

| $N =$      |   | 50                                                                | 100    | 150    | 200    | 250    | 300    | 350    | 400    | 800    | 1200   | 1600   |
|------------|---|-------------------------------------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|            |   | Overall mean of the posterior estimated mean of $\mu$             |        |        |        |        |        |        |        |        |        |        |
| True $\nu$ | 3 | 0.006                                                             | 0.005  | 0.001  | -0.001 | -0.006 | -0.002 | -0.001 | -0.004 | 0.0    | -0.001 | -0.002 |
|            | 5 | -0.007                                                            | 0.004  | 0.003  | -0.003 | -0.004 | -0.003 | -0.001 | 0.003  | 0.001  | -0.002 | -0.0   |
|            | 7 | -0.007                                                            | 0.001  | 0.003  | -0.003 | 0.004  | -0.002 | -0.002 | 0.002  | 0.001  | -0.002 | 0.0    |
|            |   | Overall sd of the posterior estimated mean of $\mu$               |        |        |        |        |        |        |        |        |        |        |
| True $\nu$ | 3 | 0.196                                                             | 0.13   | 0.104  | 0.085  | 0.078  | 0.07   | 0.066  | 0.061  | 0.046  | 0.035  | 0.03   |
|            | 5 | 0.172                                                             | 0.121  | 0.099  | 0.083  | 0.075  | 0.069  | 0.063  | 0.061  | 0.043  | 0.032  | 0.03   |
|            | 7 | 0.162                                                             | 0.116  | 0.097  | 0.079  | 0.072  | 0.067  | 0.062  | 0.058  | 0.04   | 0.031  | 0.029  |
|            |   | Overall 2.5%-tile of the posterior estimated mean of $\mu$        |        |        |        |        |        |        |        |        |        |        |
| True $\nu$ | 3 | -0.389                                                            | -0.255 | -0.197 | -0.163 | -0.159 | -0.139 | -0.13  | -0.125 | -0.093 | -0.07  | -0.058 |
|            | 5 | -0.355                                                            | -0.241 | -0.178 | -0.166 | -0.146 | -0.142 | -0.123 | -0.116 | -0.084 | -0.064 | -0.059 |
|            | 7 | -0.33                                                             | -0.231 | -0.185 | -0.158 | -0.139 | -0.132 | -0.126 | -0.108 | -0.079 | -0.062 | -0.053 |
|            |   | Overall 97.5%-tile of the posterior estimated mean of $\mu$       |        |        |        |        |        |        |        |        |        |        |
| True $\nu$ | 3 | 0.402                                                             | 0.269  | 0.202  | 0.159  | 0.139  | 0.126  | 0.133  | 0.115  | 0.09   | 0.066  | 0.059  |
|            | 5 | 0.318                                                             | 0.257  | 0.202  | 0.161  | 0.143  | 0.143  | 0.126  | 0.122  | 0.082  | 0.058  | 0.058  |
|            | 7 | 0.303                                                             | 0.241  | 0.206  | 0.152  | 0.139  | 0.128  | 0.123  | 0.114  | 0.08   | 0.056  | 0.058  |
|            |   | Overall mean of the posterior estimated sd of $\mu$               |        |        |        |        |        |        |        |        |        |        |
| True $\nu$ | 3 | 0.197                                                             | 0.131  | 0.104  | 0.089  | 0.079  | 0.072  | 0.066  | 0.062  | 0.044  | 0.035  | 0.031  |
|            | 5 | 0.175                                                             | 0.121  | 0.098  | 0.084  | 0.075  | 0.068  | 0.063  | 0.059  | 0.041  | 0.033  | 0.029  |
|            | 7 | 0.166                                                             | 0.116  | 0.094  | 0.081  | 0.073  | 0.066  | 0.061  | 0.057  | 0.04   | 0.032  | 0.028  |
|            |   | Overall sd of the posterior estimated sd of $\mu$                 |        |        |        |        |        |        |        |        |        |        |
| True $\nu$ | 3 | 0.032                                                             | 0.016  | 0.01   | 0.007  | 0.005  | 0.005  | 0.004  | 0.003  | 0.002  | 0.001  | 0.001  |
|            | 5 | 0.024                                                             | 0.012  | 0.008  | 0.006  | 0.005  | 0.004  | 0.003  | 0.003  | 0.002  | 0.001  | 0.001  |
|            | 7 | 0.021                                                             | 0.01   | 0.007  | 0.005  | 0.004  | 0.004  | 0.003  | 0.003  | 0.001  | 0.001  | 0.001  |
|            |   | Overall 2.5%-tile of the posterior estimated sd of $\mu$          |        |        |        |        |        |        |        |        |        |        |
| True $\nu$ | 3 | 0.138                                                             | 0.103  | 0.086  | 0.076  | 0.068  | 0.063  | 0.058  | 0.055  | 0.04   | 0.033  | 0.029  |
|            | 5 | 0.131                                                             | 0.1    | 0.082  | 0.072  | 0.065  | 0.061  | 0.056  | 0.053  | 0.038  | 0.032  | 0.028  |
|            | 7 | 0.128                                                             | 0.097  | 0.079  | 0.071  | 0.065  | 0.06   | 0.055  | 0.052  | 0.037  | 0.031  | 0.027  |
|            |   | Overall 97.5%-tile of the posterior estimated sd of $\mu$         |        |        |        |        |        |        |        |        |        |        |
| True $\nu$ | 3 | 0.266                                                             | 0.164  | 0.123  | 0.104  | 0.089  | 0.081  | 0.074  | 0.069  | 0.047  | 0.038  | 0.033  |
|            | 5 | 0.226                                                             | 0.146  | 0.115  | 0.097  | 0.085  | 0.076  | 0.07   | 0.064  | 0.044  | 0.035  | 0.031  |
|            | 7 | 0.208                                                             | 0.137  | 0.109  | 0.092  | 0.081  | 0.073  | 0.067  | 0.062  | 0.042  | 0.034  | 0.029  |
|            |   | Overall mean of the posterior estimated 2.5%-tile of $\mu$        |        |        |        |        |        |        |        |        |        |        |
| True $\nu$ | 3 | -0.381                                                            | -0.254 | -0.202 | -0.176 | -0.16  | -0.143 | -0.13  | -0.125 | -0.085 | -0.071 | -0.062 |
|            | 5 | -0.352                                                            | -0.234 | -0.189 | -0.168 | -0.15  | -0.136 | -0.124 | -0.111 | -0.079 | -0.067 | -0.057 |
|            | 7 | -0.333                                                            | -0.227 | -0.181 | -0.162 | -0.138 | -0.131 | -0.121 | -0.11  | -0.076 | -0.065 | -0.055 |
|            |   | Overall sd of the posterior estimated 2.5%-tile of $\mu$          |        |        |        |        |        |        |        |        |        |        |
| True $\nu$ | 3 | 0.208                                                             | 0.134  | 0.105  | 0.086  | 0.078  | 0.07   | 0.067  | 0.062  | 0.046  | 0.035  | 0.03   |
|            | 5 | 0.179                                                             | 0.125  | 0.101  | 0.085  | 0.076  | 0.07   | 0.063  | 0.062  | 0.043  | 0.032  | 0.03   |
|            | 7 | 0.167                                                             | 0.118  | 0.098  | 0.08   | 0.073  | 0.068  | 0.062  | 0.058  | 0.04   | 0.031  | 0.029  |
|            |   | Overall 2.5%-tile of the posterior estimated 2.5%-tile of $\mu$   |        |        |        |        |        |        |        |        |        |        |
| True $\nu$ | 3 | -0.821                                                            | -0.513 | -0.404 | -0.346 | -0.319 | -0.282 | -0.26  | -0.245 | -0.18  | -0.139 | -0.118 |
|            | 5 | -0.713                                                            | -0.479 | -0.379 | -0.332 | -0.298 | -0.276 | -0.244 | -0.231 | -0.166 | -0.129 | -0.116 |
|            | 7 | -0.678                                                            | -0.462 | -0.374 | -0.32  | -0.282 | -0.262 | -0.248 | -0.22  | -0.156 | -0.125 | -0.108 |
|            |   | Overall 97.5%-tile of the posterior estimated 2.5%-tile of $\mu$  |        |        |        |        |        |        |        |        |        |        |
| True $\nu$ | 3 | 0.016                                                             | 0.013  | -0.003 | -0.018 | -0.012 | -0.011 | -0.001 | -0.006 | 0.005  | -0.003 | -0.002 |
|            | 5 | -0.009                                                            | 0.02   | 0.009  | -0.001 | -0.002 | 0.012  | 0.001  | 0.008  | 0.002  | -0.006 | 0.003  |
|            | 7 | -0.024                                                            | 0.013  | 0.017  | -0.007 | -0.002 | -0.002 | 0.007  | 0.009  | 0.004  | -0.007 | 0.002  |
|            |   | Overall mean of the posterior estimated 97.5%-tile of $\mu$       |        |        |        |        |        |        |        |        |        |        |
| True $\nu$ | 3 | 0.393                                                             | 0.263  | 0.205  | 0.174  | 0.148  | 0.138  | 0.129  | 0.118  | 0.086  | 0.068  | 0.059  |
|            | 5 | 0.337                                                             | 0.242  | 0.196  | 0.162  | 0.143  | 0.131  | 0.121  | 0.118  | 0.082  | 0.064  | 0.057  |
|            | 7 | 0.319                                                             | 0.23   | 0.188  | 0.156  | 0.147  | 0.127  | 0.117  | 0.113  | 0.079  | 0.062  | 0.055  |
|            |   | Overall sd of the posterior estimated 97.5%-tile of $\mu$         |        |        |        |        |        |        |        |        |        |        |
| True $\nu$ | 3 | 0.207                                                             | 0.136  | 0.106  | 0.087  | 0.078  | 0.071  | 0.066  | 0.062  | 0.046  | 0.035  | 0.03   |
|            | 5 | 0.179                                                             | 0.123  | 0.1    | 0.084  | 0.075  | 0.069  | 0.063  | 0.061  | 0.043  | 0.032  | 0.03   |
|            | 7 | 0.168                                                             | 0.118  | 0.098  | 0.08   | 0.072  | 0.068  | 0.062  | 0.057  | 0.04   | 0.031  | 0.029  |
|            |   | Overall 2.5%-tile of the posterior estimated 97.5%-tile of $\mu$  |        |        |        |        |        |        |        |        |        |        |
| True $\nu$ | 3 | 0.018                                                             | -0.001 | -0.003 | 0.006  | -0.006 | -0.001 | -0.001 | -0.007 | -0.008 | -0.002 | 0.002  |
|            | 5 | 0.002                                                             | -0.006 | 0.011  | 0.004  | 0.001  | -0.009 | -0.001 | -0.006 | -0.005 | 0.002  | -0.001 |
|            | 7 | -0.005                                                            | -0.003 | 0.001  | 0.001  | 0.006  | -0.005 | -0.011 | 0.002  | -0.001 | 0.003  | 0.003  |
|            |   | Overall 97.5%-tile of the posterior estimated 97.5%-tile of $\mu$ |        |        |        |        |        |        |        |        |        |        |
| True $\nu$ | 3 | 0.846                                                             | 0.542  | 0.405  | 0.341  | 0.296  | 0.27   | 0.263  | 0.239  | 0.175  | 0.135  | 0.12   |
|            | 5 | 0.691                                                             | 0.491  | 0.406  | 0.328  | 0.288  | 0.273  | 0.249  | 0.238  | 0.16   | 0.124  | 0.115  |
|            | 7 | 0.643                                                             | 0.46   | 0.389  | 0.321  | 0.287  | 0.257  | 0.242  | 0.225  | 0.159  | 0.121  | 0.112  |