Seed(110225021)

Simulation time:10000, N=50, each sequence 25, independent

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
| 1.2 | 0 | 1.0 | 0.2 |
|  |  |  |  |
| 1.1969 | -0.0020 | 1.0018 | 0.2008 |

|  |  |  |
| --- | --- | --- |
|  |  |  |
| 0.3771 | 0.3776 | 0.3777 |

|  |  |
| --- | --- |
| Simulation time：10000 | N=50 |
| Wald Test naive | 0.0500 |
| Wald Test robust | 0.0543 |
| LR Test naive | 0.0494 |
| LR Test robust | 0.0536 |
| Score Test naive | 0.0494 |
| Score Test robust | 0.0530 |

|  |  |  |  |
| --- | --- | --- | --- |
| Simulation time：10000 | 信賴區間 | 平均長度 | 覆蓋率 |
| Wald Test naïve | [-0.1691317, 0.1766924] | 0.3458241 | 0.9498 |
| Wald Test robust | [-0.1687775, 0.176415] | 0.3451925 | 0.9474 |
| LR Test naive | [-0.1720264, 0.1688337] | 0.3408601 | 0.9506 |
| LR Test robust | [-0.1716814, 0.1684897] | 0.340171 | 0.9464 |
| Score Test naive | [-0.1749471, 0.1629006] | 0.3378477 | 0.9498 |
| Score Test robust | [-0.1745749, 0.1625598] | 0.3371346 | 0.9463 |

Seed(110225021)

Simulation time:10000, N=50, each sequence 25, correlated

相關性資料生成方法：Copula(package in R:genCorGen),

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
| 1.2 | 0 | 1.0 | 0.2 |
|  |  |  |  |
| 1.1939 | 0.0018 | 1.0021 | 0.2023 |

|  |  |  |
| --- | --- | --- |
|  |  |  |
| 0.2583 | 0.3778 | 0.2478 |

|  |  |
| --- | --- |
|  | N=50 |
| Wald Test naive | 0.0184 |
| Wald Test robust | 0.0633 |
| LR Test naive | 0.0181 |
| LR Test robust | 0.0612 |
| Score Test naive | 0.0177 |
| Score Test robust | 0.0607 |

|  |  |
| --- | --- |
|  | N=50 |
| Wald Test naive |  |
| Wald Test robust |  |
| LR Test naive |  |
| LR Test robust |  |
| Score Test naive |  |
| Score Test robust |  |

|  |  |  |  |
| --- | --- | --- | --- |
|  | 信賴區間 | 平均長度 | 覆蓋率 |
| Wald Test naïve | [-0.1682779,0.1717784] | 0.3400563 | 0.9816 |
| Wald Test robust | [-0.1350318,0.1385324] | 0.2735642 | 0.9367 |
| LR Test naive |  |  |  |
| LR Test robust |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
|  | 信賴區間 | 平均長度 | 覆蓋率 |
| Wald Test naïve |  |  |  |
| Wald Test robust |  |  |  |
| LR Test naive |  |  |  |
| LR Test robust |  |  |  |

Seed(110225021)

Simulation time:10000, N=100, each sequence 50, independent

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
| 1.2 | 0 | 1.0 | 0.2 |
|  |  |  |  |
| 1.1979 | -0.0001 | 1.0011 | 0.2007 |

|  |  |  |
| --- | --- | --- |
|  |  |  |
| 0.3853 | 0.3761 | 0.3766 |

|  |  |
| --- | --- |
| Simulation time：10000 | N=100 |
| Wald Test naive | 0.0518 |
| Wald Test robust | 0.0521 |
| LR Test naive | 0.0518 |
| LR Test robust | 0.0515 |
| Score Test naive | 0.0516 |
| Score Test robust | 0.0518 |

|  |  |  |  |
| --- | --- | --- | --- |
| Simulation time：10000 | 信賴區間 | 平均長度 | 覆蓋率 |
| Wald Test naïve | [-0.1201853, 0.1199352] | 0.2401205 | 0.9482 |
| Wald Test robust | [-0.1201471, 0.1198969] | 0.2400439 | 0.9479 |
| LR Test naive |  |  |  |
| LR Test robust |  |  |  |

Seed(110225021)

Simulation time:10000, N=100, each sequence 50, correlated

相關性資料生成方法：Copula(package in R:genCorGen),

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
| 1.2 | 0 | 1.0 | 0.2 |
|  |  |  |  |
| 1.1969 | 0.0011 | 1.0008 | 0.2012 |

|  |  |  |
| --- | --- | --- |
|  |  |  |
| 0.2582 | 0.3762 | 0.2464 |

|  |  |
| --- | --- |
|  | N=100 |
| Wald Test naive | 0.0163 |
| Wald Test robust | 0.0566 |
| LR Test naive | 0.0162 |
| LR Test robust | 0.0560 |
| Score Test naive | 0.0164 |
| Score Test robust | 0.0561 |

|  |  |
| --- | --- |
|  | N=100 |
| Wald Test naive | 0.0022 |
| Wald Test robust | 0.0664 |
| LR Test naive | 0.0022 |
| LR Test robust | 0.0660 |
| Score Test naive | 0.0022 |
| Score Test robust | 0.0657 |

|  |  |  |  |
| --- | --- | --- | --- |
|  | 信賴區間 | 平均長度 | 覆蓋率 |
| Wald Test naïve | [-0.1190328, 0.1211536] | 0.2401863 | 0.9837 |
| Wald Test robust | [-0.09583561, 0.09795643] | 0.193792 | 0.9434 |
| LR Test naive |  |  |  |
| LR Test robust |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
|  | 信賴區間 | 平均長度 | 覆蓋率 |
| Wald Test naïve |  |  |  |
| Wald Test robust |  |  |  |
| LR Test naive |  |  |  |
| LR Test robust |  |  |  |

Seed(110225021)

Simulation time:10000, N=150, each sequence 75, independent

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
| 1.2 | 0 | 1.0 | 0.2 |
|  |  |  |  |
| 1.1978 | -0.0007 | 1.0012 | 0.2008 |

|  |  |  |
| --- | --- | --- |
|  |  |  |
| 0.3829 | 0.3758 | 0.3755 |

|  |  |
| --- | --- |
| Simulation time：10000 | N=150 |
| Wald Test naive | 0.0547 |
| Wald Test robust | 0.0554 |
| LR Test naive | 0.0544 |
| LR Test robust | 0.0550 |
| Score Test naive | 0.0543 |
| Score Test robust | 0.0550 |

|  |  |  |  |
| --- | --- | --- | --- |
| Simulation time：10000 | 信賴區間 | 平均長度 | 覆蓋率 |
| Wald Test naïve | [-0.09809594, 0.09795074] | 0.1960467 | 0.9453 |
| Wald Test robust | [-0.09798795, 0.09784274] | 0.1958307 | 0.9446 |
| LR Test naive |  |  |  |
| LR Test robust |  |  |  |

Seed(110225021)

Simulation time:10000, N=150, each sequence 75, correlated

相關性資料生成方法：Copula(package in R:genCorGen),

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
| 1.2 | 0 | 1.0 | 0.2 |
|  |  |  |  |
| 1.1983 | 0.0004 | 1.0003 | 0.2009 |

|  |  |  |
| --- | --- | --- |
|  |  |  |
| 0.2575 | 0.3756 | 0.2460 |

|  |  |
| --- | --- |
|  | N=150 |
| Wald Test naive | 0.0168 |
| Wald Test robust | 0.0584 |
| LR Test naive | 0.0166 |
| LR Test robust | 0.0582 |
| Score Test naive | 0.0165 |
| Score Test robust | 0.0580 |

|  |  |
| --- | --- |
|  | N=150 |
| Wald Test naive | 0.0022 |
| Wald Test robust | 0.0640 |
| LR Test naive | 0.0021 |
| LR Test robust | 0.0635 |
| Score Test naive | 0.0020 |
| Score Test robust | 0.0636 |

|  |  |  |  |
| --- | --- | --- | --- |
|  | 信賴區間 | 平均長度 | 覆蓋率 |
| Wald Test naïve | [-0.09763935, 0.09838511] | 0.1960245 | 0.9832 |
| Wald Test robust | [-0.07877282, 0.07951858] | 0.1582914 | 0.9446 |
| LR Test naive |  |  |  |
| LR Test robust |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
|  | 信賴區間 | 平均長度 | 覆蓋率 |
| Wald Test naïve | [-0.09771606 , 0.09831818] | 0.1960342 | 0.9978 |
| Wald Test robust | [-0.06072642 , 0.06132854] | 0.122055 | 0.9361 |
| LR Test naive |  |  |  |
| LR Test robust |  |  |  |

Seed(110225021)

Simulation time:10000, N=200, each sequence 100, independent

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
| 1.2 | 0 | 1.0 | 0.2 |
|  |  |  |  |
| 1.1977 | 0.0006 | 1.0013 | 0.2008 |

|  |  |  |
| --- | --- | --- |
|  |  |  |
| 0.3878 | 0.3756 | 0.3754 |

|  |  |
| --- | --- |
| Simulation time：10000 | N=200 |
| Wald Test naïve | 0.0538 |
| Wald Test robust | 0.0544 |
| LR Test naive | 0.0538 |
| LR Test robust | 0.0541 |
| Score Test naive | 0.0536 |
| Score Test robust | 0.0542 |

|  |  |  |  |
| --- | --- | --- | --- |
| Simulation time：10000 | 信賴區間 | 平均長度 | 覆蓋率 |
| Wald Test naïve | [-0.08426236,0.08549843] | 0.1697608 | 0.9461 |
| Wald Test robust | [-0.08419705,0.08543312] | 0.1696302 | 0.9456 |
| LR Test naive |  |  |  |
| LR Test robust |  |  |  |

Seed(110225021)

Simulation time:10000, N=200, each sequence 100, correlated

相關性資料生成方法：Copula(package in R:genCorGen),

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
| 1.2 | 0 | 1.0 | 0.2 |
|  |  |  |  |
| 1.1990 | 0.0003 | 0.9998 | 0.2008 |

|  |  |  |
| --- | --- | --- |
|  |  |  |
| 0.2530 | 0.3753 | 0.2454 |

|  |  |
| --- | --- |
|  | N=200 |
| Wald Test naïve | 0.0168 |
| Wald Test robust | 0.0556 |
| LR Test naive | 0.0167 |
| LR Test robust | 0.0552 |
| Score Test naive | 0.0167 |
| Score Test robust | 0.0547 |

|  |  |
| --- | --- |
|  | N=200 |
| Wald Test naive | 0.0022 |
| Wald Test robust | 0.0614 |
| LR Test naive | 0.0022 |
| LR Test robust | 0.0609 |
| Score Test naive | 0.0022 |
| Score Test robust | 0.0607 |

|  |  |  |  |
| --- | --- | --- | --- |
|  | 信賴區間 | 平均長度 | 覆蓋率 |
| Wald Test naïve | [-0.08455749,0.08515703] | 0.1697145 | 0.9832 |
| Wald Test robust | [-0.0682168, 0.06881634] | 0.1370331 | 0.9444 |
| LR Test naive |  |  |  |
| LR Test robust |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
|  | 信賴區間 | 平均長度 | 覆蓋率 |
| Wald Test naïve | [-0.08462293,0.0850953] | 0.1697182 | 0.9978 |
| Wald Test robust | [-0.05263057,0.05310294] | 0.1057335 | 0.9388 |
| LR Test naive |  |  |  |
| LR Test robust |  |  |  |

Seed(110225021)

Simulation time:10000, N=250, each sequence 125, independent

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
| 1.2 | 0 | 1.0 | 0.2 |
|  |  |  |  |
| 1.1988 | 0.0002 | 1.0007 | 0.2003 |

|  |  |  |
| --- | --- | --- |
|  |  |  |
| 0.3787 | 0.3753 | 0.3749 |

|  |  |
| --- | --- |
| Simulation time：10000 | N=250 |
| Wald Test naive | 0.0525 |
| Wald Test robust | 0.0526 |
| LR Test naive | 0.0523 |
| LR Test robust | 0.0524 |
| Score Test naive | 0.0521 |
| Score Test robust | 0.0521 |

|  |  |  |  |
| --- | --- | --- | --- |
| Simulation time：10000 | 信賴區間 | 平均長度 | 覆蓋率 |
| Wald Test naïve | [-0.07570716, 0.07608236] | 0.1517895 | 0.9474 |
| Wald Test robust | [-0.0756297, 0.0760049] | 0.1516346 | 0.9474 |
| LR Test naive |  |  |  |
| LR Test robust |  |  |  |

Seed(110225021)

Simulation time:10000, N=250, each sequence 125, correlated

相關性資料生成方法：Copula(package in R:genCorGen),

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
| 1.2 | 0 | 1.0 | 0.2 |
|  |  |  |  |
| 1.19859 | 0.0004 | 0.9999 | 0.2012 |

|  |  |  |
| --- | --- | --- |
|  |  |  |
| 0.2504 | 0.3752 | 0.2453 |

|  |  |
| --- | --- |
|  | N=250 |
| Wald Test naive | 0.0159 |
| Wald Test robust | 0.0526 |
| LR Test naive | 0.0157 |
| LR Test robust | 0.0526 |
| Score Test naive | 0.0158 |
| Score Test robust | 0.0525 |

|  |  |
| --- | --- |
|  | N=250 |
| Wald Test naive | 0.0017 |
| Wald Test robust | 0.0555 |
| LR Test naive | 0.0017 |
| LR Test robust | 0.0549 |
| Score Test naive | 0.0017 |
| Score Test robust | 0.0554 |

|  |  |  |  |
| --- | --- | --- | --- |
|  | 信賴區間 | 平均長度 | 覆蓋率 |
| Wald Test naïve | [-0.07547346,0.07631324] | 0.1517867 | 0.9841 |
| Wald Test robust | [-0.06088983,0.0617296] | 0.1226194 | 0.9475 |
| LR Test naive |  |  |  |
| LR Test robust |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
|  | 信賴區間 | 平均長度 | 覆蓋率 |
| Wald Test naïve | [-0.07557222,0.07621791] | 0.1517901 | 0.9983 |
| Wald Test robust | [-0.0470041, 0.04764979] | 0.09465389 | 0.9445 |
| LR Test naive |  |  |  |
| LR Test robust |  |  |  |

Seed(110225021)

Simulation time:10000, N=300, each sequence 150, independent

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
| 1.2 | 0 | 1.0 | 0.2 |
|  |  |  |  |
| 1.1994 | -0.0006 | 1.0008 | 0.1999 |

|  |  |  |
| --- | --- | --- |
|  |  |  |
| 0.3755 | 0.3752 | 0.3752 |

|  |  |
| --- | --- |
| Simulation time：10000 | N=300 |
| Wald Test naive | 0.0487 |
| Wald Test robust | 0.0478 |
| LR Test naive | 0.0485 |
| LR Test robust | 0.0475 |
| Score Test naive | 0.0487 |
| Score Test robust | 0.0471 |

|  |  |  |  |
| --- | --- | --- | --- |
| Simulation time：10000 | 信賴區間 | 平均長度 | 覆蓋率 |
| Wald Test naïve | [-0.06982864, 0.06869495] | 0.1385236 | 0.9513 |
| Wald Test robust | [-0.06981828, 0.06868459] | 0.1385029 | 0.9522 |
| LR Test naive |  |  |  |
| LR Test robust |  |  |  |

Seed(110225021)

Simulation time:10000, N=300, each sequence 150, correlated

相關性資料生成方法：Copula(package in R:genCorGen),

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
| 1.2 | 0 | 1.0 | 0.2 |
|  |  |  |  |
| 1.1988 | 0.0005 | 0.9998 | 0.2011 |

|  |  |  |
| --- | --- | --- |
|  |  |  |
| 0.2490 | 0.3751 | 0.2451 |

|  |  |
| --- | --- |
|  | N=300 |
| Wald Test naive | 0.0147 |
| Wald Test robust | 0.0529 |
| LR Test naive | 0.0146 |
| LR Test robust | 0.0528 |
| Score Test naive | 0.0143 |
| Score Test robust | 0.0532 |

|  |  |
| --- | --- |
|  | N=300 |
| Wald Test naive | 0.0015 |
| Wald Test robust | 0.0561 |
| LR Test naive | 0.0015 |
| LR Test robust | 0.0559 |
| Score Test naive | 0.0015 |
| Score Test robust | 0.0561 |
|  | N=400 |
| Wald Test naive | 0.0013 |
| Wald Test robust | 0.0562 |
| LR Test naive | 0.0013 |
| LR Test robust | 0.0560 |
| Score Test naive | 0.0013 |
| Score Test robust | 0.0557 |

|  |  |  |  |
| --- | --- | --- | --- |
|  | 信賴區間 | 平均長度 | 覆蓋率 |
| Wald Test naïve | [-0.06871082, 0.0698066] | 0.1385174 | 0.9853 |
| Wald Test robust | [-0.05541512, 0.0565109] | 0.111926 | 0.9472 |
| LR Test naive |  |  |  |
| LR Test robust |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
|  | 信賴區間 | 平均長度 | 覆蓋率 |
| Wald Test naïve | [-0.06883888,0.06968146] | 0.1385203 | 0.9985 |
| Wald Test robust | [-0.04279057, 0.04363316] | 0.08642373 | 0.9439 |
| LR Test naive |  |  |  |
| LR Test robust |  |  |  |