## Estimates of other parameters

t12

Yi

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## Load data

```
s.rdt <- "../../scenario/scenario-t12/set-t12-c11.RData"

# s.rdt <- "../../scenario/scenario-t12/set-t12-c10.RData"

# dt <- "c10"

#

# s.rdt <- "../../scenario/scenario-t12/set-t12-c01.RData"

# dt <- "c01"</pre>
```

- Scenario 1
- Scenario 2
- Scenario 3
- Scenario 4
- Scenario 5

Table 1: Estimates of the parameters

$\overline{S}$	Par	True	Proposed $(\hat{c}_1^2, \hat{c}_2^2)$	Proposed (correct)	Proposed (wrong)	$Reitsma_O$	$Reitsma_{P}$
25	$\mu_1$	0.000	-0.051 (-0.347, 0.234)	0.040 (-0.171, 0.266)	-0.021 (-0.282, 0.194)	0.141 (-0.049, 0.331)	0.016 (-0.135, 0.171)
	$\mu_2$	1.735	1.936 (1.485, 2.396)	$1.880\ (1.378,\ 2.265)$	2.488(2.157, 2.770)	2.385(2.046, 2.646)	$1.716\ (1.442,1.997)$
	$ au_1$	1.000	0.999 (0.836, 1.181)	0.940 (0.789, 1.097)	$0.977 \ (0.830, 1.162)$	$0.920\ (0.767,\ 1.075)$	$0.947 \ (0.825, 1.077)$
	$ au_2$	2.000	1.833 (1.537, 2.192)	1.840 (1.540, 2.203)	1.664 (1.403, 1.900)	1.644 (1.400, 1.876)	$1.916 \ (1.707, \ 2.122)$
	$\rho$	-0.300	-0.371 (-0.599, -0.112)	-0.359 (-0.588, -0.097)	-0.516 (-0.678, -0.310)	-0.497 (-0.667, -0.307)	-0.319 (-0.465, -0.151)
	$c_1$	0.707	$0.776 \ (0.539, \ 0.925)$				
	$\beta$	0.500	$2.000 \ (0.448, \ 2.000)$	$0.575 \ (0.186, \ 2.000)$	$0.047\ (0.000,\ 0.227)$		
	$\alpha$	-0.165	0.177 (-0.380, 0.890)	$0.003 \ (-0.364, \ 0.291)$	$0.642\ (0.466,\ 0.915)$		
50	$\mu_1$	0.000	-0.060 (-0.301, 0.152)	0.009 (-0.144, 0.163)	0.016 (-0.168, 0.159)	0.112 (-0.017, 0.250)	-0.006 (-0.114, 0.118)
	$\mu_2$	1.735	$1.853 \ (1.472, \ 2.231)$	$1.836\ (1.473,\ 2.155)$	$2.475\ (2.257,\ 2.701)$	$2.408\ (2.194,\ 2.593)$	$1.746 \ (1.543, \ 1.946)$
	$ au_1$	1.000	$1.037 \ (0.900, \ 1.171)$	$0.972 \ (0.864, \ 1.085)$	$0.989\ (0.872,\ 1.099)$	$0.956 \ (0.850, 1.063)$	$0.970 \ (0.884, 1.056)$
	$ au_2$	2.000	$1.916 \ (1.705, \ 2.220)$	$1.917 \ (1.702, \ 2.195)$	$1.711\ (1.543,\ 1.869)$	$1.697\ (1.538,\ 1.859)$	$1.983\ (1.824,\ 2.129)$
	$\rho$	-0.300	-0.329 (-0.510, -0.146)	-0.336 (-0.507, -0.151)	-0.485 (-0.612, -0.357)	-0.479 (-0.601, -0.344)	-0.311 (-0.411, -0.188)
	$c_1$	0.707	$0.759 \ (0.545, \ 0.897)$				
	$\beta$	0.500	$0.894 \ (0.459, \ 2.000)$	$0.548 \ (0.242, \ 1.071)$	$0.033 \ (0.000, \ 0.103)$		
	$\alpha$	-0.165	$0.132 \ (-0.243, \ 0.613)$	-0.039 (-0.275, 0.225)	$0.578 \ (0.478, \ 0.691)$		
200	$\mu_1$	0.000	-0.018 (-0.151, 0.093)	0.014 (-0.060, 0.080)	$0.079\ (0.008,\ 0.141)$	$0.123\ (0.062,\ 0.187)$	0.007 (-0.051, 0.059)
	$\mu_2$	1.735	1.795 (1.559, 2.019)	1.779 (1.596, 1.969)	$2.418 \ (2.324, \ 2.532)$	2.407 (2.296, 2.509)	1.733 (1.634, 1.835)
	$ au_1$	1.000	$1.013\ (0.959,\ 1.088)$	$0.989 \ (0.939, 1.048)$	$0.980\ (0.922,\ 1.033)$	$0.979\ (0.932,\ 1.031)$	$0.993\ (0.948,\ 1.037)$
	$ au_2$	2.000	$1.957 \ (1.816, \ 2.115)$	$1.964 \ (1.826, \ 2.104)$	$1.719\ (1.640,\ 1.794)$	$1.723\ (1.645,\ 1.798)$	$1.990\ (1.915,\ 2.062)$
	ho	-0.300	-0.310 (-0.411, -0.208)	-0.320 (-0.409, -0.218)	-0.455 (-0.519, -0.409)	-0.468 (-0.524, -0.407)	-0.302 (-0.359, -0.245)
	$c_1$	0.707	$0.730\ (0.612,\ 0.828)$				
	$\beta$	0.500	$0.542 \ (0.404, \ 0.727)$	$0.497 \ (0.364, \ 0.647)$	$0.019\ (0.007,\ 0.035)$		
	$\alpha$	-0.165	-0.068 (-0.189, 0.102)	-0.120 (-0.208, -0.033)	$0.530 \ (0.485, \ 0.568)$		

Table 2: Estimates of the parameters

$\overline{S}$	Par	True	Proposed $(\hat{c}_1^2, \hat{c}_2^2)$	Proposed (correct)	Proposed (wrong)	$\mathrm{Reitsma}_O$	$Reitsma_{P}$
25	$\mu_1$	0.000	-0.101 (-0.414, 0.174)	0.013 (-0.199, 0.208)	-0.160 (-0.388, 0.065)	0.025 (-0.174, 0.199)	0.004 (-0.150, 0.163)
	$\mu_2$	1.735	1.979 (1.472, 2.461)	$1.860 \ (1.415, \ 2.275)$	2.505(2.171, 2.853)	2.316(2.029, 2.630)	$1.740\ (1.425,\ 2.012)$
	$ au_1$	1.000	1.026 (0.856, 1.199)	0.947 (0.803, 1.099)	0.994 (0.838, 1.156)	0.940 (0.798, 1.088)	$0.960 \ (0.839, 1.081)$
	$ au_2$	2.000	$1.867 \ (1.592, \ 2.183)$	$1.861 \ (1.579, \ 2.199)$	$1.715 \ (1.495, 1.958)$	$1.670\ (1.456,\ 1.886)$	1.923 (1.712, 2.132)
	$\rho$	-0.600	-0.670 (-0.815, -0.457)	-0.665 (-0.813, -0.457)	-0.743 (-0.846, -0.580)	-0.734 (-0.842, -0.568)	-0.631 (-0.731, -0.486)
	$c_1$	0.707	$0.794\ (0.557,\ 0.927)$				
	$\beta$	0.500	$2.000 \ (0.494, \ 2.000)$	$0.551 \ (0.162, \ 1.934)$	$0.046\ (0.000,\ 0.221)$		
	$\alpha$	-0.251	$0.056 \ (-0.606, \ 0.751)$	-0.111 (-0.592, 0.232)	$0.650\ (0.490,\ 0.998)$		
50	$\mu_1$	0.000	-0.102 (-0.359, 0.118)	0.005 (-0.138, 0.148)	-0.070 (-0.252, 0.068)	$0.023 \ (-0.127, \ 0.148)$	-0.011 (-0.121, 0.112)
	$\mu_2$	1.735	1.869 (1.474, 2.289)	1.772 (1.452, 2.161)	2.434 (2.188, 2.688)	$2.340\ (2.105,\ 2.557)$	$1.736 \ (1.556, \ 1.953)$
	$ au_1$	1.000	$1.048 \ (0.934, \ 1.178)$	$0.984 \ (0.881, \ 1.078)$	$1.005 \ (0.900, \ 1.116)$	$0.985 \ (0.883, 1.077)$	$0.977 \ (0.896, 1.066)$
	$ au_2$	2.000	1.909 (1.716, 2.183)	$1.934\ (1.722,\ 2.182)$	1.747 (1.585, 1.922)	$1.741\ (1.581,\ 1.901)$	1.967 (1.819, 2.110)
	$\rho$	-0.600	-0.614 (-0.740, -0.472)	-0.632 (-0.740, -0.502)	-0.712 (-0.790, -0.613)	-0.707 (-0.783, -0.611)	-0.609 (-0.685, -0.535)
	$c_1$	0.707	$0.788 \ (0.605, \ 0.911)$				
	$\beta$	0.500	$0.881 \ (0.462, \ 2.000)$	$0.517 \ (0.252, \ 0.978)$	$0.026\ (0.000,\ 0.092)$		
	$\alpha$	-0.251	$0.000 \ (-0.324, \ 0.413)$	$-0.161 \ (-0.396, \ 0.077)$	$0.587 \ (0.492, \ 0.723)$		
200	$\mu_1$	0.000	-0.038 (-0.202, 0.092)	0.005 (-0.065, 0.069)	-0.038 (-0.122, 0.033)	0.017 (-0.048, 0.079)	-0.000 (-0.052, 0.055)
	$\mu_2$	1.735	$1.798 \ (1.526, \ 2.068)$	$1.750\ (1.557,\ 1.946)$	$2.393\ (2.283,\ 2.509)$	$2.330\ (2.229,\ 2.445)$	$1.728\ (1.631,\ 1.836)$
	$ au_1$	1.000	$1.025\ (0.965,\ 1.087)$	$0.995 \ (0.942, \ 1.041)$	$1.006 \ (0.951, \ 1.060)$	$1.000 \ (0.947, \ 1.048)$	$0.991\ (0.953,\ 1.034)$
	$ au_2$	2.000	$1.955 \ (1.816, \ 2.140)$	1.979 (1.851, 2.118)	1.775 (1.691, 1.864)	$1.768 \ (1.696, \ 1.846)$	1.989 (1.918, 2.060)
	ho	-0.600	-0.600 (-0.677, -0.519)	-0.607 (-0.669, -0.540)	-0.689 (-0.729, -0.652)	-0.684 (-0.727, -0.645)	-0.603 (-0.639, -0.561)
	$c_1$	0.707	$0.740 \ (0.619, \ 0.858)$				
	$\beta$	0.500	$0.576 \ (0.420, \ 0.755)$	$0.508 \ (0.366, \ 0.671)$	$0.023\ (0.013,\ 0.038)$		
	$\alpha$	-0.251	-0.142 (-0.275, 0.048)	-0.211 (-0.307, -0.120)	$0.536 \ (0.505, \ 0.588)$		

Table 3: Estimates of the parameters

$\overline{S}$	Par	True	Proposed $(\hat{c}_1^2, \hat{c}_2^2)$	Proposed (correct)	Proposed (wrong)	$Reitsma_O$	$Reitsma_{P}$
25	$\mu_1$	1.386	1.391 (1.129, 1.620)	1.413 (1.206, 1.587)	1.216 (0.920, 1.462)	1.489 (1.326, 1.684)	1.389 (1.237, 1.549)
	$\mu_2$	1.386	$1.537 \ (1.073, \ 2.023)$	1.490 (1.062, 1.921)	2.174 (1.844, 2.498)	1.983 (1.695, 2.323)	1.392 (1.136, 1.657)
	$ au_1$	1.000	1.001 (0.828, 1.200)	$0.958 \ (0.806, 1.129)$	$1.093\ (0.903,\ 1.295)$	$0.936\ (0.784,\ 1.093)$	0.953 (0.838, 1.094)
	$ au_2$	2.000	1.880 (1.608, 2.182)	1.875 (1.586, 2.183)	$1.727 \ (1.492, 1.956)$	$1.673\ (1.453,\ 1.885)$	1.916 (1.721, 2.120)
	$\rho$	-0.300	-0.405 (-0.605, -0.133)	-0.369 (-0.572, -0.104)	-0.516 (-0.668, -0.305)	-0.473 (-0.632, -0.286)	-0.312 (-0.464, -0.146)
	$c_1$	0.707	$0.763\ (0.477,\ 0.924)$				
	$\beta$	0.500	$2.000 \ (0.456, \ 2.000)$	$0.594\ (0.206,\ 2.000)$	$0.252\ (0.033,\ 0.949)$		
	$\alpha$	-0.766	-1.013 (-2.438, -0.100)	-0.803 (-1.827, -0.176)	0.191 (-0.165, 0.440)		
50	$\mu_1$	1.386	$1.379\ (1.144,\ 1.566)$	$1.407 \ (1.266, \ 1.547)$	$1.269\ (1.057,\ 1.462)$	$1.502\ (1.377,\ 1.629)$	$1.389\ (1.278,\ 1.499)$
	$\mu_2$	1.386	$1.513\ (1.073,\ 1.889)$	1.474 (1.130, 1.784)	$2.166\ (1.922,\ 2.407)$	$2.005\ (1.794,\ 2.227)$	$1.384\ (1.182,\ 1.577)$
	$ au_1$	1.000	$1.016 \ (0.888, \ 1.153)$	$0.972 \ (0.862, \ 1.088)$	$1.070 \ (0.931, \ 1.222)$	$0.957 \ (0.855, 1.068)$	$0.977 \ (0.886, 1.068)$
	$ au_2$	2.000	1.942 (1.710, 2.248)	$1.931\ (1.706,\ 2.173)$	$1.752\ (1.584,\ 1.921)$	$1.721\ (1.558,\ 1.881)$	$1.978 \ (1.825, \ 2.115)$
	$\rho$	-0.300	-0.358 (-0.534, -0.161)	-0.330 (-0.495, -0.149)	-0.492 (-0.612, -0.338)	-0.459 (-0.576, -0.320)	-0.309 (-0.422, -0.189)
	$c_1$	0.707	$0.736\ (0.522,\ 0.895)$				
	$\beta$	0.500	$0.806 \ (0.417, \ 2.000)$	$0.536 \ (0.278, \ 0.966)$	$0.167 \ (0.019, \ 0.467)$		
	$\alpha$	-0.766	-0.829 (-1.680, -0.268)	-0.752 (-1.300, -0.380)	$0.193 \ (-0.066, \ 0.432)$		
200	$\mu_1$	1.386	$1.380\ (1.272,\ 1.495)$	1.390 (1.317, 1.466)	$1.381\ (1.252,\ 1.488)$	1.498 (1.435, 1.564)	$1.387\ (1.331,\ 1.441)$
	$\mu_2$	1.386	$1.387 \ (1.156, \ 1.627)$	$1.393\ (1.232,\ 1.565)$	$2.086\ (1.967,\ 2.205)$	$2.001\ (1.897,\ 2.104)$	$1.383\ (1.278,\ 1.485)$
	$ au_1$	1.000	$1.009\ (0.950,\ 1.075)$	$0.993 \ (0.943, \ 1.051)$	$1.027 \ (0.968, \ 1.106)$	$0.982\ (0.933,\ 1.038)$	$0.996 \ (0.952, \ 1.041)$
	$ au_2$	2.000	$1.984 \ (1.839, \ 2.157)$	$1.983 \ (1.857, \ 2.112)$	1.769 (1.687, 1.848)	$1.751\ (1.675,\ 1.833)$	1.994 (1.913, 2.066)
	ho	-0.300	-0.314 (-0.411, -0.227)	-0.303 (-0.395, -0.219)	-0.456 (-0.513, -0.397)	-0.442 (-0.502, -0.383)	-0.301 (-0.357, -0.246)
	$c_1$	0.707	$0.709\ (0.610,\ 0.802)$				
	$\beta$	0.500	$0.566 \ (0.424, \ 0.709)$	$0.510 \ (0.388, \ 0.656)$	$0.049\ (0.003,\ 0.179)$		
	$\alpha$	-0.766	-0.752 (-1.001, -0.530)	-0.770 (-0.955, -0.582)	$0.296 \ (0.079, \ 0.475)$		

Table 4: Estimates of the parameters

$\overline{S}$	Par	True	Proposed $(\hat{c}_1^2, \hat{c}_2^2)$	Proposed (correct)	Proposed (wrong)	$Reitsma_O$	$Reitsma_{P}$
25	$\mu_1$	1.386	1.349 (1.093, 1.604)	1.376 (1.182, 1.574)	1.110 (0.822, 1.357)	1.394 (1.207, 1.581)	1.381 (1.236, 1.537)
	$\mu_2$	1.386	1.545 (1.039, 2.020)	1.472 (1.062, 1.878)	2.205 (1.874, 2.577)	$1.929 \ (1.649, \ 2.255)$	1.395(1.103, 1.671)
	$ au_1$	1.000	1.003 (0.835, 1.194)	$0.954 \ (0.800, 1.103)$	1.083 (0.892, 1.296)	$0.941 \ (0.795, 1.090)$	$0.957 \ (0.827, 1.073)$
	$ au_2$	2.000	1.928 (1.640, 2.229)	1.889 (1.598, 2.207)	$1.798 \ (1.550, \ 2.071)$	1.717 (1.493, 1.973)	$1.936 \ (1.727, \ 2.148)$
	$\rho$	-0.600	-0.687 (-0.825, -0.477)	-0.659 (-0.805, -0.444)	-0.749 (-0.850, -0.595)	-0.708 (-0.826, -0.546)	-0.631 (-0.744, -0.487)
	$c_1$	0.707	$0.754 \ (0.515, \ 0.917)$				
	$\beta$	0.500	$2.000 \ (0.504, \ 2.000)$	$0.581\ (0.202,\ 1.980)$	$0.232\ (0.025,\ 0.860)$		
	$\alpha$	-0.848	-1.214 (-2.822, -0.219)	-0.911 (-2.151, -0.206)	$0.263 \ (-0.079, \ 0.523)$		
50	$\mu_1$	1.386	1.369 (1.154, 1.575)	$1.398 \ (1.269, \ 1.515)$	$1.186\ (0.964,\ 1.362)$	$1.404\ (1.281,\ 1.525)$	$1.395\ (1.285,\ 1.506)$
	$\mu_2$	1.386	$1.431\ (0.988,\ 1.867)$	$1.422\ (1.109,\ 1.717)$	$2.142\ (1.880,\ 2.417)$	$1.917\ (1.697,\ 2.137)$	1.377 (1.184, 1.569)
	$ au_1$	1.000	$1.021\ (0.905,\ 1.151)$	$0.968 \ (0.868, \ 1.075)$	$1.085\ (0.941,\ 1.238)$	$0.972 \ (0.869, 1.074)$	$0.977 \ (0.886, 1.069)$
	$ au_2$	2.000	1.987 (1.749, 2.272)	$1.940 \ (1.728, \ 2.182)$	$1.816\ (1.660,\ 2.004)$	$1.754 \ (1.599, \ 1.924)$	$1.963 \ (1.818, \ 2.110)$
	ho	-0.600	-0.648 (-0.760, -0.513)	-0.624 (-0.731, -0.495)	-0.715 (-0.793, -0.616)	-0.682 (-0.763, -0.583)	-0.612 (-0.691, -0.521)
	$c_1$	0.707	$0.732\ (0.540,\ 0.889)$				
	$\beta$	0.500	$0.772 \ (0.453, \ 1.850)$	$0.532\ (0.274,\ 0.923)$	$0.133\ (0.018,\ 0.420)$		
	$\alpha$	-0.848	-0.914 (-1.729, -0.340)	-0.844 (-1.477, -0.436)	$0.252\ (0.032,\ 0.444)$		
200	$\mu_1$	1.386	$1.373\ (1.278,\ 1.480)$	$1.386\ (1.321,\ 1.454)$	$1.290\ (1.154,\ 1.384)$	$1.394\ (1.332,\ 1.459)$	1.383 (1.327, 1.441)
	$\mu_2$	1.386	1.403 (1.160, 1.660)	$1.404 \ (1.235, \ 1.573)$	$2.045 \ (1.913, \ 2.190)$	1.927 (1.821, 2.041)	1.382 (1.282, 1.484)
	$ au_1$	1.000	$1.011\ (0.961,\ 1.067)$	$0.992 \ (0.946, \ 1.044)$	$1.043\ (0.987,\ 1.103)$	0.997 (0.951, 1.049)	$0.995 \ (0.955, 1.040)$
	$ au_2$	2.000	1.981 (1.848, 2.139)	$1.970\ (1.853,\ 2.097)$	$1.820\ (1.731,\ 1.897)$	$1.791\ (1.714,\ 1.871)$	$1.992\ (1.916,\ 2.072)$
	ho	-0.600	-0.614 (-0.676, -0.555)	-0.604 (-0.663, -0.549)	-0.682 (-0.724, -0.638)	-0.670 (-0.710, -0.624)	-0.600 (-0.645, -0.557)
	$c_1$	0.707	$0.703\ (0.621,\ 0.807)$				
	$\beta$	0.500	$0.544 \ (0.420, \ 0.703)$	$0.498 \ (0.376, \ 0.642)$	$0.047\ (0.003,\ 0.162)$		
	$\alpha$	-0.848	-0.818 (-1.086, -0.586)	-0.830 (-1.059, -0.623)	$0.333 \ (0.145, \ 0.473)$		

Table 5: Estimates of the parameters

$\overline{S}$	Par	True	Proposed $(\hat{c}_1^2, \hat{c}_2^2)$	Proposed (correct)	Proposed (wrong)	$\mathrm{Reitsma}_O$	$Reitsma_{P}$
25	$\mu_1$	2.197	2.217 (1.979, 2.439)	2.203 (2.006, 2.405)	2.087 (1.833, 2.334)	2.299 (2.120, 2.485)	2.199 (2.038, 2.339)
	$\mu_2$	-0.405	-0.236 (-0.700, 0.196)	-0.256 (-0.659, 0.185)	$0.436 \ (0.115, \ 0.746)$	0.269 (-0.018, 0.588)	-0.374 (-0.660, -0.101)
	$ au_1$	1.000	0.958 (0.797, 1.135)	0.936 (0.788, 1.092)	$0.996 \ (0.811, 1.231)$	0.915 (0.776, 1.060)	$0.950 \ (0.820, 1.073)$
	$ au_2$	2.000	1.884 (1.585, 2.243)	1.845 (1.568, 2.175)	$1.676 \ (1.439, 1.935)$	1.645 (1.427, 1.881)	$1.922 \ (1.702, \ 2.139)$
	$\rho$	-0.300	-0.412 (-0.609, -0.141)	-0.361 (-0.574, -0.106)	-0.527 (-0.678, -0.324)	-0.501 (-0.649, -0.302)	-0.326 (-0.476, -0.161)
	$c_1$	0.707	$0.712\ (0.496,\ 0.877)$				
	$\beta$	0.500	$2.000 \ (0.410, \ 2.000)$	$0.563 \ (0.176, \ 2.000)$	$0.253 \ (0.038, \ 0.727)$		
	$\alpha$	-0.198	-0.035 (-1.292, 0.871)	$-0.033 \ (-0.482, \ 0.253)$	-0.306 (-1.047, 0.238)		
50	$\mu_1$	2.197	$2.204\ (2.038,\ 2.374)$	$2.211\ (2.069,\ 2.350)$	$2.129\ (1.921,\ 2.293)$	$2.318\ (2.202,\ 2.437)$	$2.198\ (2.092,\ 2.302)$
	$\mu_2$	-0.405	-0.356 (-0.777, -0.011)	-0.324 (-0.665, -0.016)	$0.399\ (0.182,\ 0.630)$	$0.259 \ (0.055, \ 0.452)$	-0.394 (-0.597, -0.199)
	$ au_1$	1.000	$1.000 \ (0.880, \ 1.116)$	$0.974 \ (0.867, \ 1.073)$	$1.038 \ (0.905, \ 1.195)$	$0.959 \ (0.856, 1.054)$	$0.976 \ (0.896, 1.056)$
	$ au_2$	2.000	$1.978\ (1.725,\ 2.255)$	1.945 (1.709, 2.203)	$1.729\ (1.566,\ 1.914)$	$1.695\ (1.548,\ 1.873)$	$1.976 \ (1.835, \ 2.120)$
	$\rho$	-0.300	-0.350 (-0.514, -0.174)	-0.335 (-0.482, -0.167)	-0.495 (-0.619, -0.380)	-0.474 (-0.590, -0.357)	-0.308 (-0.410, -0.198)
	$c_1$	0.707	$0.695 \ (0.541, \ 0.829)$				
	$\beta$	0.500	$0.781 \ (0.406, \ 2.000)$	$0.554 \ (0.267, \ 1.010)$	$0.195 \ (0.041, \ 0.494)$		
	$\alpha$	-0.198	-0.089 (-0.791, 0.595)	-0.090 (-0.340, 0.135)	$-0.225 \ (-0.792, \ 0.243)$		
200	$\mu_1$	2.197	2.200 (2.109, 2.291)	$2.203\ (2.132,\ 2.281)$	$2.172\ (2.064,\ 2.270)$	$2.323\ (2.262,\ 2.388)$	$2.206\ (2.146,\ 2.256)$
	$\mu_2$	-0.405	-0.397 (-0.597, -0.190)	-0.387 (-0.569, -0.211)	$0.349\ (0.230,\ 0.474)$	$0.247 \ (0.147, \ 0.348)$	-0.416 (-0.510, -0.316)
	$ au_1$	1.000	1.009 (0.953, 1.069)	$1.001\ (0.947,\ 1.056)$	$1.042\ (0.973,\ 1.108)$	$0.989\ (0.937,\ 1.042)$	$0.999 \ (0.953, \ 1.044)$
	$ au_2$	2.000	$1.995 \ (1.846, \ 2.127)$	1.979 (1.851, 2.112)	$1.741\ (1.668,\ 1.821)$	$1.728\ (1.656,\ 1.803)$	$1.991\ (1.918,\ 2.075)$
	ho	-0.300	-0.324 (-0.406, -0.221)	-0.312 (-0.401, -0.227)	-0.480 (-0.543, -0.417)	-0.466 (-0.526, -0.405)	-0.303 (-0.358, -0.250)
	$c_1$	0.707	$0.704\ (0.635,\ 0.763)$				
	$\beta$	0.500	$0.555 \ (0.408, \ 0.718)$	$0.519\ (0.381,\ 0.667)$	$0.148\ (0.029,\ 0.278)$		
	$\alpha$	-0.198	-0.148 (-0.394, 0.120)	-0.163 (-0.251, -0.073)	-0.124 (-0.434, 0.299)		

## Scenario 6

Table 6: Estimates of the parameters

$\overline{S}$	Par	True	Proposed $(\hat{c}_1^2, \hat{c}_2^2)$	Proposed (correct)	Proposed (wrong)	$\mathrm{Reitsma}_O$	$Reitsma_{P}$
25	$\mu_1$	2.197	2.174 (1.940, 2.418)	2.203 (1.992, 2.421)	1.973 (1.708, 2.220)	2.214 (2.027, 2.404)	2.202 (2.039, 2.352)
	$\mu_2$	-0.405	-0.276 (-0.775, 0.178)	-0.308 (-0.740, 0.084)	0.400(0.054, 0.765)	0.170 (-0.143, 0.472)	-0.419 (-0.691, -0.128)
	$ au_1$	1.000	0.992 (0.831, 1.160)	0.953 (0.804, 1.100)	$1.062 \ (0.865, 1.257)$	0.944 (0.798, 1.091)	0.952 (0.829, 1.080)
	$ au_2$	2.000	1.883 (1.597, 2.222)	1.843 (1.590, 2.192)	1.734 (1.491, 1.996)	1.653 (1.440, 1.908)	1.901 (1.696, 2.109)
	$\rho$	-0.600	-0.693 (-0.833, -0.475)	-0.668 (-0.815, -0.456)	-0.757 (-0.867, -0.625)	-0.728 (-0.848, -0.586)	-0.623 (-0.734, -0.495)
	$c_1$	0.707	$0.729\ (0.549,\ 0.883)$				
	$\beta$	0.500	$2.000 \ (0.509, \ 2.000)$	$0.610 \ (0.197, \ 1.888)$	$0.281\ (0.049,\ 0.821)$		
	$\alpha$	-0.284	-0.357 (-1.706, 0.553)	-0.190 (-0.722, 0.198)	-0.281 (-1.083, 0.215)		
50	$\mu_1$	2.197	2.181 (1.988, 2.365)	$2.198\ (2.049,\ 2.353)$	$2.011\ (1.804,\ 2.195)$	$2.216\ (2.086,\ 2.344)$	$2.204\ (2.091,\ 2.316)$
	$\mu_2$	-0.405	-0.366 (-0.743, -0.005)	-0.355 (-0.708, -0.023)	$0.365 \ (0.143, \ 0.646)$	0.182 (-0.042, 0.373)	-0.418 (-0.612, -0.214)
	$ au_1$	1.000	$1.003 \ (0.893, \ 1.124)$	$0.976 \ (0.869, 1.084)$	$1.057 \ (0.926, 1.216)$	$0.978 \ (0.867, 1.084)$	$0.971\ (0.883,\ 1.064)$
	$ au_2$	2.000	1.959 (1.725, 2.219)	$1.918\ (1.693,\ 2.188)$	$1.771\ (1.597,\ 1.984)$	1.717 (1.569, 1.898)	$1.958 \ (1.798, \ 2.106)$
	$\rho$	-0.600	-0.643 (-0.758, -0.511)	-0.637 (-0.746, -0.485)	-0.725 (-0.806, -0.626)	-0.704 (-0.782, -0.600)	-0.615 (-0.689, -0.522)
	$c_1$	0.707	$0.722\ (0.581,\ 0.840)$				
	$\beta$	0.500	$0.778 \ (0.414, \ 1.885)$	$0.533 \ (0.260, \ 0.977)$	$0.204\ (0.047,\ 0.474)$		
	$\alpha$	-0.284	-0.240 (-1.005, 0.419)	-0.194 (-0.430, 0.064)	-0.186 (-0.659, 0.220)		
200	$\mu_1$	2.197	2.194 (2.103, 2.282)	2.194 (2.127, 2.263)	$2.051\ (1.923,\ 2.157)$	2.211 (2.145, 2.268)	$2.195\ (2.143,\ 2.249)$
	$\mu_2$	-0.405	-0.410 (-0.637, -0.185)	-0.390 (-0.570, -0.210)	$0.361 \ (0.219, \ 0.491)$	$0.191\ (0.087,\ 0.300)$	-0.398 (-0.501, -0.296)
	$ au_1$	1.000	$1.007 \ (0.950, \ 1.060)$	$0.997 \ (0.941, \ 1.045)$	$1.056 \ (0.994, \ 1.135)$	$1.002 \ (0.948, \ 1.051)$	$0.994 \ (0.955, \ 1.038)$
	$ au_2$	2.000	$1.996 \ (1.858, \ 2.155)$	$1.991\ (1.855,\ 2.133)$	$1.811\ (1.714,\ 1.895)$	$1.776 \ (1.689, 1.854)$	1.992 (1.918, 2.060)
	$\rho$	-0.600	-0.615 (-0.676, -0.544)	-0.609 (-0.669, -0.540)	-0.705 (-0.743, -0.661)	-0.686 (-0.726, -0.643)	-0.605 (-0.646, -0.559)
	$c_1$	0.707	$0.700 \ (0.643, \ 0.758)$				
	$\beta$	0.500	$0.572\ (0.414,\ 0.737)$	$0.529\ (0.373,\ 0.685)$	$0.158\ (0.031,\ 0.289)$		
	$\alpha$	-0.284	-0.221 (-0.505, 0.025)	-0.259 (-0.365, -0.152)	-0.107 (-0.384, 0.320)		