Insurance Ltd. | -0.00406 | 0.00115 | -0.00292 | 0.01110 | 0.00007 | 0.01117 |
| 171 | Northern General Insurance Co. Ltd. | -0.00646 | 0.00171 | -0.00475 | 0.01921 | 0.00016 | 0.01937 |
| 172 | Republic Insurance Company Ltd. | -0.00534 | 0.00142 | -0.00391 | 0.01563 | 0.00011 | 0.01574 |
| 173 | Asia Insurance Co. Ltd. | -0.00662 | 0.00181 | -0.00481 | 0.01021 | 0.00018 | 0.01039 |
| 174 | Rupali Life Insurance Co.Ltd. | -0.01202 | 0.00131 | -0.01071 | 0.01126 | 0.00009 | 0.01135 |
| 175 | Islami Insurance BD. Ltd. | 0.00102 | 0.00207 | 0.00309 | 0.00862 | 0.00023 | 0.00885 |
| 176 | Provati Insurance Company ltd. | -0.00906 | 0.00181 | -0.00725 | 0.00591 | 0.00017 | 0.00609 |
| 177 | Dhaka Insurance Co. Ltd. | -0.01440 | 0.00238 | -0.01203 | 0.00749 | 0.00030 | 0.00779 |
| 178 | Padma Islami Life Insurance Limited | -0.00375 | 0.00160 | -0.00215 | 0.01242 | 0.00014 | 0.01256 |

**Appendix-C:** Ranking of stocks according to their excess return-to-beta ratio

| **Rank** | **Name** |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **1** | Renwick Jajneswar & Co (Bd) Ltd. | 0.04892 | 0.04413 | 0.00714 | 6.18333 |
| **2** | Legacy Footwear Ltd. | 0.04283 | 0.03805 | 0.00902 | 4.21675 |
| **3** | Grameenphone Ltd. | 0.04033 | 0.03555 | 0.03157 | 1.12589 |
| **4** | Kohinoor Chemicals Company (Bangladesh) Ltd. | 0.01758 | 0.01279 | 0.01278 | 1.00118 |
| **5** | Libra Infusions Limited | 0.02678 | 0.02200 | 0.02627 | 0.83736 |
| **6** | Monno Ceramic Industries Ltd. | 0.03555 | 0.03077 | 0.04893 | 0.62871 |
| **7** | Al-Haj Textile Mills Limited | 0.02320 | 0.01841 | 0.03196 | 0.57611 |
| **8** | Pharma Aids Ltd. | 0.02614 | 0.02135 | 0.05015 | 0.42578 |
| **9** | Eastern Cables Ltd. | 0.03165 | 0.02686 | 0.06957 | 0.38610 |
| **10** | British American Tobacco Bangladesh Company Limited | 0.02554 | 0.02076 | 0.06771 | 0.30655 |
| **11** | Ambee Pharma Ltd. | 0.01582 | 0.01104 | 0.04265 | 0.25884 |
| **12** | Marico Bangladesh Ltd. | 0.02138 | 0.01660 | 0.08022 | 0.20693 |
| **13** | National tubes Ltd. | 0.03079 | 0.02600 | 0.12802 | 0.20314 |
| **14** | Rahim Textile Mills Ltd. | 0.02361 | 0.01883 | 0.09635 | 0.19539 |
| **15** | The IBN SINA Pharmaceutical Industry Ltd. | 0.02298 | 0.01819 | 0.09345 | 0.19466 |
| **16** | Sonali Aansh Industries Limited | 0.01719 | 0.01241 | 0.08073 | 0.15372 |
| **17** | Apex Foods Limited | 0.02311 | 0.01833 | 0.11994 | 0.15279 |
| **18** | Daffodil Computers Ltd. | 0.01811 | 0.01333 | 0.09811 | 0.13586 |
| **19** | Olympic Industries Limited | 0.02206 | 0.01727 | 0.13604 | 0.12698 |
| **20** | GlaxoSmithKline(GSK) Bangladesh Limited | 0.02127 | 0.01648 | 0.13605 | 0.12113 |
| **21** | BDCOM Online Ltd. | 0.01447 | 0.00968 | 0.08163 | 0.11864 |
| **22** | ACI Limited. | 0.02278 | 0.01799 | 0.15302 | 0.11757 |
| **23** | Anlima Yarn Dyeing Ltd. | 0.01299 | 0.00821 | 0.07836 | 0.10474 |
| **24** | ACI Formulations Ltd. | 0.02209 | 0.01730 | 0.17129 | 0.10103 |
| **25** | Renata Ltd. | 0.01314 | 0.00836 | 0.08427 | 0.09916 |
| **26** | Reckitt Benckiser (Bd.)Ltd. | 0.01783 | 0.01305 | 0.13937 | 0.09361 |
| **27** | Agricultural Marketing Company Ltd. (Pran) | 0.01419 | 0.00940 | 0.10499 | 0.08956 |
| **28** | Quasem Drycells Ltd. | 0.01912 | 0.01433 | 0.16512 | 0.08681 |
| **29** | Apex Spinning & Knitting Mills Limited | 0.01626 | 0.01148 | 0.14013 | 0.08192 |
| **30** | BRAC Bank Ltd. | 0.02030 | 0.01552 | 0.21499 | 0.07219 |
| **31** | Lafarge Surma Cement Ltd. | 0.01623 | 0.01145 | 0.17688 | 0.06473 |
| **32** | IPDC Finance Limited | 0.01908 | 0.01430 | 0.22657 | 0.06310 |
| **33** | Linde Bangladesh Limited | 0.01745 | 0.01267 | 0.20492 | 0.06182 |
| **34** | National Polymer Industries Ltd | 0.01611 | 0.01132 | 0.18475 | 0.06129 |
| **35** | Rangpur Foundry Ltd. | 0.01526 | 0.01047 | 0.18526 | 0.05653 |
| **36** | Bangladesh Lamps Limited | 0.01305 | 0.00827 | 0.16122 | 0.05127 |
| **37** | Apex Tannery Limited | 0.01635 | 0.01157 | 0.22622 | 0.05115 |
| **38** | Summit Alliance Port Limited | 0.01253 | 0.00774 | 0.15249 | 0.05079 |
| **39** | Bata Shoe Company (Bangladesh) Limited | 0.01575 | 0.01097 | 0.22110 | 0.04960 |
| **40** | Trust Bank Ltd. | 0.01457 | 0.00979 | 0.22960 | 0.04263 |
| **41** | Apex Footwear Limited | 0.01076 | 0.00597 | 0.20568 | 0.02903 |
| **42** | Samorita Hospital Ltd. | 0.00859 | 0.00381 | 0.13350 | 0.02853 |
| **43** | Beximco Pharmaceuticals Ltd. | 0.01334 | 0.00856 | 0.30569 | 0.02800 |
| **44** | Padma Oil Co.Ltd. | 0.01029 | 0.00550 | 0.20622 | 0.02668 |
| **45** | Heidelberg Cement Bangladesh Ltd. | 0.01060 | 0.00582 | 0.22901 | 0.02540 |
| **46** | Mutual Trust Bank Ltd. | 0.01123 | 0.00645 | 0.26881 | 0.02398 |
| **47** | The City Bank Ltd. | 0.01113 | 0.00634 | 0.28493 | 0.02226 |
| **48** | Orion Infusion Ltd. | 0.00861 | 0.00382 | 0.17229 | 0.02219 |
| **49** | Square Pharmaceuticals Ltd. | 0.01167 | 0.00689 | 0.31474 | 0.02188 |
| **50** | Confidence Cement Ltd. | 0.01100 | 0.00622 | 0.31933 | 0.01947 |
| **51** | Unique Hotel & Resorts Limited | 0.00657 | 0.00179 | 0.09248 | 0.01932 |
| **52** | Singer Bangladesh Ltd. | 0.00873 | 0.00394 | 0.22916 | 0.01720 |
| **53** | H.R. Textile Ltd. | 0.00762 | 0.00284 | 0.17462 | 0.01624 |
| **54** | MJL Bangladesh Limited | 0.00831 | 0.00352 | 0.24299 | 0.01450 |
| **55** | Meghna Petroleum Ltd. | 0.00688 | 0.00209 | 0.19282 | 0.01085 |
| **56** | Mercantile Bank Ltd. | 0.00689 | 0.00211 | 0.24136 | 0.00874 |
| **57** | Phoenix Finance and Investments Ltd. | 0.00683 | 0.00205 | 0.24701 | 0.00830 |
| **58** | BSRM Steels Limited | 0.00718 | 0.00240 | 0.30040 | 0.00798 |
| **59** | Khulna Power Company Ltd. | 0.00630 | 0.00151 | 0.27241 | 0.00555 |
| **60** | Social Islami Bank Ltd. | 0.00599 | 0.00120 | 0.24267 | 0.00495 |
| **61** | Eastern Bank Ltd. | 0.00650 | 0.00172 | 0.35953 | 0.00479 |
| **62** | Pragati Life Insurance Ltd. | 0.00530 | 0.00052 | 0.11649 | 0.00443 |
| **63** | Meghna Cement Mills Ltd | 0.00562 | 0.00084 | 0.20473 | 0.00408 |
| **64** | Shahjalal Islami Bank Ltd. | 0.00553 | 0.00074 | 0.21899 | 0.00339 |
| **65** | aamra technologies limited | 0.00559 | 0.00081 | 0.24921 | 0.00324 |
| **66** | Eastern Housing Limited | 0.00561 | 0.00083 | 0.28701 | 0.00289 |
| **67** | Baraka Power Limited | 0.00537 | 0.00059 | 0.28984 | 0.00203 |
| **68** | Jamuna Oil Com. Ltd. | 0.00520 | 0.00041 | 0.21505 | 0.00192 |
| **69** | Prime Textile Spinning Mills Ltd. | 0.00495 | 0.00016 | 0.23979 | 0.00067 |
| **70** | Al-Arafah Islami Bank Ltd. | 0.00484 | 0.00005 | 0.26704 | 0.00019 |
| **71** | GSP Finance Company (Bangladesh) Limited | 0.00478 | 0.00000 | 0.15041 | -0.00002 |
| **72** | Intech Limited | 0.00470 | -0.00008 | 0.21731 | -0.00038 |
| **73** | LankaBangla Finance Ltd. | 0.00469 | -0.00009 | 0.18862 | -0.00050 |
| **74** | IDLC Finance Limited | 0.00461 | -0.00018 | 0.27608 | -0.00064 |
| **75** | Southeast Bank Ltd. | 0.00426 | -0.00052 | 0.31930 | -0.00164 |
| **76** | Bank Asia Ltd. | 0.00429 | -0.00050 | 0.23776 | -0.00209 |
| **77** | Premier Leasing & Finance Limited. | 0.00417 | -0.00061 | 0.22791 | -0.00268 |
| **78** | Bangladesh Finance and Investment Co. Ltd. | 0.00371 | -0.00107 | 0.23210 | -0.00461 |
| **79** | Dutch-Bangla Bank Ltd. | 0.00311 | -0.00167 | 0.32799 | -0.00511 |
| **80** | Islami Insurance BD. Ltd. | 0.00309 | -0.00169 | 0.30455 | -0.00556 |
| **81** | GPH Ispat Ltd. | 0.00326 | -0.00152 | 0.27131 | -0.00562 |
| **82** | United Commercial Bank Ltd. | 0.00287 | -0.00191 | 0.28005 | -0.00684 |
| **83** | One Bank Limited | 0.00212 | -0.00266 | 0.36771 | -0.00724 |
| **84** | Power Grid Company of Bangladesh Ltd. | 0.00283 | -0.00195 | 0.26586 | -0.00734 |
| **85** | M.I. Cement Factory Limited | 0.00162 | -0.00316 | 0.37557 | -0.00842 |
| **86** | Bay Leasing & Investment Ltd. | 0.00281 | -0.00197 | 0.21247 | -0.00928 |
| **87** | RAK Ceramics (BD) Ltd. | 0.00204 | -0.00274 | 0.28468 | -0.00964 |
| **88** | National Credit and Commerce Bank Ltd. | 0.00091 | -0.00387 | 0.39944 | -0.00969 |
| **89** | Atlas Bangladesh Ltd. | 0.00279 | -0.00199 | 0.20380 | -0.00979 |
| **90** | Agni Systems Ltd. | 0.00136 | -0.00343 | 0.34223 | -0.01002 |
| **91** | Islamic Finance & Investment Ltd. | 0.00183 | -0.00295 | 0.27282 | -0.01081 |
| **92** | Malek Spinning Mills Ltd. | 0.00250 | -0.00229 | 0.20731 | -0.01104 |
| **93** | Navana CNG Limited | 0.00088 | -0.00390 | 0.33858 | -0.01153 |
| **94** | Nitol Insurance Co. Ltd. | 0.00132 | -0.00346 | 0.28661 | -0.01208 |
| **95** | Uttara Finance and Investments Limited. | -0.00008 | -0.00487 | 0.40203 | -0.01211 |
| **96** | Jamuna Bank Ltd. | 0.00131 | -0.00348 | 0.28406 | -0.01225 |
| **97** | Fu Wang Food Ltd. | 0.00218 | -0.00261 | 0.20425 | -0.01277 |
| **98** | Uttara Bank Ltd. | 0.00001 | -0.00477 | 0.32736 | -0.01459 |
| **99** | Aftab Automobiles Limited | 0.00066 | -0.00413 | 0.28280 | -0.01459 |
| **100** | Fu-Wang Ceramic Industries Ltd. | 0.00094 | -0.00385 | 0.25127 | -0.01531 |
| **101** | Summit Power Ltd. | -0.00089 | -0.00567 | 0.36483 | -0.01554 |
| **102** | Premier Bank Ltd. | 0.00008 | -0.00470 | 0.27575 | -0.01705 |
| **103** | Islami Bank Bd Ltd | 0.00209 | -0.00270 | 0.15359 | -0.01757 |
| **104** | Dhaka Bank Ltd. | -0.00096 | -0.00575 | 0.32680 | -0.01759 |
| **105** | Deshbandhu Polymer Limited | 0.00194 | -0.00284 | 0.16092 | -0.01766 |
| **106** | Green Delta Insurance Company Ltd. | 0.00062 | -0.00416 | 0.22480 | -0.01851 |
| **107** | Eastern Insurance Co. Ltd. | -0.00274 | -0.00753 | 0.39755 | -0.01893 |
| **108** | First Security Islami Bank Ltd. | -0.00085 | -0.00564 | 0.29198 | -0.01931 |
| **109** | Peoples Insurance Company Ltd. | -0.00215 | -0.00694 | 0.35636 | -0.01947 |
| **110** | Pubali Bank Ltd. | -0.00084 | -0.00562 | 0.27022 | -0.02080 |
| **111** | Union Capital Ltd. | 0.00067 | -0.00412 | 0.19313 | -0.02133 |
| **112** | Standard Bank Ltd. | -0.00235 | -0.00713 | 0.32447 | -0.02199 |
| **113** | Asia Pacific General Insurance Co. Ltd. | -0.00219 | -0.00698 | 0.31658 | -0.02204 |
| **114** | United Finance Limited | -0.00221 | -0.00700 | 0.31180 | -0.02244 |
| **115** | Fareast Islami Life Insurance Co. Ltd. | -0.00355 | -0.00834 | 0.36616 | -0.02277 |
| **116** | United Insurance Company Ltd. | -0.00136 | -0.00615 | 0.26563 | -0.02314 |
| **117** | Rupali Bank Ltd. | 0.00042 | -0.00436 | 0.18556 | -0.02352 |
| **118** | Export Import (Exim) Bank of Bangladesh Ltd. | -0.00260 | -0.00739 | 0.31399 | -0.02352 |
| **119** | Bangladesh General Insurance Company Ltd. | -0.00183 | -0.00661 | 0.27374 | -0.02416 |
| **120** | Titas Gas Trans. & Dist. Co. Ltd. | -0.00547 | -0.01026 | 0.41024 | -0.02500 |
| **121** | S. Alam Cold Rolled Steels Ltd. | -0.00368 | -0.00846 | 0.33294 | -0.02542 |
| **122** | Rangpur Dairy & Food Products Limited | -0.00021 | -0.00500 | 0.19446 | -0.02571 |
| **123** | Saiham Textile Mills Ltd. | -0.00421 | -0.00900 | 0.34376 | -0.02618 |
| **124** | Mercantile Insurance Co. Ltd. | -0.00224 | -0.00702 | 0.26278 | -0.02673 |
| **125** | Reliance Insurance Ltd. | -0.00418 | -0.00897 | 0.33274 | -0.02695 |
| **126** | Padma Islami Life Insurance Limited | -0.00215 | -0.00693 | 0.23507 | -0.02950 |
| **127** | Continental Insurance Ltd. | -0.00123 | -0.00602 | 0.19511 | -0.03084 |
| **128** | GBB Power Limited | -0.00711 | -0.01189 | 0.36546 | -0.03254 |
| **129** | AB Bank Limited | -0.00260 | -0.00738 | 0.22182 | -0.03327 |
| **130** | Asia Insurance Co. Ltd. | -0.00481 | -0.00960 | 0.26595 | -0.03609 |
| **131** | Dhaka Electric Supply Company Ltd. | -0.00548 | -0.01026 | 0.28067 | -0.03656 |
| **132** | Northern General Insurance Co. Ltd. | -0.00475 | -0.00953 | 0.25091 | -0.03798 |
| **133** | Meghna Life Insurance Co. Ltd. | -0.00709 | -0.01188 | 0.30623 | -0.03879 |
| **134** | Agrani Insurance Co Ltd. | -0.00354 | -0.00832 | 0.21098 | -0.03943 |
| **135** | Prime Insurance Company Limited | -0.00360 | -0.00838 | 0.21221 | -0.03950 |
| **136** | Square Textiles Limited | -0.00935 | -0.01414 | 0.35771 | -0.03952 |
| **137** | Karnaphuli Insurance Co. Ltd. | -0.00853 | -0.01331 | 0.33039 | -0.04030 |
| **138** | National Bank Ltd. | -0.00479 | -0.00958 | 0.23006 | -0.04162 |
| **139** | Republic Insurance Company Ltd. | -0.00391 | -0.00870 | 0.20893 | -0.04163 |
| **140** | Sonar Bangla Insurance Ltd. | -0.00769 | -0.01248 | 0.29561 | -0.04220 |
| **141** | Popular Life Insurance Company Ltd. | -0.00241 | -0.00719 | 0.16608 | -0.04330 |
| **142** | IFIC Bank Ltd. | -0.00070 | -0.00548 | 0.12338 | -0.04443 |
| **143** | Provati Insurance Company ltd. | -0.00725 | -0.01204 | 0.26502 | -0.04542 |
| **144** | Envoy Textiles Limited | -0.00498 | -0.00976 | 0.21435 | -0.04555 |
| **145** | Saiham Cotton Mills Limited | -0.00905 | -0.01383 | 0.30217 | -0.04578 |
| **146** | Standard Insurance Ltd. | -0.00292 | -0.00770 | 0.16809 | -0.04583 |
| **147** | Pragati Insurance Ltd. | -0.00832 | -0.01310 | 0.27977 | -0.04684 |
| **148** | City General Insurance Co. Ltd. | -0.00785 | -0.01263 | 0.26965 | -0.04685 |
| **149** | Dhaka Insurance Co. Ltd. | -0.01203 | -0.01681 | 0.34932 | -0.04812 |
| **150** | Prime Bank Ltd. | -0.00472 | -0.00951 | 0.19448 | -0.04888 |
| **151** | Paramount Insurance Co. Ltd. | -0.00236 | -0.00715 | 0.14503 | -0.04929 |
| **152** | Central Insurance Company Limited | -0.00573 | -0.01052 | 0.20969 | -0.05015 |
| **153** | Active Fine Chemicals Ltd. | -0.00861 | -0.01339 | 0.25872 | -0.05176 |
| **154** | Rupali Insurance Company Ltd. | -0.01092 | -0.01571 | 0.29158 | -0.05386 |
| **155** | Eastland Insurance Company Limited | -0.01261 | -0.01739 | 0.31146 | -0.05583 |
| **156** | Prime Islami life Insurance Ltd. | -0.00410 | -0.00889 | 0.15289 | -0.05812 |
| **157** | Phoenix Insurance Company Ltd. | -0.00962 | -0.01441 | 0.23969 | -0.06011 |
| **158** | National Life Insurance Co Ltd | -0.00689 | -0.01168 | 0.18738 | -0.06231 |
| **159** | Takaful Islami Insurance Ltd. | -0.00403 | -0.00882 | 0.12321 | -0.07156 |
| **160** | Alif Manufacturing Company Ltd. | -0.00579 | -0.01057 | 0.13463 | -0.07851 |
| **161** | Keya Cosmetics Ltd. | -0.01192 | -0.01670 | 0.20939 | -0.07978 |
| **162** | Sandhani Life Insurance Ltd | -0.01503 | -0.01981 | 0.24798 | -0.07989 |
| **163** | Rupali Life Insurance Co.Ltd. | -0.01071 | -0.01549 | 0.19293 | -0.08031 |
| **164** | Zahintex Industries Limited | -0.00638 | -0.01116 | 0.13270 | -0.08413 |
| **165** | Pioneer Insurance company Ltd. | -0.01376 | -0.01854 | 0.20022 | -0.09261 |
| **166** | Purabi Gen. Insurance Company Ltd. | -0.01711 | -0.02189 | 0.22962 | -0.09535 |
| **167** | Generation Next Fashions Limited | -0.01481 | -0.01960 | 0.19177 | -0.10218 |
| **168** | National Tea Company Limited | -0.00264 | -0.00742 | 0.06378 | -0.11640 |
| **169** | R.N. Spinning Mills Ltd. | -0.00971 | -0.01449 | 0.10019 | -0.14467 |
| **170** | Delta Spinners Ltd. | -0.01595 | -0.02073 | 0.14202 | -0.14599 |
| **171** | Delta Life Insurance Co. Ltd | -0.01578 | -0.02056 | 0.12120 | -0.16967 |
| **172** | Gemini Sea Food Ltd. | 0.03379 | 0.02900 | -0.04778 | -0.60706 |
| **173** | Monno Jute Stafflers Ltd. | 0.03474 | 0.02995 | -0.04531 | -0.66110 |
| **174** | Anwar Galvanizing Ltd. | 0.03342 | 0.02863 | -0.02251 | -1.27203 |
| **175** | Stylecraft Limited | 0.02568 | 0.02090 | -0.01040 | -2.00855 |
| **176** | Eastern Lubricants Ltd. | 0.04159 | 0.03680 | -0.01710 | -2.15210 |
| **177** | Desh Garments Ltd. | 0.05439 | 0.04960 | -0.01552 | -3.19625 |
| **178** | Northern Jute Manufacturing Co. Ltd. | 0.08227 | 0.07749 | -0.00611 | -12.69015 |

**Appendix-D:** Evaluation of Portfolio Performance

| **Rank** | **Security No.** |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **1** | **49** | 0.00714 | 0.02324 | 0.00017 | 0.04887 | 0.001136 | 0.04320 | 0.000023336 |
| **2** | **134** | 0.00902 | 0.00971 | 0.00009 | 0.04277 | 0.000415 | 0.08907 | 0.000008395 |
| **3** | **130** | 0.03157 | 0.01059 | 0.00033 | 0.04012 | 0.000425 | 0.07562 | 0.000008480 |
| **4** | **107** | 0.01278 | 0.02381 | 0.00030 | 0.01749 | 0.000416 | 0.01209 | 0.000006850 |
| **5** | **109** | 0.02627 | 0.02353 | 0.00062 | 0.02660 | 0.000626 | 0.02097 | 0.000011613 |
| **6** | **135** | 0.04893 | 0.02354 | 0.00115 | 0.03522 | 0.000829 | 0.02916 | 0.000016157 |
| **7** | **82** | 0.03196 | 0.01415 | 0.00045 | 0.02298 | 0.000325 | 0.02898 | 0.000005800 |
| **8** | **106** | 0.05015 | 0.04996 | 0.00251 | 0.02580 | 0.001289 | 0.00944 | 0.000023554 |
| **9** | **44** | 0.06957 | 0.03657 | 0.00254 | 0.03117 | 0.001140 | 0.01616 | 0.000021614 |
| **10** | **61** | 0.06771 | 0.08153 | 0.00552 | 0.02508 | 0.002045 | 0.00555 | 0.000036880 |
| **11** | **100** | 0.04265 | 0.02110 | 0.00090 | 0.01553 | 0.000328 | 0.01131 | 0.000005034 |
| **12** | **114** | 0.08022 | 0.03759 | 0.00302 | 0.02084 | 0.000783 | 0.00941 | 0.000013300 |
| **13** | **50** | 0.12802 | 0.02147 | 0.00275 | 0.02992 | 0.000642 | 0.02578 | 0.000011881 |
| **14** | **84** | 0.09635 | 0.01364 | 0.00131 | 0.02295 | 0.000313 | 0.02929 | 0.000005449 |
| **15** | **108** | 0.09345 | 0.02780 | 0.00260 | 0.02234 | 0.000621 | 0.01388 | 0.000010731 |
| **16** | **81** | 0.08073 | 0.02025 | 0.00163 | 0.01664 | 0.000337 | 0.01274 | 0.000005226 |
| **17** | **60** | 0.11994 | 0.02352 | 0.00282 | 0.02229 | 0.000524 | 0.01620 | 0.000008957 |
| **18** | **128** | 0.09811 | 0.01979 | 0.00194 | 0.01745 | 0.000345 | 0.01383 | 0.000005415 |
| **19** | **59** | 0.13604 | 0.03033 | 0.00413 | 0.02113 | 0.000641 | 0.01160 | 0.000010675 |
| **20** | **102** | 0.13605 | 0.03983 | 0.00542 | 0.02034 | 0.000810 | 0.00838 | 0.000013296 |
| **21** | **125** | 0.08163 | 0.00804 | 0.00066 | 0.01391 | 0.000112 | 0.02434 | 0.000001573 |
| **22** | **103** | 0.15302 | 0.02986 | 0.00457 | 0.02173 | 0.000649 | 0.01216 | 0.000010840 |
| **23** | **90** | 0.07836 | 0.01040 | 0.00082 | 0.01246 | 0.000130 | 0.01567 | 0.000001696 |
| **24** | **113** | 0.17129 | 0.01600 | 0.00274 | 0.02092 | 0.000335 | 0.02136 | 0.000005468 |
| **25** | **104** | 0.08427 | 0.01872 | 0.00158 | 0.01257 | 0.000235 | 0.00879 | 0.000003081 |
| **26** | **105** | 0.13937 | 0.02713 | 0.00378 | 0.01688 | 0.000458 | 0.00938 | 0.000006904 |
| **27** | **64** | 0.10499 | 0.01739 | 0.00183 | 0.01347 | 0.000234 | 0.01047 | 0.000003165 |
| **28** | **48** | 0.16512 | 0.01397 | 0.00231 | 0.01799 | 0.000251 | 0.01975 | 0.000003856 |
| **29** | **87** | 0.14013 | 0.01813 | 0.00254 | 0.01531 | 0.000278 | 0.01206 | 0.000003962 |
| **30** | **25** | 0.21499 | 0.02998 | 0.00645 | 0.01884 | 0.000565 | 0.00959 | 0.000008624 |
| **31** | **123** | 0.17688 | 0.01267 | 0.00224 | 0.01503 | 0.000190 | 0.01631 | 0.000002616 |
| **32** | **36** | 0.22657 | 0.01991 | 0.00451 | 0.01754 | 0.000349 | 0.01287 | 0.000005099 |
| **33** | **67** | 0.20492 | 0.02820 | 0.00578 | 0.01606 | 0.000453 | 0.00800 | 0.000006364 |
| **34** | **54** | 0.18475 | 0.02063 | 0.00381 | 0.01485 | 0.000306 | 0.00976 | 0.000004151 |
| **35** | **52** | 0.18526 | 0.02981 | 0.00552 | 0.01400 | 0.000417 | 0.00610 | 0.000005417 |
| **36** | **43** | 0.16122 | 0.01092 | 0.00176 | 0.01195 | 0.000131 | 0.01271 | 0.000001516 |
| **37** | **131** | 0.22622 | 0.01366 | 0.00309 | 0.01481 | 0.000202 | 0.01421 | 0.000002651 |
| **38** | **118** | 0.15249 | 0.00455 | 0.00069 | 0.01149 | 0.000052 | 0.02848 | 0.000000590 |
| **39** | **132** | 0.22110 | 0.03333 | 0.00737 | 0.01425 | 0.000475 | 0.00546 | 0.000006065 |
| **40** | **28** | 0.22960 | 0.01094 | 0.00251 | 0.01301 | 0.000142 | 0.01393 | 0.000001668 |
| **41** | **133** | 0.20568 | 0.00656 | 0.00135 | 0.00935 | 0.000061 | 0.01109 | 0.000000478 |
| **42** | **116** | 0.13350 | 0.00486 | 0.00065 | 0.00768 | 0.000037 | 0.00941 | 0.000000222 |
| **43** | **101** | 0.30569 | 0.01219 | 0.00373 | 0.01126 | 0.000137 | 0.00829 | 0.000001231 |
| **44** | **68** | 0.20622 | 0.00414 | 0.00085 | 0.00888 | 0.000037 | 0.01495 | 0.000000256 |
| **45** | **120** | 0.22901 | 0.00687 | 0.00157 | 0.00904 | 0.000062 | 0.00903 | 0.000000426 |
| **46** | **18** | 0.26881 | 0.00812 | 0.00218 | 0.00940 | 0.000076 | 0.00790 | 0.000000521 |
| **47** | **2** | 0.28493 | 0.00475 | 0.00135 | 0.00918 | 0.000044 | 0.01197 | 0.000000270 |
| **48** | **110** | 0.17229 | 0.00309 | 0.00053 | 0.00743 | 0.000023 | 0.01102 | 0.000000105 |
| **49** | **111** | 0.31474 | 0.01643 | 0.00517 | 0.00953 | 0.000157 | 0.00366 | 0.000000987 |
| **50** | **121** | 0.31933 | 0.00400 | 0.00128 | 0.00883 | 0.000035 | 0.01084 | 0.000000173 |
| **51** | **119** | 0.09248 | 0.00025 | 0.00002 | 0.00594 | 0.000001 | 0.04852 | 0.000000003 |
| **52** | **46** | 0.22916 | 0.00135 | 0.00031 | 0.00716 | 0.000010 | 0.01421 | 0.000000026 |
| **53** | **91** | 0.17462 | 0.00062 | 0.00011 | 0.00643 | 0.000004 | 0.01752 | 0.000000007 |
| **54** | **78** | 0.24299 | 0.00060 | 0.00015 | 0.00665 | 0.000004 | 0.00907 | 0.000000003 |
|  |  |  |  | 0.124003 |  | 0.020644 |  | 0.000342655 |