

Optimization terminated: relative infinity-norm of gradient less than options.TolFun.

Computing finite-difference Hessian using user-supplied objective function.

ans =

	est.	std.err.
1	0.5596	0.05403
2	-0.399	0.05738
3	0.363	0.02664
4	-0.3399	0.01532

ans =

LL at convergence:
-2207

estimating scale heterogeneity model...

No. of draws:500

draw for random scale is truncated normal.

Initial values:[0.56 -0.4 0.36 -0.34 0.1]

no constraints on parameters

All parameters are scaled.

BHHH with analytical gradients

Converged with tolerance:8.6553e-005

Function value:-2022.394

Function is concave at stopping point.

Elapsed time is 125.117563 seconds.

ans =

	est.	std.err.
1	0.5889	0.1253
2	-0.5272	0.1103
3	0.6675	0.12
4	-0.6939	0.1244
5	1.346	0.1185

estimating mixed logit model...

with uncorrelated errors...

No. of draws:500

Initial values:[0.56 -0.4 0.36 -0.34 0 0 0 0]

no constraints on parameters

BHHH with analytical gradients

Converged with tolerance:4.2102e-005

Function value:-1741.5682

Function is concave at stopping point.

Elapsed time is 47.531968 seconds.

ans =

	est.	std.err.
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1	0.9041	0.1048
2	-0.6556	0.1048
3	0.6952	0.09033
4	-0.6732	0.06495
5	0.792	0.1084
6	-0.7193	0.1075
7	0.959	0.09052
8	0.8037	0.06462

estimating mixed logit model...
with correlated errors...

No. of draws:500

Initial values:[0.9 -0.66 0.7 -0.67 0.79 -0.72 0.96 0.8 0.1 0.1 0.1 0.1 0.1 0.1]

no constraints on parameters

BHHH with analytical gradients

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Converged with tolerance:9.548e-005

Function value:-1728.2554

Function is concave at stopping point.

Elapsed time is 228.851246 seconds.

ans =

	est.	std.err.
1	0.9277	0.113
2	-0.6757	0.1099
3	0.8057	0.09246
4	-0.7372	0.07458
5	0.8184	0.1108
6	-0.7232	0.1149
7	0.8995	0.1089
8	0.8228	0.07485
9	-0.1426	0.1934
10	0.2262	0.1352
11	-0.2641	0.09293
12	0.3593	0.1115
13	0.1312	0.1099
14	0.09562	0.06772

estimating G-MNL model...

with uncorrelated errors...

No. of draws:500

draw for random scale is truncated normal. the rest are standard normal.

Initial values:[0.9 -0.66 0.7 -0.67 0.79 -0.72 0.96 0.8 0.1 -1]

no constraints on parameters

All parameters are scaled.

setting LBVAR for gamma* to -5

setting UBVAR for gamma* to 5

BHHH with analytical gradients

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Converged with tolerance:3.4857e-005

Function value:-1731.3856

Function is concave at stopping point.

Elapsed time is 47.437137 seconds.

ans =

	est.	std.err.
1	1.085	0.1519
2	-0.8876	0.1336
3	0.7949	0.1093
4	-0.783	0.09662
5	0.8116	0.1559
6	-0.7448	0.1452
7	1.125	0.1436
8	1.047	0.1088
9	0.6721	0.1345
10	-1.844	1.188

estimating G-MNL model...

with uncorrelated errors...

No. of draws:500

draw for random scale is truncated normal. the rest are standard normal.

Initial values:[0.56 -0.4 0.36 -0.34 0.1 0.1 0.1 0.1 0.5 0]

Parameters with zeros are constrained to their initial values[1 1 1 1 1 1 1 1 1 0]

All parameters are scaled.

setting LBVAR for gamma* to -5

setting UBVAR for gamma* to 5

BHHH with analytical gradients

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Converged with tolerance:2.4594e-005

Function value:-1725.4718

Function is concave at stopping point.

Elapsed time is 53.714052 seconds.

ans =

	est.	std.err.
1	1.179	0.1466
2	-0.8353	0.1328
3	1.039	0.1132
4	-0.9061	0.09411
5	0.7655	0.1309
6	0.7857	0.1313
7	0.9292	0.1124
8	0.8373	0.07861
9	0.8294	0.1246

estimating G-MNL model...

with uncorrelated errors...

No. of draws:500

draw for random scale is truncated normal. the rest are standard normal.

All parameters are scaled.

setting LBVAR for gamma* to -5

setting UBVAR for gamma* to 5

BHHH with analytical gradients

**

Converged with tolerance:8.04e-005

Function value:-1725.4705

Function is concave at stopping point.

Elapsed time is 16.010529 seconds.

ans =

	est.	std.err.
1	1.177	0.153
2	-0.8339	0.1362
3	1.037	0.1229
4	-0.903	0.1163
5	0.7646	0.1315
6	0.7851	0.1372
7	0.9278	0.1233
8	0.8361	0.09252
9	0.828	0.1322
10	0.01799	0.5199

estimating G-MNL model...

with correlated errors...

No. of draws:500

draw for random scale is truncated normal. the rest are standard normal.

All parameters are scaled.

setting LBVAR for gamma* to -5

setting UBVAR for gamma* to 5

BHHH with analytical gradients

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Converged with tolerance:9.8073e-005

Function value:-1717.6975

Function is concave at stopping point.

Elapsed time is 200.492329 seconds.

ans =

	est.	std.err.
1	1.195	0.1935
2	-0.9687	0.1834
3	0.9354	0.1496
4	-0.9032	0.1279
5	0.8399	0.1708
6	-0.7975	0.1456
7	1.078	0.1568
8	0.7869	0.115
9	0.07393	0.2294
10	0.1428	0.1618
11	-0.2376	0.1164
12	0.2241	0.1427
13	0.2698	0.1079
14	0.3581	0.1057
15	1.005	0.1764
16	0.1968	0.5577

estimating G-MNL model...

with correlated errors...

No. of draws:500

draw for random scale is truncated normal. the rest are standard normal.

Initial values:[0.56 -0.4 0.36 -0.34 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.5 0]

Parameters with zeros are constrained to their initial values[1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0]

All parameters are scaled.
setting LBVAR for gamma* to -5
setting UBVAR for gamma* to 5
BHHH with analytical gradients

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Converged with tolerance:8.7227e-005
Function value:-1722.1845
Function is concave at stopping point.
Elapsed time is 308.424982 seconds.

ans =

	est.	std.err.
1	1.253	0.163
2	-0.8974	0.1477
3	1.052	0.1241
4	-0.8165	0.08865
5	0.817	0.1511
6	0.7465	0.1459
7	0.977	0.1221
8	0.7757	0.08687
9	0.1683	0.202
10	0.2101	0.1564
11	0.07073	0.09327
12	0.08102	0.1287
13	-0.08445	0.1098
14	0.3405	0.1014
15	0.9432	0.1365

estimating G-MNL model...
with correlated errors...
No. of draws:500
draw for random scale is truncated normal. the rest are standard normal.

All parameters are scaled.
setting LBVAR for gamma* to -5
setting UBVAR for gamma* to 5
BHHH with analytical gradients

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Converged with tolerance:7.9761e-005
Function value:-1720.4336
Function is concave at stopping point.
Elapsed time is 593.378823 seconds.

ans =

	est.	std.err.
1	1.364	0.248
2	-1.014	0.1952
3	1.244	0.1945
4	-0.9184	0.1419
5	0.7703	0.1951
6	0.7264	0.1596
7	0.888	0.1544
8	0.8152	0.1167
9	0.3479	0.1995

10	0.4324	0.1406
11	0.3146	0.1427
12	-0.07033	0.1764
13	-0.05507	0.1246
14	0.4007	0.1029
15	1.206	0.1641
16	0.3264	0.4656

estimating G-MNL model...

with correlated errors...

No. of draws:500

draw for random scale is truncated normal. the rest are standard normal.

All parameters are scaled.

setting LBVAR for gamma* to -5

setting UBVAR for gamma* to 5

BHHH with analytical gradients

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Converged with tolerance:9.5729e-005

Function value:-1718.7254

Function is concave at stopping point.

Elapsed time is 291.608302 seconds.

ans =

	est.	std.err.
1	1.114	0.149
2	-0.8677	0.1481
3	0.92	0.1346
4	-0.8732	0.1086
5	0.6878	0.1498
6	0.688	0.1489
7	1.043	0.152
8	0.6572	0.0881
9	0.1587	0.1954
10	-0.2623	0.1536
11	-0.2252	0.09419
12	0.3281	0.1504
13	-0.2571	0.1203
14	0.3698	0.1078
15	0.9507	0.1516
16	0.2306	0.4915