Homework-8

Question 11.1

Using the crime data set uscrime.txt from Questions 8.2, 9.1, and 10.1, build a regression model using:

1. **Stepwise regression**

2. **Lasso**

3. **Elastic net**

For Parts 2 and 3, remember to scale the data first – otherwise, the regression coefficients will be on different scales and the constraint won't have the desired effect.

For Parts 2 and 3, use the glmnet function in R.

Notes on R:

- For the elastic net model, what we called   in the videos, glmnet calls "alpha"; you can get a range of results by varying alpha from 1 (lasso) to 0 (ridge regression) [and, of course, other values of alpha in between].

- In a function call like glmnet(x,y,family="mgaussian",alpha=1) the predictors x need to be in R's matrix format, rather than data frame format. You can convert a data frame to a matrix using as.matrix – for example, x <- as.matrix(data[,1:n-1])

- Rather than specifying a value of T, glmnet returns models for a variety of values of T.

1. Stepwise

```
rm(list=ls())
set.seed(42069)

library(caret)
```

```
## Warning: package 'caret' was built under R version 4.0.4
```

```
## Loading required package: lattice
```

```
## Loading required package: ggplot2
```

```
library(glmnet)
```

```
## Warning: package 'glmnet' was built under R version 4.0.4
```

```
## Loading required package: Matrix
```

```
## Loaded glmnet 4.1-1
```

```
data = read.table("C:/Users/Admin/Desktop/MM/Homework 8/uscrime.txt",
                  stringsAsFactors = FALSE,
                  header = TRUE)
head(data)
```

```
##       M So   Ed  Po1  Po2    LF   M.F Pop   NW    U1  U2 Wealth Ineq     Prob
## 1 15.1  1  9.1  5.8  5.6 0.510  95.0  33 30.1 0.108 4.1   3940 26.1 0.084602
## 2 14.3  0 11.3 10.3  9.5 0.583 101.2  13 10.2 0.096 3.6   5570 19.4 0.029599
## 3 14.2  1  8.9  4.5  4.4 0.533  96.9  18 21.9 0.094 3.3   3180 25.0 0.083401
## 4 13.6  0 12.1 14.9 14.1 0.577  99.4 157  8.0 0.102 3.9   6730 16.7 0.015801
## 5 14.1  0 12.1 10.9 10.1 0.591  98.5  18  3.0 0.091 2.0   5780 17.4 0.041399
## 6 12.1  0 11.0 11.8 11.5 0.547  96.4  25  4.4 0.084 2.9   6890 12.6 0.034201
##      Time Crime
## 1 26.2011   791
## 2 25.2999  1635
## 3 24.3006   578
## 4 29.9012  1969
## 5 21.2998  1234
## 6 20.9995   682
```

```
# exclude scaling binary and target variable
data.scaled = as.data.frame(scale(data[,c(1,3,4,5,6,7,8,9,10,11,12,13,14,15)]))
data.scaled = cbind(data.scaled, data[,c(2,16)])
head(data.scaled)
```

```
##            M         Ed        Po1        Po2         LF         M.F
## 1  0.9886930 -1.3085099 -0.9085105 -0.8666988 -1.2667456 -1.12060499
## 2  0.3521372  0.6580587  0.6056737  0.5280852  0.5396568  0.98341752
## 3  0.2725678 -1.4872888 -1.3459415 -1.2958632 -0.6976051 -0.47582390
## 4 -0.2048491  1.3731746  2.1535064  2.1732150  0.3911854  0.37257228
## 5  0.1929983  1.3731746  0.8075649  0.7426673  0.7376187  0.06714965
## 6 -1.3983912  0.3898903  1.1104017  1.2433590 -0.3511718 -0.64550313
##           Pop          NW          U1         U2     Wealth       Ineq
## 1 -0.09500679  1.943738564  0.69510600  0.8313680 -1.3616094  1.6793638
## 2 -0.62033844  0.008483424  0.02950365  0.2393332  0.3276683  0.0000000
## 3 -0.48900552  1.146296747 -0.08143007 -0.1158877 -2.1492481  1.4036474
## 4  3.16204944 -0.205464381  0.36230482  0.5945541  1.5298536 -0.6767585
## 5 -0.48900552 -0.691709391 -0.24783066 -1.6551781  0.5453053 -0.5013026
## 6 -0.30513945 -0.555560788 -0.63609870 -0.5895155  1.6956723 -1.7044289
##         Prob        Time So Crime
## 1  1.6497631 -0.05599367  1   791
## 2 -0.7693365 -0.18315796  0  1635
## 3  1.5969416 -0.32416470  1   578
## 4 -1.3761895  0.46611085  0  1969
## 5 -0.2503580 -0.74759413  0  1234
## 6 -0.5669349 -0.78996812  0   682
```

```
# backwards stepwise
control = trainControl(method = 'repeatedcv',
                       number = 5,
                       repeats = 5)
model.backwards = train(Crime~.,
                        data = data.scaled,
                        method = 'lmStepAIC',
                        direction = 'backward',
                        trControl = control)
```

```
## Start:  AIC=408.6
## .outcome ~ M + Ed + Po1 + Po2 + LF + M.F + Pop + NW + U1 + U2 +
##     Wealth + Ineq + Prob + Time + So
##
##           Df Sum of Sq     RSS    AIC
## - M.F      1       541  974772 406.62
## - LF       1      1396  975626 406.66
## - So       1      4063  978294 406.76
## - U1       1     12366  986597 407.07
## - NW       1     13178  987409 407.10
## - Wealth   1     21299  995530 407.40
## - Pop      1     22282  996512 407.44
## - Prob     1     24607  998838 407.53
## - M        1     26849 1001079 407.61
## - Po2      1     33810 1008041 407.87
## - Time     1     41945 1016176 408.16
## <none>               974231 408.60
## - U2       1     56450 1030681 408.69
## - Po1      1    149896 1124127 411.90
## - Ed       1    292520 1266751 416.32
## - Ineq     1    418839 1393070 419.84
##
## Step:  AIC=406.62
## .outcome ~ M + Ed + Po1 + Po2 + LF + Pop + NW + U1 + U2 + Wealth +
##     Ineq + Prob + Time + So
##
##           Df Sum of Sq     RSS    AIC
## - LF       1      4914  979686 404.81
## - So       1      5801  980573 404.84
## - U1       1     13918  988690 405.15
## - NW       1     15548  990320 405.21
## - Wealth   1     23210  997982 405.50
## - Prob     1     25382 1000154 405.58
## - Pop      1     31925 1006697 405.82
## - Po2      1     33282 1008054 405.87
## - M        1     33473 1008245 405.87
## - Time     1     41761 1016533 406.18
## <none>               974772 406.62
## - U2       1     55910 1030682 406.69
## - Po1      1    149361 1124132 409.90
## - Ed       1    292266 1267038 414.33
## - Ineq     1    437013 1411784 418.33
##
```

```
## Step:  AIC=404.81
## .outcome ~ M + Ed + Po1 + Po2 + Pop + NW + U1 + U2 + Wealth +
##     Ineq + Prob + Time + So
##
##            Df Sum of Sq     RSS     AIC
## - So        1      3074  982760  402.93
## - U1        1     15075  994761  403.38
## - NW        1     16019  995705  403.41
## - Prob      1     23026 1002712  403.67
## - Wealth    1     28687 1008373  403.88
## - M         1     28959 1008645  403.89
## - Pop       1     34357 1014042  404.09
## - Time      1     43337 1023022  404.41
## - U2        1     51538 1031224  404.71
## - Po2       1     52960 1032645  404.76
## <none>                   979686  404.81
## - Po1       1    208020 1187705  409.93
## - Ed        1    449431 1429117  416.78
## - Ineq      1    603156 1582842  420.56
##
## Step:  AIC=402.93
## .outcome ~ M + Ed + Po1 + Po2 + Pop + NW + U1 + U2 + Wealth +
##     Ineq + Prob + Time
##
##            Df Sum of Sq     RSS     AIC
## - NW        1     13496  996256  401.43
## - Prob      1     22232 1004992  401.75
## - U1        1     28957 1011716  402.00
## - Wealth    1     29762 1012522  402.03
## - Pop       1     35441 1018201  402.24
## - M         1     37738 1020498  402.32
## - Time      1     40454 1023214  402.42
## - Po2       1     51957 1034717  402.83
## <none>                   982760  402.93
## - U2        1     76153 1058913  403.69
## - Po1       1    205349 1188109  407.95
## - Ed        1    450358 1433117  414.88
## - Ineq      1    600083 1582843  418.56
##
## Step:  AIC=401.43
## .outcome ~ M + Ed + Po1 + Po2 + Pop + U1 + U2 + Wealth + Ineq +
##     Prob + Time
##
##            Df Sum of Sq     RSS     AIC
## - Time      1     26966 1023222  400.42
## - U1        1     30231 1026486  400.54
## - Pop       1     31956 1028211  400.60
## - Wealth    1     31958 1028214  400.60
## - M         1     43629 1039884  401.02
## <none>                   996256  401.43
## - Po2       1     69385 1065640  401.92
## - Prob      1     76798 1073054  402.18
## - U2        1     80196 1076452  402.30
## - Po1       1    225951 1222207  406.99
```

```
## - Ed       1    454718 1450974 413.34
## - Ineq     1    696015 1692271 419.03
##
## Step:  AIC=400.42
## .outcome ~ M + Ed + Po1 + Po2 + Pop + U1 + U2 + Wealth + Ineq +
##     Prob
##
##            Df Sum of Sq      RSS     AIC
## - Pop      1     14526 1037748 398.94
## - Wealth  1     28932 1052154 399.45
## - U1       1     47884 1071106 400.11
## <none>                 1023222 400.42
## - Po2      1     77620 1100842 401.12
## - M        1    108584 1131806 402.15
## - U2       1    110549 1133771 402.22
## - Prob     1    212388 1235610 405.40
## - Po1      1    237660 1260882 406.15
## - Ed       1    427752 1450974 411.34
## - Ineq     1    671972 1695195 417.10
##
## Step:  AIC=398.94
## .outcome ~ M + Ed + Po1 + Po2 + U1 + U2 + Wealth + Ineq + Prob
##
##            Df Sum of Sq      RSS     AIC
## - Wealth  1     23018 1060766 397.75
## - U1       1     41435 1079183 398.39
## <none>                 1037748 398.94
## - Po2      1     76993 1114741 399.59
## - U2       1     98702 1136450 400.30
## - M        1    115720 1153468 400.85
## - Prob     1    198360 1236108 403.41
## - Po1      1    233930 1271678 404.46
## - Ed       1    457072 1494820 410.44
## - Ineq     1    659402 1697150 415.14
##
## Step:  AIC=397.75
## .outcome ~ M + Ed + Po1 + Po2 + U1 + U2 + Ineq + Prob
##
##            Df Sum of Sq      RSS     AIC
## - U1       1     51889 1112655 397.52
## <none>                 1060766 397.75
## - Po2      1     78817 1139584 398.40
## - M        1    101197 1161963 399.12
## - U2       1    106909 1167675 399.31
## - Prob     1    223963 1284729 402.84
## - Po1      1    260470 1321236 403.88
## - Ed       1    544931 1605697 411.09
## - Ineq     1    849485 1910251 417.52
##
## Step:  AIC=397.52
## .outcome ~ M + Ed + Po1 + Po2 + U2 + Ineq + Prob
##
##            Df Sum of Sq      RSS     AIC
## - U2       1     55788 1168443 397.33
```

```
## <none>                  1112655 397.52
## - Po2   1      64758 1177413 397.61
## - M     1     100992 1213648 398.73
## - Prob  1     246394 1359049 402.92
## - Po1   1     253905 1366560 403.12
## - Ed    1     505504 1618159 409.38
## - Ineq  1     870100 1982755 416.90
##
## Step:  AIC=397.33
## .outcome ~ M + Ed + Po1 + Po2 + Ineq + Prob
##
##         Df Sum of Sq      RSS    AIC
## - M      1      64021 1232464 397.30
## <none>                1168443 397.33
## - Po2    1      72254 1240697 397.55
## - Prob   1     243855 1412298 402.34
## - Po1    1     281456 1449898 403.32
## - Ed     1     451057 1619500 407.41
## - Ineq   1     941470 2109913 417.20
##
## Step:  AIC=397.3
## .outcome ~ Ed + Po1 + Po2 + Ineq + Prob
##
##         Df Sum of Sq      RSS    AIC
## <none>                1232464 397.30
## - Po2    1     111467 1343931 398.51
## - Prob   1     225453 1457917 401.52
## - Po1    1     348203 1580667 404.51
## - Ed     1     483523 1715987 407.55
## - Ineq   1    1298985 2531449 421.94
## Start:  AIC=415.56
## .outcome ~ M + Ed + Po1 + Po2 + LF + M.F + Pop + NW + U1 + U2 +
##     Wealth + Ineq + Prob + Time + So
##
##            Df Sum of Sq      RSS    AIC
## - Time      1       2490  921677 413.66
## - Pop       1       4111  923297 413.73
## - So        1      10138  929325 413.98
## - NW        1      31431  950618 414.84
## <none>                   919187 415.56
## - Po2       1      73724  992911 416.49
## - Wealth    1      77247  996434 416.63
## - LF        1     100786 1019973 417.51
## - Ineq      1     122415 1041601 418.31
## - Po1       1     140655 1059842 418.97
## - Prob      1     149732 1068918 419.29
## - M.F       1     156637 1075823 419.54
## - U1        1     160751 1079938 419.68
## - U2        1     171930 1091116 420.07
## - M         1     205988 1125175 421.24
## - Ed        1     425485 1344672 428.01
##
## Step:  AIC=413.66
## .outcome ~ M + Ed + Po1 + Po2 + LF + M.F + Pop + NW + U1 + U2 +
```

```
##       Wealth + Ineq + Prob + So
##
##          Df Sum of Sq     RSS    AIC
## - Pop     1       3934  925611 411.82
## - So      1      11171  932848 412.12
## - NW      1      29131  950808 412.84
## <none>                  921677 413.66
## - Po2     1      73713  995390 414.59
## - Wealth  1      76448  998125 414.69
## - LF      1      98308 1019985 415.51
## - Ineq    1     121038 1042715 416.35
## - Po1     1     143208 1064885 417.15
## - U1      1     159480 1081157 417.73
## - U2      1     174818 1096495 418.26
## - M.F     1     175456 1097133 418.28
## - Prob    1     199974 1121651 419.12
## - M       1     205222 1126899 419.30
## - Ed      1     430356 1352033 426.22
##
## Step:  AIC=411.82
## .outcome ~ M + Ed + Po1 + Po2 + LF + M.F + NW + U1 + U2 + Wealth +
##       Ineq + Prob + So
##
##          Df Sum of Sq     RSS    AIC
## - So      1      10618  936228 410.26
## - NW      1      30910  956521 411.07
## <none>                  925611 411.82
## - Po2     1      73351  998962 412.72
## - Wealth  1      90457 1016068 413.37
## - LF      1      94653 1020264 413.52
## - Po1     1     148447 1074058 415.48
## - Ineq    1     148629 1074240 415.48
## - U1      1     158976 1084587 415.85
## - U2      1     172513 1098123 416.32
## - M       1     201484 1127094 417.31
## - M.F     1     202195 1127806 417.33
## - Prob    1     213196 1138807 417.70
## - Ed      1     427094 1352705 424.24
##
## Step:  AIC=410.26
## .outcome ~ M + Ed + Po1 + Po2 + LF + M.F + NW + U1 + U2 + Wealth +
##       Ineq + Prob
##
##          Df Sum of Sq     RSS    AIC
## - NW      1      30447  966676 409.47
## <none>                  936228 410.26
## - Po2     1      64355 1000583 410.78
## - Wealth  1      98449 1034678 412.06
## - LF      1     112883 1049111 412.58
## - Po1     1     138364 1074593 413.49
## - U1      1     206150 1142378 415.82
## - U2      1     206612 1142840 415.83
## - M.F     1     210722 1146950 415.97
## - Prob    1     214703 1150932 416.10
```

```
## - M       1    227130 1163359 416.51
## - Ineq    1    280434 1216662 418.21
## - Ed      1    416480 1352709 422.24
##
## Step:  AIC=409.47
## .outcome ~ M + Ed + Po1 + Po2 + LF + M.F + U1 + U2 + Wealth +
##     Ineq + Prob
##
##            Df Sum of Sq      RSS    AIC
## - Po2      1     38025 1004701 408.94
## <none>                     966676 409.47
## - Wealth  1     75890 1042566 410.35
## - LF      1     82978 1049654 410.60
## - Po1     1    111371 1078046 411.62
## - M.F     1    183447 1150122 414.08
## - Prob    1    191920 1158596 414.36
## - U1      1    211801 1178476 415.00
## - U2      1    269707 1236382 416.82
## - M       1    387102 1353778 420.27
## - Ed      1    387245 1353920 420.28
## - Ineq    1    489260 1455936 423.04
##
## Step:  AIC=408.94
## .outcome ~ M + Ed + Po1 + LF + M.F + U1 + U2 + Wealth + Ineq +
##     Prob
##
##            Df Sum of Sq      RSS    AIC
## <none>                    1004701 408.94
## - LF      1     60296 1064997 409.15
## - Wealth  1     74686 1079386 409.66
## - Prob    1    176221 1180922 413.08
## - M.F     1    207142 1211842 414.06
## - U1      1    223311 1228011 414.57
## - U2      1    298962 1303662 416.84
## - Ed      1    349413 1354114 418.28
## - M       1    358773 1363473 418.54
## - Po1     1    489206 1493907 422.01
## - Ineq    1    524012 1528712 422.89
## Start:  AIC=380.44
## .outcome ~ M + Ed + Po1 + Po2 + LF + M.F + Pop + NW + U1 + U2 +
##     Wealth + Ineq + Prob + Time + So
##
##            Df Sum of Sq      RSS    AIC
## - Pop     1        26  737261 378.44
## - Po2     1      1145  738380 378.49
## - LF      1      3112  740347 378.58
## - Po1     1      6814  744050 378.76
## - M       1      6874  744109 378.76
## - U1      1     12219  749454 379.01
## - M.F     1     12780  750015 379.04
## - U2      1     15899  753135 379.18
## - NW      1     26717  763952 379.68
## - So      1     26953  764188 379.69
## - Time    1     40167  777402 380.29
```

```
## <none>                       737235 380.44
## - Wealth   1     71231  808466 381.66
## - Ed       1    168987  906222 385.66
## - Prob     1    335445 1072680 391.56
## - Ineq     1    462719 1199954 395.49
##
## Step:  AIC=378.44
## .outcome ~ M + Ed + Po1 + Po2 + LF + M.F + NW + U1 + U2 + Wealth +
##     Ineq + Prob + Time + So
##
##           Df Sum of Sq     RSS    AIC
## - Po2      1       1127  738388 376.49
## - LF       1       3127  740388 376.59
## - M        1       7068  744329 376.77
## - Po1      1       8258  745519 376.83
## - M.F      1      12759  750020 377.04
## - U1       1      13037  750298 377.05
## - U2       1      18954  756216 377.33
## - So       1      27078  764339 377.70
## - NW       1      27204  764465 377.71
## <none>                   737261 378.44
## - Time     1      47552  784813 378.62
## - Wealth   1      75643  812905 379.86
## - Ed       1     169446  906707 383.68
## - Prob     1     340391 1077652 389.72
## - Ineq     1     462794 1200055 393.49
##
## Step:  AIC=376.49
## .outcome ~ M + Ed + Po1 + LF + M.F + NW + U1 + U2 + Wealth +
##     Ineq + Prob + Time + So
##
##           Df Sum of Sq     RSS    AIC
## - LF       1       2292  740680 374.60
## - M        1       6720  745108 374.81
## - M.F      1      15944  754333 375.24
## - U1       1      17084  755472 375.29
## - U2       1      19852  758240 375.42
## - So       1      25974  764362 375.70
## - NW       1      33350  771738 376.04
## <none>                   738388 376.49
## - Time     1      60356  798744 377.24
## - Wealth   1      75141  813529 377.88
## - Ed       1     168345  906733 381.68
## - Prob     1     364225 1102613 388.52
## - Ineq     1     470624 1209012 391.75
## - Po1      1     553548 1291936 394.07
##
## Step:  AIC=374.6
## .outcome ~ M + Ed + Po1 + M.F + NW + U1 + U2 + Wealth + Ineq +
##     Prob + Time + So
##
##           Df Sum of Sq     RSS    AIC
## - M        1       7503  748182 372.95
## - M.F      1      22689  763369 373.66
```

```
## - U2       1       24681    765361  373.75
## - So       1       25763    766442  373.80
## - U1       1       30552    771232  374.01
## - NW       1       37359    778039  374.32
## <none>                      740680  374.60
## - Time     1       59240    799920  375.29
## - Wealth   1       75665    816344  376.00
## - Ed       1      211237    951917  381.38
## - Prob     1      363208   1103888  386.57
## - Ineq     1      492199   1232878  390.43
## - Po1      1      563337   1304017  392.40
##
## Step:  AIC=372.95
## .outcome ~ Ed + Po1 + M.F + NW + U1 + U2 + Wealth + Ineq + Prob +
##      Time + So
##
##           Df Sum of Sq      RSS      AIC
## - U2       1       17746    765929  371.77
## - U1       1       27562    775744  372.22
## - So       1       37807    785989  372.68
## <none>                      748182  372.95
## - M.F      1       44558    792741  372.98
## - Time     1       54445    802627  373.41
## - NW       1       69502    817685  374.06
## - Wealth   1       89728    837910  374.92
## - Ed       1      203890    952073  379.39
## - Prob     1      397442   1145624  385.86
## - Po1      1      558772   1306954  390.48
## - Ineq     1      566562   1314744  390.68
##
## Step:  AIC=371.77
## .outcome ~ Ed + Po1 + M.F + NW + U1 + Wealth + Ineq + Prob +
##      Time + So
##
##           Df Sum of Sq      RSS      AIC
## - U1       1       10095    776024  370.23
## - M.F      1       32861    798790  371.24
## <none>                      765929  371.77
## - So       1       51015    816944  372.03
## - Time     1       54321    820249  372.17
## - NW       1       69417    835345  372.81
## - Wealth   1      128266    894195  375.19
## - Ed       1      186260    952188  377.39
## - Prob     1      397617   1163545  384.41
## - Po1      1      604378   1370306  390.13
## - Ineq     1      642105   1408033  391.08
##
## Step:  AIC=370.23
## .outcome ~ Ed + Po1 + M.F + NW + Wealth + Ineq + Prob + Time +
##      So
##
##           Df Sum of Sq      RSS      AIC
## - M.F      1       23541    799565  369.28
## <none>                      776024  370.23
```

```
## - Time      1      52884   828908 370.54
## - So        1      59834   835857 370.83
## - NW        1      67955   843979 371.17
## - Wealth    1     123980   900004 373.42
## - Ed        1     287704  1063728 379.27
## - Prob      1     393810  1169834 382.60
## - Po1       1     598401  1374425 388.24
## - Ineq      1     658606  1434630 389.74
##
## Step:  AIC=369.28
## .outcome ~ Ed + Po1 + NW + Wealth + Ineq + Prob + Time + So
##
##             Df Sum of Sq      RSS    AIC
## <none>                     799565 369.28
## - So        1      48028   847592 369.32
## - NW        1      67856   867421 370.13
## - Time      1     119827   919392 372.16
## - Wealth    1     132143   931708 372.63
## - Ed        1     353455  1153019 380.09
## - Prob      1     421119  1220683 382.09
## - Po1       1     576055  1375620 386.27
## - Ineq      1     713015  1512580 389.59
## Start:  AIC=418.37
## .outcome ~ M + Ed + Po1 + Po2 + LF + M.F + Pop + NW + U1 + U2 +
##      Wealth + Ineq + Prob + Time + So
##
##             Df Sum of Sq      RSS    AIC
## - Wealth    1        123   782907 416.38
## - M.F       1       5120   787903 416.63
## - So        1      17607   800390 417.24
## - Pop       1      27068   809852 417.70
## <none>                     782784 418.37
## - LF        1      41306   824090 418.38
## - U1        1      41307   824091 418.38
## - Time      1      49133   831917 418.75
## - NW        1      79638   862421 420.15
## - Po2       1     128173   910956 422.29
## - U2        1     165369   948153 423.85
## - Prob      1     168220   951004 423.97
## - M         1     188088   970872 424.77
## - Po1       1     269376  1052160 427.91
## - Ineq      1     411907  1194690 432.86
## - Ed        1     527028  1309811 436.45
##
## Step:  AIC=416.38
## .outcome ~ M + Ed + Po1 + Po2 + LF + M.F + Pop + NW + U1 + U2 +
##      Ineq + Prob + Time + So
##
##             Df Sum of Sq      RSS    AIC
## - M.F       1       5383   788290 414.65
## - So        1      17662   800569 415.25
## - Pop       1      27342   810249 415.72
## <none>                     782907 416.38
## - LF        1      42111   825018 416.42
```

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```
## - U1     1     43349   826256 416.48
## - Time   1     49345   832252 416.76
## - NW     1     80034   862941 418.18
## - Po2    1    128302   911209 420.30
## - U2     1    175997   958904 422.29
## - M      1    203744   986651 423.40
## - Prob   1    207063   989970 423.53
## - Po1    1    274176  1057083 426.09
## - Ineq   1    543919  1326826 434.95
## - Ed     1    657321  1440228 438.15
##
## Step:  AIC=414.65
## .outcome ~ M + Ed + Po1 + Po2 + LF + Pop + NW + U1 + U2 + Ineq +
##     Prob + Time + So
##
##          Df Sum of Sq      RSS    AIC
## - So      1     13911   802201 413.33
## - LF      1     38192   826482 414.49
## - U1      1     40166   828456 414.59
## <none>                  788290 414.65
## - Pop     1     42330   830620 414.69
## - Time    1     62365   850654 415.62
## - NW      1     74778   863067 416.18
## - Po2     1    136821   925111 418.89
## - U2      1    170617   958906 420.29
## - Prob    1    215725  1004015 422.08
## - M       1    255778  1044068 423.61
## - Po1     1    305072  1093361 425.41
## - Ineq    1    569462  1357751 433.85
## - Ed      1    668013  1456303 436.59
##
## Step:  AIC=413.33
## .outcome ~ M + Ed + Po1 + Po2 + LF + Pop + NW + U1 + U2 + Ineq +
##     Prob + Time
##
##          Df Sum of Sq      RSS    AIC
## - LF      1     24805   827006 412.52
## - U1      1     28033   830234 412.67
## - Pop     1     40424   842626 413.25
## <none>                  802201 413.33
## - Time    1     56700   858901 413.99
## - NW      1     61482   863683 414.21
## - Po2     1    131024   933225 417.23
## - U2      1    156708   958909 418.29
## - Prob    1    208421  1010622 420.34
## - M       1    251155  1053356 421.95
## - Po1     1    302550  1104751 423.81
## - Ineq    1    601835  1404036 433.16
## - Ed      1    668098  1470299 434.96
##
## Step:  AIC=412.52
## .outcome ~ M + Ed + Po1 + Po2 + Pop + NW + U1 + U2 + Ineq + Prob +
##     Time
##
```

```
##          Df Sum of Sq      RSS     AIC
## - U1     1      24527   851532 411.66
## - Pop    1      32856   859862 412.04
## <none>               827006 412.52
## - Time   1      47191   874196 412.68
## - NW     1      47829   874835 412.71
## - Po2    1     107966   934972 415.30
## - U2     1     179799  1006805 418.19
## - Prob   1     185110  1012116 418.40
## - Po1    1     278064  1105069 421.82
## - M      1     278775  1105781 421.85
## - Ineq   1     577111  1404117 431.16
## - Ed     1     724556  1551562 435.06
##
## Step:  AIC=411.66
## .outcome ~ M + Ed + Po1 + Po2 + Pop + NW + U2 + Ineq + Prob +
##      Time
##
##          Df Sum of Sq      RSS     AIC
## - Time   1      31329   882861 411.07
## - Pop    1      40326   891858 411.46
## <none>               851532 411.66
## - NW     1      52968   904501 412.01
## - Po2    1      96442   947974 413.84
## - Prob   1     165921  1017454 416.60
## - M      1     268059  1119591 420.33
## - Po1    1     272581  1124113 420.49
## - U2     1     295978  1147511 421.29
## - Ineq   1     588493  1440026 430.15
## - Ed     1     720002  1571534 433.56
##
## Step:  AIC=411.07
## .outcome ~ M + Ed + Po1 + Po2 + Pop + NW + U2 + Ineq + Prob
##
##          Df Sum of Sq      RSS     AIC
## - NW     1      41203   924064 410.85
## <none>               882861 411.07
## - Po2    1      71108   953969 412.09
## - Pop    1      86063   968924 412.69
## - Prob   1     144880  1027741 414.99
## - Po1    1     242157  1125019 418.52
## - M      1     245822  1128683 418.65
## - U2     1     294085  1176946 420.28
## - Ineq   1     630509  1513370 430.09
## - Ed     1     791428  1674289 434.03
##
## Step:  AIC=410.85
## .outcome ~ M + Ed + Po1 + Po2 + Pop + U2 + Ineq + Prob
##
##          Df Sum of Sq      RSS     AIC
## <none>               924064 410.85
## - Po2    1      52938   977002 411.02
## - Pop    1      69209   993273 411.66
## - Prob   1     115769  1039833 413.45
```

```
## - Po1    1     221000 1145064 417.21
## - U2     1     286528 1210592 419.38
## - M      1     478986 1403049 425.13
## - Ed     1     754749 1678813 432.13
## - Ineq   1     768994 1693058 432.46
## Start:  AIC=436.92
## .outcome ~ M + Ed + Po1 + Po2 + LF + M.F + Pop + NW + U1 + U2 +
##     Wealth + Ineq + Prob + Time + So
##
##           Df Sum of Sq      RSS    AIC
## - So       1        97 1259561 434.93
## - LF       1      2869 1262333 435.01
## - Time     1      3094 1262558 435.02
## - Po2      1      6280 1265744 435.12
## - Wealth   1     12444 1271908 435.31
## - NW       1     13197 1272661 435.33
## - Pop      1     33591 1293055 435.95
## - M.F      1     46087 1305551 436.32
## - Po1      1     50212 1309676 436.45
## <none>               1259464 436.92
## - M        1     80931 1340395 437.35
## - U1       1     91673 1351137 437.66
## - Prob     1    165866 1425330 439.75
## - U2       1    170063 1429527 439.86
## - Ed       1    172784 1432248 439.94
## - Ineq     1    212907 1472371 441.01
##
## Step:  AIC=434.93
## .outcome ~ M + Ed + Po1 + Po2 + LF + M.F + Pop + NW + U1 + U2 +
##     Wealth + Ineq + Prob + Time
##
##           Df Sum of Sq      RSS    AIC
## - Time     1      3347 1262908 433.03
## - LF       1      4899 1264459 433.08
## - Po2      1      6358 1265918 433.12
## - Wealth   1     14340 1273900 433.37
## - NW       1     17268 1276829 433.46
## - Pop      1     33504 1293065 433.95
## - M.F      1     48247 1307808 434.39
## - Po1      1     50270 1309831 434.45
## <none>               1259561 434.93
## - M        1     82664 1342225 435.40
## - U1       1     99836 1359397 435.90
## - Prob     1    167004 1426564 437.78
## - U2       1    171114 1430675 437.89
## - Ed       1    173634 1433195 437.96
## - Ineq     1    273567 1533128 440.59
##
## Step:  AIC=433.03
## .outcome ~ M + Ed + Po1 + Po2 + LF + M.F + Pop + NW + U1 + U2 +
##     Wealth + Ineq + Prob
##
##           Df Sum of Sq      RSS    AIC
## - Po2      1      3901 1266809 431.15
```

```
## - LF       1      4389 1267297 431.16
## - Wealth 1     13485 1276393 431.44
## - NW       1     14583 1277491 431.48
## - Pop      1     41405 1304313 432.29
## - Po1      1     47320 1310229 432.46
## - M.F      1     53823 1316731 432.66
## <none>              1262908 433.03
## - M        1     79861 1342769 433.42
## - U1       1     97209 1360117 433.92
## - U2       1    169519 1432427 435.94
## - Ed       1    175052 1437960 436.09
## - Prob     1    224668 1487576 437.41
## - Ineq     1    276157 1539065 438.74
##
## Step:  AIC=431.15
## .outcome ~ M + Ed + Po1 + LF + M.F + Pop + NW + U1 + U2 + Wealth +
##     Ineq + Prob
##
##           Df Sum of Sq     RSS    AIC
## - LF       1      2492 1269301 429.23
## - NW       1     11992 1278801 429.52
## - Wealth 1     12071 1278879 429.52
## - Pop      1     38271 1305080 430.31
## - M.F      1     64157 1330965 431.08
## <none>              1266809 431.15
## - M        1     81310 1348118 431.58
## - U1       1     95939 1362747 432.00
## - Ed       1    172497 1439305 434.13
## - U2       1    177789 1444597 434.27
## - Prob     1    220769 1487577 435.41
## - Ineq     1    274564 1541372 436.80
## - Po1      1    682019 1948827 445.95
##
## Step:  AIC=429.23
## .outcome ~ M + Ed + Po1 + M.F + Pop + NW + U1 + U2 + Wealth +
##     Ineq + Prob
##
##           Df Sum of Sq     RSS    AIC
## - NW       1     11370 1280671 427.57
## - Wealth 1     11954 1281255 427.59
## - Pop      1     43804 1313105 428.55
## <none>              1269301 429.23
## - M.F      1     68092 1337393 429.26
## - M        1     89598 1358899 429.89
## - U1       1     93774 1363075 430.01
## - Ed       1    170587 1439888 432.14
## - U2       1    186594 1455895 432.58
## - Prob     1    223088 1492389 433.54
## - Ineq     1    272464 1541765 434.81
## - Po1      1    729413 1998714 444.93
##
## Step:  AIC=427.57
## .outcome ~ M + Ed + Po1 + M.F + Pop + U1 + U2 + Wealth + Ineq +
##     Prob
```

```
##
##           Df Sum of Sq      RSS    AIC
## - Wealth  1       9716 1290387 425.87
## - Pop     1      40371 1321042 426.78
## - M.F     1      64884 1345555 427.50
## <none>                1280671 427.57
## - U1      1      93316 1373987 428.32
## - M       1     126395 1407066 429.24
## - Ed      1     161580 1442251 430.21
## - U2      1     187857 1468528 430.91
## - Prob    1     211722 1492393 431.54
## - Ineq    1     310137 1590808 434.03
## - Po1     1     950827 2231498 447.23
##
## Step:  AIC=425.87
## .outcome ~ M + Ed + Po1 + M.F + Pop + U1 + U2 + Ineq + Prob
##
##         Df Sum of Sq      RSS    AIC
## - Pop    1      36028 1326415 424.94
## <none>              1290387 425.87
## - M.F    1      95817 1386204 426.66
## - M      1     117393 1407780 427.26
## - U1     1     118318 1408705 427.29
## - Ed     1     158575 1448961 428.39
## - U2     1     214414 1504801 429.86
## - Prob   1     247142 1537529 430.70
## - Ineq   1     451652 1742039 435.57
## - Po1    1    1088292 2378679 447.72
##
## Step:  AIC=424.94
## .outcome ~ M + Ed + Po1 + M.F + U1 + U2 + Ineq + Prob
##
##         Df Sum of Sq      RSS    AIC
## <none>              1326415 424.94
## - U1     1     126009 1452424 426.48
## - M      1     141878 1468293 426.91
## - Ed     1     157820 1484235 427.33
## - M.F    1     185755 1512170 428.05
## - U2     1     210212 1536627 428.68
## - Prob   1     218434 1544849 428.89
## - Ineq   1     415906 1742321 433.58
## - Po1    1    1145071 2471486 447.21
## Start:  AIC=434.24
## .outcome ~ M + Ed + Po1 + Po2 + LF + M.F + Pop + NW + U1 + U2 +
##     Wealth + Ineq + Prob + Time + So
##
##           Df Sum of Sq      RSS    AIC
## - So       1       1052 1176653 432.27
## - Pop      1       3220 1178821 432.34
## - LF       1      10741 1186341 432.59
## - M.F      1      13448 1189048 432.68
## - Po2      1      17252 1192853 432.80
## - Time     1      32300 1207900 433.29
## - NW       1      41086 1216687 433.58
```

```
## - U1      1     44888 1220489 433.70
## <none>              1175600 434.24
## - Po1     1     72915 1248515 434.58
## - U2      1     94425 1270025 435.25
## - Wealth  1    120781 1296381 436.05
## - M       1    156068 1331669 437.10
## - Prob    1    197765 1373366 438.30
## - Ed      1    307016 1482617 441.28
## - Ineq    1    514111 1689711 446.38
##
## Step:  AIC=432.27
## .outcome ~ M + Ed + Po1 + Po2 + LF + M.F + Pop + NW + U1 + U2 +
##     Wealth + Ineq + Prob + Time
##
##           Df Sum of Sq      RSS    AIC
## - Pop      1      3248 1179901 430.38
## - LF       1      9993 1186646 430.60
## - M.F      1     12656 1189309 430.69
## - Po2      1     16733 1193386 430.82
## - Time     1     31291 1207944 431.29
## - NW       1     42836 1219489 431.66
## - U1       1     46503 1223156 431.78
## <none>              1176653 432.27
## - Po1      1     72456 1249108 432.60
## - U2       1     94838 1271491 433.29
## - Wealth   1    122035 1298688 434.12
## - M        1    155463 1332116 435.11
## - Prob     1    203287 1379939 436.49
## - Ed       1    306519 1483172 439.30
## - Ineq     1    552163 1728815 445.28
##
## Step:  AIC=430.38
## .outcome ~ M + Ed + Po1 + Po2 + LF + M.F + NW + U1 + U2 + Wealth +
##     Ineq + Prob + Time
##
##           Df Sum of Sq      RSS    AIC
## - LF       1     11898 1191799 428.77
## - Po2      1     16069 1195970 428.91
## - M.F      1     21097 1200999 429.07
## - Time     1     44609 1224510 429.83
## - NW       1     47721 1227622 429.92
## - U1       1     50051 1229952 430.00
## <none>              1179901 430.38
## - Po1      1     69483 1249384 430.61
## - U2       1     93757 1273658 431.36
## - Wealth   1    121119 1301020 432.19
## - M        1    153785 1333686 433.16
## - Prob     1    201659 1381560 434.53
## - Ed       1    309750 1489651 437.47
## - Ineq     1    550398 1730299 443.31
##
## Step:  AIC=428.77
## .outcome ~ M + Ed + Po1 + Po2 + M.F + NW + U1 + U2 + Wealth +
##     Ineq + Prob + Time
```

```
##
##           Df Sum of Sq      RSS     AIC
## - Po2      1     11053 1202852 427.13
## - M.F      1     11290 1203089 427.14
## - U1       1     40970 1232769 428.09
## - NW       1     43330 1235129 428.16
## - Time     1     45953 1237752 428.24
## - Po1      1     60826 1252625 428.71
## <none>              1191799 428.77
## - U2       1    105059 1296858 430.06
## - Wealth   1    123952 1315751 430.63
## - M        1    176976 1368775 432.17
## - Prob     1    190287 1382086 432.55
## - Ed       1    297862 1489661 435.47
## - Ineq     1    553740 1745539 441.65
##
## Step:  AIC=427.13
## .outcome ~ M + Ed + Po1 + M.F + NW + U1 + U2 + Wealth + Ineq +
##     Prob + Time
##
##           Df Sum of Sq      RSS     AIC
## - M.F      1     23153 1226005 425.87
## - Time     1     35740 1238591 426.27
## - NW       1     35972 1238824 426.28
## - U1       1     36432 1239284 426.29
## <none>              1202852 427.13
## - U2       1     99266 1302118 428.22
## - Wealth   1    122407 1325259 428.91
## - M        1    170814 1373666 430.31
## - Prob     1    179247 1382099 430.55
## - Ed       1    286869 1489721 433.47
## - Po1      1    551059 1753911 439.84
## - Ineq     1    580043 1782895 440.48
##
## Step:  AIC=425.87
## .outcome ~ M + Ed + Po1 + NW + U1 + U2 + Wealth + Ineq + Prob +
##     Time
##
##           Df Sum of Sq      RSS     AIC
## - U1       1     23427 1249432 424.61
## - NW       1     35599 1261604 424.99
## <none>              1226005 425.87
## - Time     1     65215 1291220 425.89
## - U2       1     90576 1316580 426.65
## - Wealth   1    165471 1391476 428.81
## - Prob     1    183406 1409410 429.31
## - M        1    234299 1460304 430.69
## - Ed       1    457868 1683873 436.25
## - Po1      1    551909 1777913 438.37
## - Ineq     1    827202 2053206 443.98
##
## Step:  AIC=424.61
## .outcome ~ M + Ed + Po1 + NW + U2 + Wealth + Ineq + Prob + Time
##
```

```
##          Df Sum of Sq     RSS    AIC
## - NW      1     38913 1288345 423.81
## - Time    1     56652 1306083 424.34
## <none>              1249432 424.61
## - U2      1     99241 1348672 425.59
## - Prob    1    179308 1428739 427.84
## - Wealth  1    186465 1435896 428.04
## - M       1    218455 1467887 428.90
## - Ed      1    446537 1695969 434.53
## - Po1     1    646432 1895864 438.87
## - Ineq    1    871931 2121363 443.26
##
## Step:  AIC=423.81
## .outcome ~ M + Ed + Po1 + U2 + Wealth + Ineq + Prob + Time
##
##          Df Sum of Sq     RSS    AIC
## - Time    1     32383 1320727 422.78
## <none>              1288345 423.81
## - U2      1    114498 1402843 425.13
## - Prob    1    144609 1432953 425.96
## - Wealth  1    156101 1444446 426.27
## - M       1    361976 1650320 431.46
## - Ed      1    414486 1702830 432.69
## - Ineq    1    909763 2198108 442.64
## - Po1     1   1110877 2399222 446.06
##
## Step:  AIC=422.78
## .outcome ~ M + Ed + Po1 + U2 + Wealth + Ineq + Prob
##
##          Df Sum of Sq     RSS    AIC
## <none>              1320727 422.78
## - Prob    1    112334 1433061 423.96
## - U2      1    125221 1445949 424.31
## - Wealth  1    149077 1469805 424.95
## - M       1    350218 1670945 429.95
## - Ed      1    611488 1932216 435.61
## - Ineq    1    902659 2223386 441.09
## - Po1     1   1085530 2406258 444.17
## Start:  AIC=432.17
## .outcome ~ M + Ed + Po1 + Po2 + LF + M.F + Pop + NW + U1 + U2 +
##     Wealth + Ineq + Prob + Time + So
##
##          Df Sum of Sq     RSS    AIC
## - LF      1       483 1115465 430.19
## - So      1       872 1115854 430.20
## - NW      1      6706 1121687 430.40
## - Time    1      9306 1124287 430.49
## - Pop     1     17348 1132330 430.77
## - M.F     1     23124 1138106 430.97
## - Wealth  1     45283 1160264 431.72
## <none>              1114981 432.17
## - Po2     1     61236 1176217 432.26
## - U1      1     86179 1201160 433.07
## - M       1     92279 1207261 433.27
```

```
## - U2      1     117063 1232045 434.06
## - Prob    1     137235 1252216 434.70
## - Po1     1     165264 1280246 435.56
## - Ed      1     212358 1327339 436.97
## - Ineq    1     420144 1535125 442.64
##
## Step:  AIC=430.19
## .outcome ~ M + Ed + Po1 + Po2 + M.F + Pop + NW + U1 + U2 + Wealth +
##     Ineq + Prob + Time + So
##
##           Df Sum of Sq     RSS    AIC
## - So       1        467 1115931 428.20
## - NW       1       6288 1121753 428.41
## - Time     1       8984 1124448 428.50
## - Pop      1      19004 1134469 428.85
## - M.F      1      25823 1141288 429.08
## - Wealth   1      44974 1160439 429.73
## <none>                  1115465 430.19
## - Po2      1      61249 1176714 430.27
## - M        1      93074 1208538 431.31
## - U1       1     102564 1218028 431.62
## - U2       1     116865 1232330 432.07
## - Prob     1     136781 1252246 432.70
## - Po1      1     165139 1280604 433.57
## - Ed       1     223708 1339173 435.32
## - Ineq     1     426813 1542277 440.82
##
## Step:  AIC=428.2
## .outcome ~ M + Ed + Po1 + Po2 + M.F + Pop + NW + U1 + U2 + Wealth +
##     Ineq + Prob + Time
##
##           Df Sum of Sq     RSS    AIC
## - NW       1       5834 1121766 426.41
## - Time     1       8883 1124815 426.51
## - Pop      1      18616 1134548 426.85
## - M.F      1      27025 1142956 427.14
## - Wealth   1      45074 1161006 427.75
## <none>                  1115931 428.20
## - Po2      1      63262 1179194 428.35
## - M        1      92864 1208795 429.32
## - U1       1     106229 1222160 429.75
## - U2       1     121620 1237551 430.24
## - Prob     1     153602 1269534 431.23
## - Po1      1     168784 1284716 431.70
## - Ed       1     231955 1347886 433.57
## - Ineq     1     471494 1587425 439.95
##
## Step:  AIC=426.41
## .outcome ~ M + Ed + Po1 + Po2 + M.F + Pop + U1 + U2 + Wealth +
##     Ineq + Prob + Time
##
##           Df Sum of Sq     RSS    AIC
## - Time     1       5519 1127284 424.60
## - Pop      1      18845 1140610 425.06
```

```
## - M.F      1      24517 1146282 425.25
## - Wealth  1      42429 1164194 425.86
## - Po2      1      57533 1179299 426.36
## <none>                1121766 426.41
## - U1       1     108865 1230631 428.02
## - M        1     115032 1236798 428.21
## - U2       1     126515 1248281 428.57
## - Prob     1     156858 1278623 429.51
## - Po1      1     162950 1284716 429.70
## - Ed       1     230088 1351853 431.68
## - Ineq     1     566372 1688137 440.35
##
## Step:  AIC=424.6
## .outcome ~ M + Ed + Po1 + Po2 + M.F + Pop + U1 + U2 + Wealth +
##     Ineq + Prob
##
##           Df Sum of Sq     RSS    AIC
## - Pop      1      29881 1157166 423.62
## - M.F      1      30020 1157305 423.62
## - Wealth  1      40051 1167335 423.96
## - Po2      1      52054 1179338 424.36
## <none>                1127284 424.60
## - U1       1     107022 1234306 426.14
## - M        1     110322 1237607 426.24
## - U2       1     127108 1254393 426.77
## - Po1      1     158035 1285319 427.72
## - Prob     1     189477 1316762 428.66
## - Ed       1     264363 1391647 430.82
## - Ineq     1     578631 1705915 438.76
##
## Step:  AIC=423.62
## .outcome ~ M + Ed + Po1 + Po2 + M.F + U1 + U2 + Wealth + Ineq +
##     Prob
##
##           Df Sum of Sq     RSS    AIC
## - Wealth  1      35833 1192999 422.81
## - Po2      1      42660 1199826 423.03
## - M.F      1      55910 1213076 423.46
## <none>                1157166 423.62
## - U1       1     117245 1274411 425.38
## - U2       1     121423 1278589 425.51
## - Po1      1     134819 1291985 425.92
## - M        1     135603 1292769 425.94
## - Prob     1     167945 1325111 426.90
## - Ed       1     257846 1415012 429.46
## - Ineq     1     550909 1708075 436.81
##
## Step:  AIC=422.81
## .outcome ~ M + Ed + Po1 + Po2 + M.F + U1 + U2 + Ineq + Prob
##
##           Df Sum of Sq     RSS    AIC
## - Po2      1      47850 1240849 422.34
## <none>                1192999 422.81
## - M.F      1      81084 1274083 423.37
```

```
## - M      1     115577 1308576 424.41
## - U1     1     149258 1342257 425.41
## - Po1    1     159462 1352461 425.70
## - U2     1     160889 1353888 425.74
## - Prob   1     209382 1402381 427.11
## - Ed     1     307190 1500189 429.74
## - Ineq   1     628402 1821401 437.31
##
## Step:  AIC=422.34
## .outcome ~ M + Ed + Po1 + M.F + U1 + U2 + Ineq + Prob
##
##          Df Sum of Sq      RSS    AIC
## <none>                 1240849 422.34
## - M.F    1      72068 1312917 422.54
## - M      1     123811 1364660 424.05
## - U1     1     135872 1376722 424.39
## - U2     1     164554 1405403 425.20
## - Prob   1     232247 1473097 427.03
## - Ed     1     301302 1542152 428.82
## - Ineq   1     669494 1910343 437.17
## - Po1    1    1347533 2588382 449.02
## Start:  AIC=413.63
## .outcome ~ M + Ed + Po1 + Po2 + LF + M.F + Pop + NW + U1 + U2 +
##     Wealth + Ineq + Prob + Time + So
##
##            Df Sum of Sq      RSS    AIC
## - LF       1          0 1116021 411.63
## - Time     1         94 1116115 411.63
## - M.F      1      13512 1129533 412.08
## - So       1      15010 1131031 412.13
## - Po2      1      19259 1135280 412.26
## - NW       1      21522 1137543 412.34
## - Wealth   1      41397 1157419 412.98
## - Prob     1      45406 1161427 413.11
## - Pop      1      55594 1171615 413.43
## <none>                 1116021 413.63
## - U1       1      78564 1194585 414.15
## - Po1      1      88011 1204032 414.44
## - M        1     148306 1264327 416.25
## - Ed       1     221708 1337729 418.34
## - U2       1     255007 1371028 419.25
## - Ineq     1     366661 1482682 422.14
##
## Step:  AIC=411.63
## .outcome ~ M + Ed + Po1 + Po2 + M.F + Pop + NW + U1 + U2 + Wealth +
##     Ineq + Prob + Time + So
##
##            Df Sum of Sq      RSS    AIC
## - Time     1         99 1116120 409.63
## - M.F      1      15893 1131915 410.15
## - So       1      20874 1136895 410.32
## - Po2      1      21559 1137581 410.34
## - NW       1      24087 1140108 410.42
## - Wealth   1      41746 1157767 410.99
```

```
## - Prob    1      51784 1167806 411.31
## - Pop     1      56531 1172553 411.46
## <none>                1116021 411.63
## - U1      1      86596 1202618 412.40
## - Po1     1      95086 1211108 412.66
## - M       1     148339 1264360 414.25
## - Ed      1     256344 1372365 417.28
## - U2      1     256556 1372577 417.29
## - Ineq    1     389539 1505561 420.71
##
## Step:  AIC=409.63
## .outcome ~ M + Ed + Po1 + Po2 + M.F + Pop + NW + U1 + U2 + Wealth +
##      Ineq + Prob + So
##
##           Df Sum of Sq      RSS    AIC
## - M.F     1      16918 1133038 408.19
## - So      1      23110 1139229 408.39
## - Po2     1      23552 1139672 408.41
## - NW      1      28280 1144400 408.56
## - Wealth  1      42354 1158474 409.01
## <none>                1116120 409.63
## - Pop     1      66298 1182418 409.77
## - Prob    1      76950 1193069 410.10
## - U1      1      89347 1205467 410.48
## - Po1     1     102425 1218545 410.88
## - M       1     151497 1267617 412.34
## - Ed      1     258516 1374635 415.34
## - U2      1     262192 1378312 415.44
## - Ineq    1     392122 1508242 418.77
##
## Step:  AIC=408.19
## .outcome ~ M + Ed + Po1 + Po2 + Pop + NW + U1 + U2 + Wealth +
##      Ineq + Prob + So
##
##           Df Sum of Sq      RSS    AIC
## - So      1      24491 1157529 406.98
## - NW      1      36802 1169840 407.37
## - Po2     1      41461 1174500 407.52
## <none>                1133038 408.19
## - Wealth  1      64104 1197142 408.23
## - U1      1      73465 1206503 408.52
## - Prob    1      78468 1211507 408.67
## - Pop     1     132410 1265448 410.28
## - Po1     1     155134 1288172 410.94
## - M       1     185597 1318635 411.80
## - U2      1     245894 1378932 413.46
## - Ed      1     291514 1424552 414.66
## - Ineq    1     544561 1677599 420.71
##
## Step:  AIC=406.98
## .outcome ~ M + Ed + Po1 + Po2 + Pop + NW + U1 + U2 + Wealth +
##      Ineq + Prob
##
##           Df Sum of Sq      RSS    AIC
```

```
## - NW       1       18711 1176240 405.58
## - Po2      1       34691 1192220 406.08
## <none>                   1157529 406.98
## - Wealth   1       65397 1222926 407.02
## - Prob     1       71104 1228634 407.19
## - U1       1       97593 1255123 407.98
## - Pop      1      129151 1286681 408.90
## - Po1      1      141029 1298558 409.24
## - M        1      199805 1357335 410.87
## - U2       1      268154 1425683 412.69
## - Ed       1      314014 1471543 413.86
## - Ineq     1      599382 1756912 420.42
##
## Step:  AIC=405.58
## .outcome ~ M + Ed + Po1 + Po2 + Pop + U1 + U2 + Wealth + Ineq +
##     Prob
##
##           Df Sum of Sq     RSS    AIC
## - Po2      1       47783 1224023 405.05
## - Wealth   1       58944 1235184 405.39
## <none>                   1176240 405.58
## - U1       1       83598 1259839 406.12
## - Prob     1      107014 1283254 406.80
## - Pop      1      135673 1311914 407.61
## - Po1      1      156996 1333237 408.21
## - M        1      191178 1367418 409.15
## - U2       1      252309 1428549 410.77
## - Ed       1      359965 1536205 413.45
## - Ineq     1      683705 1859946 420.53
##
## Step:  AIC=405.05
## .outcome ~ M + Ed + Po1 + Pop + U1 + U2 + Wealth + Ineq + Prob
##
##           Df Sum of Sq     RSS    AIC
## - Wealth   1       56583 1280606 404.72
## <none>                   1224023 405.05
## - U1       1       68552 1292575 405.07
## - Prob     1      120797 1344820 406.53
## - Pop      1      140211 1364234 407.06
## - M        1      213748 1437771 409.00
## - U2       1      240444 1464467 409.69
## - Ed       1      356761 1580784 412.51
## - Ineq     1      712252 1936275 420.02
## - Po1      1      756739 1980762 420.86
##
## Step:  AIC=404.72
## .outcome ~ M + Ed + Po1 + Pop + U1 + U2 + Ineq + Prob
##
##        Df Sum of Sq     RSS    AIC
## <none>               1280606 404.72
## - U1    1      105587 1386193 405.65
## - Pop   1      140877 1421483 406.58
## - M     1      174718 1455324 407.45
## - Prob  1      234668 1515274 408.95
```

```
## - U2     1     286299 1566905 410.19
## - Ed     1     491782 1772388 414.75
## - Ineq   1     796117 2076722 420.61
## - Po1    1    1018999 2299604 424.38
## Start:  AIC=384.05
## .outcome ~ M + Ed + Po1 + Po2 + LF + M.F + Pop + NW + U1 + U2 +
##     Wealth + Ineq + Prob + Time + So
##
##          Df Sum of Sq    RSS    AIC
## - Po2    1         51 635861 382.05
## - Pop    1         98 635908 382.05
## - M.F    1        287 636097 382.07
## - NW     1       1748 637558 382.15
## - So     1       2222 638032 382.17
## - U2     1       4563 640373 382.31
## - U1     1       8581 644391 382.53
## - Time   1      12326 648136 382.74
## - LF     1      13837 649647 382.82
## - Wealth 1      30124 665935 383.72
## <none>              635810 384.05
## - Prob   1      45693 681503 384.55
## - Po1    1      58641 694451 385.22
## - M      1      92396 728206 386.93
## - Ed     1      96078 731888 387.12
## - Ineq   1     192729 828539 391.58
##
## Step:  AIC=382.05
## .outcome ~ M + Ed + Po1 + LF + M.F + Pop + NW + U1 + U2 + Wealth +
##     Ineq + Prob + Time + So
##
##          Df Sum of Sq    RSS    AIC
## - Pop    1         89 635950 380.06
## - M.F    1        301 636162 380.07
## - NW     1       1758 637619 380.15
## - So     1       2223 638084 380.18
## - U2     1       4513 640374 380.31
## - U1     1       9217 645078 380.57
## - LF     1      17328 653189 381.02
## - Time   1      17360 653221 381.02
## - Wealth 1      31778 667639 381.81
## <none>              635861 382.05
## - Prob   1      51817 687678 382.87
## - M      1      92562 728423 384.94
## - Ed     1     125276 761137 386.53
## - Ineq   1     196941 832802 389.77
## - Po1    1     742738 1378599 407.91
##
## Step:  AIC=380.06
## .outcome ~ M + Ed + Po1 + LF + M.F + NW + U1 + U2 + Wealth +
##     Ineq + Prob + Time + So
##
##          Df Sum of Sq    RSS    AIC
## - M.F    1        545 636495 378.09
## - NW     1       1707 637658 378.15
```

```
## - So       1       2139   638090 378.18
## - U2       1       4472   640422 378.31
## - U1       1       9144   645094 378.57
## - Time     1      17717   653667 379.05
## - LF       1      18032   653982 379.06
## - Wealth   1      35074   671024 379.99
## <none>                    635950 380.06
## - Prob     1      53824   689774 380.98
## - M        1      95359   731309 383.09
## - Ed       1     125263   761213 384.53
## - Ineq     1     206122   842072 388.16
## - Po1      1     752772  1388722 406.17
##
## Step:  AIC=378.09
## .outcome ~ M + Ed + Po1 + LF + NW + U1 + U2 + Wealth + Ineq +
##      Prob + Time + So
##
##            Df Sum of Sq      RSS     AIC
## - NW       1       1229   637724 376.16
## - So       1       3105   639600 376.26
## - U2       1       3938   640433 376.31
## - Time     1      17863   654357 377.08
## - U1       1      20765   657260 377.24
## - Wealth   1      35708   672203 378.05
## <none>                    636495 378.09
## - LF       1      40590   677084 378.31
## - Prob     1      56285   692780 379.14
## - Ed       1     125744   762239 382.58
## - M        1     163976   800471 384.34
## - Ineq     1     205671   842166 386.17
## - Po1      1     862865  1499360 406.93
##
## Step:  AIC=376.16
## .outcome ~ M + Ed + Po1 + LF + U1 + U2 + Wealth + Ineq + Prob +
##      Time + So
##
##            Df Sum of Sq      RSS     AIC
## - U2       1       3461   641185 374.35
## - So       1       4447   642171 374.41
## - Time     1      20589   658313 375.30
## - U1       1      22738   660462 375.42
## <none>                    637724 376.16
## - Wealth   1      40277   678001 376.36
## - LF       1      40923   678647 376.40
## - Prob     1      56203   693928 377.20
## - Ed       1     125243   762968 380.61
## - M        1     169303   807027 382.63
## - Ineq     1     212735   850460 384.52
## - Po1      1    1144592  1782317 411.16
##
## Step:  AIC=374.35
## .outcome ~ M + Ed + Po1 + LF + U1 + Wealth + Ineq + Prob + Time +
##      So
##
```

```
##           Df Sum of Sq     RSS    AIC
## - So       1      5875  647060 372.68
## - Time     1     33052  674237 374.16
## <none>                  641185 374.35
## - LF       1     39367  680552 374.50
## - Wealth   1     41530  682715 374.61
## - Prob     1     54369  695554 375.28
## - Ed       1    124545  765730 378.74
## - U1       1    166565  807750 380.67
## - M        1    175800  816985 381.07
## - Ineq     1    219405  860590 382.95
## - Po1      1   1713120 2354305 419.18
##
## Step:  AIC=372.68
## .outcome ~ M + Ed + Po1 + LF + U1 + Wealth + Ineq + Prob + Time
##
##           Df Sum of Sq     RSS    AIC
## - LF       1     34827  681886 372.57
## <none>                  647060 372.68
## - Time     1     39953  687013 372.84
## - Wealth   1     43575  690635 373.03
## - Prob     1     52752  699812 373.50
## - Ed       1    136934  783994 377.59
## - U1       1    164497  811557 378.83
## - M        1    179702  826762 379.50
## - Ineq     1    377746 1024806 387.23
## - Po1      1   2074182 2721242 422.39
##
## Step:  AIC=372.57
## .outcome ~ M + Ed + Po1 + U1 + Wealth + Ineq + Prob + Time
##
##           Df Sum of Sq     RSS    AIC
## - Time     1     35188  717074 372.38
## - Wealth   1     35818  717704 372.41
## <none>                  681886 372.57
## - Prob     1     53385  735271 373.28
## - U1       1    132484  814370 376.96
## - M        1    149420  831306 377.70
## - Ed       1    395676 1077563 387.04
## - Ineq     1    485158 1167044 389.91
## - Po1      1   2071147 2753034 420.81
##
## Step:  AIC=372.38
## .outcome ~ M + Ed + Po1 + U1 + Wealth + Ineq + Prob
##
##           Df Sum of Sq     RSS    AIC
## - Wealth   1     19597  736671 371.35
## <none>                  717074 372.38
## - U1       1    107569  824644 375.41
## - Prob     1    170848  887922 378.07
## - M        1    212426  929501 379.72
## - Ed       1    360500 1077574 385.04
## - Ineq     1    533377 1250451 390.40
## - Po1      1   2064281 2781356 419.18
```

```
##
## Step:  AIC=371.35
## .outcome ~ M + Ed + Po1 + U1 + Ineq + Prob
##
##           Df Sum of Sq     RSS    AIC
## <none>                  736671 371.35
## - U1     1     97696   834368 373.83
## - Prob   1    157724   894395 376.33
## - M      1    239998   976670 379.50
## - Ed     1    341609  1078280 383.06
## - Ineq   1   1030628  1767300 400.85
## - Po1    1   3156214  3892885 429.28
## Start:  AIC=400.07
## .outcome ~ M + Ed + Po1 + Po2 + LF + M.F + Pop + NW + U1 + U2 +
##      Wealth + Ineq + Prob + Time + So
##
##           Df Sum of Sq     RSS    AIC
## - Time    1       280   773919 398.09
## - Pop     1       394   774033 398.09
## - So      1       600   774239 398.10
## - NW      1     19488   793128 398.99
## - Wealth  1     26567   800206 399.32
## - Po2     1     35029   808668 399.71
## <none>                  773639 400.07
## - LF      1     60406   834045 400.86
## - M.F     1     77930   851570 401.62
## - Po1     1    113324   886964 403.13
## - Prob    1    122319   895959 403.51
## - Ineq    1    167657   941296 405.33
## - U1      1    178439   952079 405.75
## - M       1    257535  1031175 408.71
## - U2      1    279831  1053470 409.50
## - Ed      1    405405  1179045 413.66
##
## Step:  AIC=398.09
## .outcome ~ M + Ed + Po1 + Po2 + LF + M.F + Pop + NW + U1 + U2 +
##      Wealth + Ineq + Prob + So
##
##           Df Sum of Sq     RSS    AIC
## - Pop     1       421   774340 396.11
## - So      1       460   774379 396.11
## - NW      1     20104   794023 397.04
## - Wealth  1     26362   800281 397.33
## - Po2     1     35543   809462 397.75
## <none>                  773919 398.09
## - LF      1     60156   834075 398.86
## - M.F     1     86645   860565 400.01
## - Po1     1    116790   890709 401.29
## - Ineq    1    168432   942351 403.37
## - U1      1    178817   952737 403.78
## - Prob    1    179667   953586 403.81
## - M       1    257392  1031311 406.71
## - U2      1    281143  1055062 407.55
## - Ed      1    408019  1181938 411.75
```

```
##
## Step:  AIC=396.11
## .outcome ~ M + Ed + Po1 + Po2 + LF + M.F + NW + U1 + U2 + Wealth +
##     Ineq + Prob + So
##
##           Df Sum of Sq     RSS    AIC
## - So       1       440  774781 394.13
## - NW       1     19956  794296 395.05
## - Wealth   1     26309  800649 395.34
## - Po2      1     37747  812088 395.87
## <none>                  774340 396.11
## - LF       1     65621  839961 397.12
## - Po1      1    117563  891904 399.34
## - M.F      1    137080  911420 400.14
## - Ineq     1    178979  953319 401.80
## - Prob     1    184260  958600 402.01
## - U1       1    191879  966219 402.30
## - M        1    261949 1036289 404.89
## - U2       1    280851 1055192 405.56
## - Ed       1    407685 1182025 409.76
##
## Step:  AIC=394.13
## .outcome ~ M + Ed + Po1 + Po2 + LF + M.F + NW + U1 + U2 + Wealth +
##     Ineq + Prob
##
##           Df Sum of Sq     RSS    AIC
## - NW       1     21532  796313 393.14
## - Wealth   1     28666  803446 393.47
## - Po2      1     37307  812088 393.87
## <none>                  774781 394.13
## - LF       1     75454  850235 395.57
## - Po1      1    117178  891958 397.34
## - M.F      1    138944  913724 398.23
## - U1       1    197803  972583 400.54
## - Ineq     1    222220  997001 401.46
## - Prob     1    223216  997997 401.50
## - M        1    262457 1037238 402.92
## - U2       1    280572 1055353 403.56
## - Ed       1    423572 1198353 408.26
##
## Step:  AIC=393.14
## .outcome ~ M + Ed + Po1 + Po2 + LF + M.F + U1 + U2 + Wealth +
##     Ineq + Prob
##
##           Df Sum of Sq     RSS    AIC
## - Wealth   1     22536  818849 392.18
## - Po2      1     25065  821377 392.29
## <none>                  796313 393.14
## - LF       1     61054  857367 393.88
## - Po1      1    102427  898740 395.62
## - M.F      1    119003  915316 396.30
## - U1       1    195390  991703 399.26
## - Prob     1    201771  998084 399.50
## - Ineq     1    259937 1056249 401.59
```

```
## - U2      1     301477 1097790 403.02
## - M       1     393698 1190011 406.01
## - Ed      1     405805 1202118 406.38
##
## Step:  AIC=392.18
## .outcome ~ M + Ed + Po1 + Po2 + LF + M.F + U1 + U2 + Ineq + Prob
##
##          Df Sum of Sq     RSS    AIC
## - Po2  1      23245  842094 391.21
## <none>              818849 392.18
## - LF   1      62920  881770 392.91
## - Po1  1     109065  927914 394.80
## - M.F  1     130789  949638 395.66
## - U1   1     248937 1067787 400.00
## - Prob 1     253909 1072758 400.17
## - Ineq 1     282728 1101578 401.15
## - M    1     371465 1190315 404.02
## - U2   1     400389 1219238 404.90
## - Ed   1     524265 1343114 408.48
##
## Step:  AIC=391.21
## .outcome ~ M + Ed + Po1 + LF + M.F + U1 + U2 + Ineq + Prob
##
##          Df Sum of Sq     RSS    AIC
## <none>              842094 391.21
## - LF   1      47899  889993 391.26
## - M.F  1     118746  960840 394.09
## - U1   1     240609 1082703 398.51
## - Prob 1     257075 1099169 399.07
## - Ineq 1     323393 1165487 401.24
## - M    1     378568 1220662 402.95
## - U2   1     413318 1255412 403.99
## - Ed   1     506656 1348750 406.64
## - Po1  1    1298263 2140357 423.73
## Start:  AIC=391.67
## .outcome ~ M + Ed + Po1 + Po2 + LF + M.F + Pop + NW + U1 + U2 +
##     Wealth + Ineq + Prob + Time + So
##
##           Df Sum of Sq     RSS    AIC
## - M.F   1        544  786192 389.69
## - So    1       9460  795108 390.10
## - LF    1      13009  798657 390.26
## - NW    1      14938  800587 390.34
## - Pop   1      19768  805416 390.56
## - U1    1      25038  810686 390.80
## <none>               785649 391.67
## - Time  1      52092  837740 391.98
## - Po2   1      79841  865490 393.15
## - Wealth 1     85098  870747 393.37
## - U2    1     114405  900053 394.56
## - Prob  1     160689  946338 396.37
## - Po1   1     168838  954487 396.67
## - M     1     355467 1141116 403.10
## - Ed    1     356866 1142514 403.15
```

```
## - Ineq     1      445892 1231540 405.85
##
## Step:  AIC=389.69
## .outcome ~ M + Ed + Po1 + Po2 + LF + Pop + NW + U1 + U2 + Wealth +
##      Ineq + Prob + Time + So
##
##            Df Sum of Sq      RSS     AIC
## - So      1        8990   795183 388.10
## - LF      1       14009   800201 388.33
## - NW      1       14420   800612 388.35
## - Pop     1       25594   811786 388.85
## - U1      1       29178   815371 389.00
## <none>                    786192 389.69
## - Time    1       57388   843581 390.23
## - Po2     1       83930   870123 391.34
## - Wealth  1       85647   871840 391.41
## - U2      1      115310   901502 392.62
## - Prob    1      161421   947613 394.41
## - Po1     1      181724   967917 395.18
## - Ed      1      361648 1147840 401.32
## - M       1      416973 1203166 403.01
## - Ineq    1      453468 1239660 404.09
##
## Step:  AIC=388.1
## .outcome ~ M + Ed + Po1 + Po2 + LF + Pop + NW + U1 + U2 + Wealth +
##      Ineq + Prob + Time
##
##            Df Sum of Sq      RSS     AIC
## - LF      1        7480   802663 386.44
## - NW      1        8130   803313 386.47
## - U1      1       21764   816946 387.07
## - Pop     1       25808   820990 387.25
## <none>                    795183 388.10
## - Time    1       53794   848977 388.46
## - Wealth  1       78006   873189 389.47
## - Po2     1       84238   879421 389.73
## - U2      1      106634   901816 390.63
## - Po1     1      189268   984451 393.79
## - Prob    1      194265   989448 393.97
## - Ed      1      361828 1157010 399.60
## - M       1      415453 1210636 401.23
## - Ineq    1      518283 1313465 404.17
##
## Step:  AIC=386.44
## .outcome ~ M + Ed + Po1 + Po2 + Pop + NW + U1 + U2 + Wealth +
##      Ineq + Prob + Time
##
##            Df Sum of Sq      RSS     AIC
## - NW      1        6437   809100 384.73
## - U1      1       19903   822566 385.32
## - Pop     1       24517   827180 385.52
## <none>                    802663 386.44
## - Time    1       47594   850257 386.51
## - Po2     1       76780   879443 387.73
```

```
## - Wealth  1     79772   882435 387.85
## - U2      1    116720   919383 389.33
## - Po1     1    184382   987045 391.88
## - Prob    1    187998   990661 392.01
## - Ed      1    394121  1196784 398.82
## - M       1    416335  1218998 399.48
## - Ineq    1    511020  1313683 402.17
##
## Step:  AIC=384.73
## .outcome ~ M + Ed + Po1 + Po2 + Pop + U1 + U2 + Wealth + Ineq +
##      Prob + Time
##
##           Df Sum of Sq      RSS    AIC
## - U1       1     20012   829112 383.61
## - Pop      1     24220   833320 383.79
## - Time     1     41306   850406 384.52
## <none>                   809100 384.73
## - Po2      1     70374   879474 385.73
## - Wealth   1     76848   885948 385.99
## - U2       1    117874   926973 387.62
## - Po1      1    177955   987055 389.88
## - Prob     1    199871  1008971 390.67
## - Ed       1    387693  1196793 396.82
## - M        1    499615  1308714 400.04
## - Ineq     1    570489  1379588 401.94
##
## Step:  AIC=383.61
## .outcome ~ M + Ed + Po1 + Po2 + Pop + U2 + Wealth + Ineq + Prob +
##      Time
##
##           Df Sum of Sq      RSS    AIC
## - Pop      1     25856   854968 382.71
## - Time     1     29580   858692 382.87
## <none>                   829112 383.61
## - Po2      1     61305   890417 384.17
## - Wealth   1    106767   935879 385.97
## - U2       1    154193   983306 387.75
## - Po1      1    168056   997168 388.25
## - Prob     1    187421  1016533 388.94
## - Ed       1    380150  1209262 395.19
## - M        1    529457  1358569 399.38
## - Ineq     1    620503  1449615 401.72
##
## Step:  AIC=382.71
## .outcome ~ M + Ed + Po1 + Po2 + U2 + Wealth + Ineq + Prob + Time
##
##           Df Sum of Sq      RSS    AIC
## <none>                   854968 382.71
## - Time     1     71013   925981 383.58
## - Po2      1     76906   931874 383.81
## - Wealth   1    102658   957626 384.79
## - U2       1    154042  1009010 386.67
## - Po1      1    180298  1035267 387.60
## - Prob     1    189597  1044565 387.92
```

```
## - Ed        1     392573 1247542 394.31
## - Ineq      1     595902 1450871 399.75
## - M         1     654259 1509228 401.17
## Start:  AIC=412.41
## .outcome ~ M + Ed + Po1 + Po2 + LF + M.F + Pop + NW + U1 + U2 +
##     Wealth + Ineq + Prob + Time + So
##
##            Df Sum of Sq      RSS    AIC
## - Time      1       1340 1081252 410.46
## - Wealth   1       5079 1084990 410.59
## - M         1      13331 1093243 410.87
## - So        1      28890 1108802 411.39
## - M.F       1      32659 1112571 411.52
## - Pop       1      40877 1120789 411.79
## - U1        1      48867 1128779 412.05
## - LF        1      53060 1132972 412.19
## - Po2       1      53977 1133888 412.22
## <none>                  1079912 412.41
## - U2        1      78374 1158285 413.01
## - Prob      1     115338 1195250 414.17
## - NW        1     128975 1208887 414.59
## - Po1       1     136732 1216643 414.83
## - Ineq      1     249404 1329316 418.10
## - Ed        1     338619 1418531 420.51
##
## Step:  AIC=410.46
## .outcome ~ M + Ed + Po1 + Po2 + LF + M.F + Pop + NW + U1 + U2 +
##     Wealth + Ineq + Prob + So
##
##            Df Sum of Sq      RSS    AIC
## - Wealth   1       4323 1085575 408.61
## - M         1      12338 1093589 408.88
## - So        1      28581 1109832 409.43
## - M.F       1      36149 1117401 409.68
## - U1        1      47691 1128943 410.06
## - Po2       1      52852 1134104 410.23
## - LF        1      52871 1134122 410.23
## - Pop       1      53164 1134416 410.24
## <none>                  1081252 410.46
## - U2        1      77186 1158437 411.01
## - NW        1     127676 1208928 412.59
## - Po1       1     135716 1216968 412.84
## - Prob      1     137256 1218508 412.88
## - Ineq      1     248530 1329782 416.12
## - Ed        1     340573 1421825 418.59
##
## Step:  AIC=408.61
## .outcome ~ M + Ed + Po1 + Po2 + LF + M.F + Pop + NW + U1 + U2 +
##     Ineq + Prob + So
##
##            Df Sum of Sq      RSS    AIC
## - M         1      11544 1097119 407.00
## - So        1      28192 1113767 407.56
## - M.F       1      38580 1124155 407.90
```

```
## - Pop       1      51783 1137357 408.33
## - LF        1      54561 1140136 408.42
## <none>                   1085575 408.61
## - U1        1      62667 1148242 408.68
## - Po2       1      65540 1151115 408.78
## - U2        1     112364 1197939 410.25
## - NW        1     126428 1212003 410.68
## - Po1       1     165458 1251032 411.86
## - Prob      1     235899 1321474 413.88
## - Ineq      1     330763 1416338 416.45
## - Ed        1     383414 1468989 417.80
##
## Step:  AIC=407
## .outcome ~ Ed + Po1 + Po2 + LF + M.F + Pop + NW + U1 + U2 + Ineq +
##     Prob + So
##
##         Df Sum of Sq     RSS    AIC
## - So     1      27965 1125084 405.93
## - M.F    1      46296 1143415 406.53
## - U1     1      56246 1153365 406.85
## - Pop    1      59864 1156983 406.97
## <none>               1097119 407.00
## - LF     1      62319 1159438 407.04
## - Po2    1      69699 1166818 407.28
## - U2     1     101352 1198471 408.27
## - Po1    1     166987 1264106 410.24
## - Prob   1     243896 1341015 412.43
## - NW     1     244251 1341370 412.44
## - Ineq   1     320733 1417852 414.49
## - Ed     1     376637 1473756 415.92
##
## Step:  AIC=405.93
## .outcome ~ Ed + Po1 + Po2 + LF + M.F + Pop + NW + U1 + U2 + Ineq +
##     Prob
##
##         Df Sum of Sq     RSS    AIC
## - LF     1      34604 1159687 405.05
## - M.F    1      34896 1159979 405.06
## - U1     1      39650 1164733 405.21
## - Pop    1      56164 1181248 405.73
## - Po2    1      58034 1183118 405.79
## <none>               1125084 405.93
## - U2     1      88785 1213868 406.74
## - Po1    1     154285 1279369 408.69
## - Prob   1     223770 1348853 410.64
## - NW     1     246908 1371992 411.27
## - Ineq   1     298469 1423552 412.64
## - Ed     1     350767 1475851 413.97
##
## Step:  AIC=405.05
## .outcome ~ Ed + Po1 + Po2 + M.F + Pop + NW + U1 + U2 + Ineq +
##     Prob
##
##         Df Sum of Sq     RSS    AIC
```

```
## - M.F    1    14181 1173868 403.50
## - U1     1    24408 1184095 403.82
## - Po2    1    36611 1196298 404.20
## <none>              1159687 405.05
## - Pop    1    66797 1226484 405.12
## - U2     1    89741 1249428 405.81
## - Po1    1   126054 1285741 406.87
## - Prob   1   193839 1353526 408.77
## - NW     1   234384 1394071 409.86
## - Ineq   1   288863 1448551 411.28
## - Ed     1   316571 1476258 411.98
##
## Step:  AIC=403.5
## .outcome ~ Ed + Po1 + Po2 + Pop + NW + U1 + U2 + Ineq + Prob
##
##         Df Sum of Sq     RSS    AIC
## - U1     1    12737 1186605 401.90
## - Po2    1    56636 1230504 403.24
## <none>              1173868 403.50
## - U2     1    76776 1250644 403.85
## - Pop    1   138193 1312061 405.62
## - Po1    1   180743 1354611 406.80
## - Prob   1   224640 1398507 407.98
## - NW     1   261490 1435358 408.94
## - Ineq   1   308265 1482132 410.13
## - Ed     1   366565 1540432 411.56
##
## Step:  AIC=401.9
## .outcome ~ Ed + Po1 + Po2 + Pop + NW + U2 + Ineq + Prob
##
##         Df Sum of Sq     RSS    AIC
## - Po2    1    52223 1238827 401.49
## <none>              1186605 401.90
## - U2     1   119704 1306309 403.46
## - Pop    1   125605 1312210 403.62
## - Po1    1   176571 1363175 405.03
## - Prob   1   225789 1412394 406.35
## - Ineq   1   309870 1496475 408.49
## - NW     1   337502 1524107 409.16
## - Ed     1   365544 1552149 409.84
##
## Step:  AIC=401.49
## .outcome ~ Ed + Po1 + Pop + NW + U2 + Ineq + Prob
##
##         Df Sum of Sq     RSS    AIC
## <none>              1238827 401.49
## - Pop    1   116960 1355788 402.83
## - U2     1   121778 1360605 402.96
## - Prob   1   200784 1439611 405.05
## - NW     1   298820 1537648 407.49
## - Ed     1   386319 1625147 409.54
## - Ineq   1   439249 1678076 410.72
## - Po1    1   893341 2132168 419.58
## Start:  AIC=437.75
```

```
## .outcome ~ M + Ed + Po1 + Po2 + LF + M.F + Pop + NW + U1 + U2 +
##     Wealth + Ineq + Prob + Time + So
##
##          Df Sum of Sq      RSS    AIC
## - So      1        837 1287391 435.78
## - LF      1       2139 1288693 435.82
## - NW      1       6570 1293124 435.95
## - Time    1       9285 1295839 436.03
## - Pop     1       9950 1296504 436.05
## - M.F     1      18856 1305410 436.32
## - Po2     1      19690 1306244 436.35
## - Wealth  1      27454 1314009 436.58
## - U1      1      47564 1334119 437.17
## <none>               1286554 437.75
## - Po1     1     107482 1394036 438.88
## - U2      1     141952 1428507 439.83
## - Prob    1     142001 1428556 439.84
## - M       1     151123 1437678 440.08
## - Ed      1     327706 1614260 444.60
## - Ineq    1     351296 1637850 445.17
##
## Step:  AIC=435.78
## .outcome ~ M + Ed + Po1 + Po2 + LF + M.F + Pop + NW + U1 + U2 +
##     Wealth + Ineq + Prob + Time
##
##          Df Sum of Sq      RSS    AIC
## - LF      1       4657 1292048 433.92
## - Time    1      10139 1297530 434.08
## - Pop     1      10920 1298311 434.11
## - NW      1      11163 1298554 434.11
## - Po2     1      19830 1307221 434.37
## - M.F     1      20710 1308101 434.40
## - Wealth  1      31702 1319094 434.73
## - U1      1      66377 1353768 435.74
## <none>               1287391 435.78
## - Po1     1     107335 1394726 436.90
## - Prob    1     142714 1430106 437.88
## - M       1     152362 1439754 438.14
## - U2      1     165514 1452905 438.50
## - Ed      1     328282 1615673 442.64
## - Ineq    1     438314 1725705 445.21
##
## Step:  AIC=433.92
## .outcome ~ M + Ed + Po1 + Po2 + M.F + Pop + NW + U1 + U2 + Wealth +
##     Ineq + Prob + Time
##
##          Df Sum of Sq      RSS    AIC
## - NW      1       8774 1300822 432.18
## - Time    1       9483 1301531 432.20
## - Pop     1      15734 1307782 432.39
## - Po2     1      15753 1307801 432.39
## - M.F     1      16115 1308163 432.40
## - Wealth  1      31202 1323250 432.85
## - U1      1      62402 1354450 433.76
```

```
## <none>                 1292048 433.92
## - Po1     1    102967 1395015 434.91
## - Prob    1    138216 1430264 435.88
## - M       1    162461 1454509 436.54
## - U2      1    171295 1463343 436.77
## - Ed      1    337723 1629771 440.98
## - Ineq    1    447092 1739140 443.51
##
## Step:  AIC=432.18
## .outcome ~ M + Ed + Po1 + Po2 + M.F + Pop + U1 + U2 + Wealth +
##     Ineq + Prob + Time
##
##            Df Sum of Sq     RSS    AIC
## - Time     1      5780 1306602 430.36
## - Po2      1     10771 1311593 430.50
## - M.F      1     14585 1315407 430.62
## - Pop      1     16320 1317142 430.67
## - Wealth   1     27814 1328636 431.01
## - U1       1     62890 1363712 432.02
## <none>                 1300822 432.18
## - Po1      1     95622 1396444 432.95
## - Prob     1    133337 1434159 433.99
## - U2       1    178753 1479575 435.20
## - M        1    197038 1497860 435.68
## - Ed       1    329931 1630753 439.00
## - Ineq     1    535263 1836085 443.62
##
## Step:  AIC=430.36
## .outcome ~ M + Ed + Po1 + Po2 + M.F + Pop + U1 + U2 + Wealth +
##     Ineq + Prob
##
##            Df Sum of Sq     RSS    AIC
## - Po2      1      6762 1313365 428.56
## - M.F      1     19063 1325665 428.92
## - Pop      1     24337 1330939 429.08
## - Wealth   1     27329 1333931 429.16
## - U1       1     59898 1366500 430.10
## <none>                 1306602 430.36
## - Po1      1     90562 1397164 430.97
## - Prob     1    152208 1458810 432.65
## - U2       1    174703 1481305 433.25
## - M        1    191810 1498412 433.70
## - Ed       1    334406 1641008 437.24
## - Ineq     1    530852 1837454 441.65
##
## Step:  AIC=428.56
## .outcome ~ M + Ed + Po1 + M.F + Pop + U1 + U2 + Wealth + Ineq +
##     Prob
##
##            Df Sum of Sq     RSS    AIC
## - M.F      1     23487 1336851 427.25
## - Pop      1     23530 1336895 427.25
## - Wealth   1     27276 1340641 427.36
## - U1       1     60830 1374194 428.32
```

```
## <none>                    1313365 428.56
## - Prob    1     151248 1464612 430.81
## - U2      1     176437 1489801 431.47
## - M       1     187118 1500482 431.75
## - Ed      1     328200 1641564 435.26
## - Ineq    1     535872 1849237 439.90
## - Po1     1     993356 2306720 448.52
##
## Step:  AIC=427.25
## .outcome ~ M + Ed + Po1 + Pop + U1 + U2 + Wealth + Ineq + Prob
##
##            Df Sum of Sq     RSS    AIC
## - U1        1      39419 1376270 426.38
## - Wealth    1      42902 1379754 426.48
## - Pop       1      69657 1406508 427.23
## <none>                   1336851 427.25
## - Prob      1     156079 1492930 429.55
## - U2        1     160420 1497272 429.67
## - M         1     225957 1562808 431.34
## - Ed        1     456118 1792969 436.70
## - Ineq      1     705672 2042523 441.78
## - Po1       1    1136701 2473552 449.25
##
## Step:  AIC=426.38
## .outcome ~ M + Ed + Po1 + Pop + U2 + Wealth + Ineq + Prob
##
##            Df Sum of Sq     RSS    AIC
## - Wealth    1      51379 1427650 425.81
## - Pop       1      59604 1435874 426.04
## <none>                   1376270 426.38
## - Prob      1     154914 1531185 428.54
## - U2        1     177662 1553932 429.12
## - M         1     218284 1594554 430.12
## - Ed        1     417315 1793586 434.71
## - Ineq      1     756628 2132899 441.47
## - Po1       1    1354183 2730454 451.10
##
## Step:  AIC=425.81
## .outcome ~ M + Ed + Po1 + Pop + U2 + Ineq + Prob
##
##          Df Sum of Sq     RSS    AIC
## - Pop     1      57799 1485449 425.36
## <none>                 1427650 425.81
## - M       1     188681 1616331 428.65
## - U2      1     195407 1623057 428.81
## - Prob    1     203086 1630736 429.00
## - Ed      1     522730 1950380 435.98
## - Ineq    1     787913 2215562 440.95
## - Po1     1    2069832 3497482 458.76
##
## Step:  AIC=425.36
## .outcome ~ M + Ed + Po1 + U2 + Ineq + Prob
##
##          Df Sum of Sq     RSS    AIC
```

```
## <none>                  1485449 425.36
## - Prob  1     165078 1650527 427.47
## - U2    1     179735 1665184 427.81
## - M     1     262380 1747829 429.70
## - Ed    1     620753 2106202 436.98
## - Ineq  1     732570 2218019 438.99
## - Po1   1    2389715 3875164 460.75
## Start:  AIC=408.67
## .outcome ~ M + Ed + Po1 + Po2 + LF + M.F + Pop + NW + U1 + U2 +
##     Wealth + Ineq + Prob + Time + So
##
##           Df Sum of Sq     RSS    AIC
## - LF       1      1916  977826 406.74
## - Time     1      5701  981611 406.88
## - Po2      1      8861  984771 407.00
## - So       1     10076  985986 407.05
## - Pop      1     11697  987607 407.11
## - NW       1     22709  998619 407.52
## - M.F      1     32477 1008388 407.88
## - Wealth   1     46961 1022871 408.41
## - U1       1     53040 1028950 408.63
## <none>                  975910 408.67
## - Po1      1     55029 1030939 408.70
## - M        1     94794 1070704 410.10
## - Ed       1    120947 1096857 410.99
## - U2       1    122474 1098384 411.04
## - Prob     1    180697 1156607 412.95
## - Ineq     1    310846 1286756 416.90
##
## Step:  AIC=406.74
## .outcome ~ M + Ed + Po1 + Po2 + M.F + Pop + NW + U1 + U2 + Wealth +
##     Ineq + Prob + Time + So
##
##           Df Sum of Sq     RSS    AIC
## - Time     1      5504  983331 404.95
## - So       1      8164  985990 405.05
## - Pop      1     10117  987943 405.12
## - Po2      1     17242  995068 405.39
## - NW       1     28944 1006770 405.82
## - Wealth   1     53492 1031319 406.71
## <none>                  977826 406.74
## - Po1      1     72881 1050707 407.40
## - M.F      1     87177 1065003 407.90
## - M        1    117200 1095027 408.93
## - U1       1    120842 1098668 409.05
## - U2       1    135548 1113374 409.54
## - Prob     1    179788 1157614 410.99
## - Ed       1    184527 1162353 411.14
## - Ineq     1    336851 1314678 415.69
##
## Step:  AIC=404.95
## .outcome ~ M + Ed + Po1 + Po2 + M.F + Pop + NW + U1 + U2 + Wealth +
##     Ineq + Prob + So
##
```

```
##             Df Sum of Sq      RSS    AIC
## - Pop     1       7019  990349 403.21
## - So      1       7567  990898 403.23
## - Po2     1      24152 1007483 403.85
## - NW      1      44673 1028004 404.59
## <none>                  983331 404.95
## - Wealth  1      62542 1045872 405.23
## - M.F     1      81694 1065024 405.90
## - Po1     1      81905 1065235 405.91
## - U1      1     124862 1108192 407.37
## - M       1     142858 1126188 407.97
## - U2      1     143946 1127277 408.00
## - Ed      1     181479 1164810 409.21
## - Prob    1     311694 1295024 413.14
## - Ineq    1     331654 1314985 413.70
##
## Step:  AIC=403.21
## .outcome ~ M + Ed + Po1 + Po2 + M.F + NW + U1 + U2 + Wealth +
##     Ineq + Prob + So
##
##             Df Sum of Sq      RSS    AIC
## - So      1       7106  997456 401.48
## - Po2     1      19273 1009622 401.92
## - NW      1      42251 1032601 402.76
## <none>                  990349 403.21
## - Wealth  1      58972 1049321 403.35
## - Po1     1      75179 1065528 403.92
## - M.F     1     112496 1102845 405.19
## - U1      1     132847 1123196 405.87
## - U2      1     147130 1137480 406.34
## - M       1     153930 1144279 406.56
## - Ed      1     174515 1164864 407.22
## - Prob    1     304775 1295124 411.14
## - Ineq    1     337661 1328010 412.07
##
## Step:  AIC=401.48
## .outcome ~ M + Ed + Po1 + Po2 + M.F + NW + U1 + U2 + Wealth +
##     Ineq + Prob
##
##             Df Sum of Sq      RSS    AIC
## - Po2     1      16595 1014051 400.09
## - NW      1      44708 1042163 401.10
## <none>                  997456 401.48
## - Wealth  1      58712 1056167 401.59
## - Po1     1      71285 1068740 402.03
## - M.F     1     107174 1104630 403.25
## - U1      1     143847 1141303 404.46
## - U2      1     163285 1160740 405.09
## - Ed      1     169315 1166770 405.28
## - M       1     189732 1187187 405.92
## - Prob    1     328712 1326168 410.01
## - Ineq    1     410650 1408105 412.23
##
## Step:  AIC=400.09
```

```
## .outcome ~ M + Ed + Po1 + M.F + NW + U1 + U2 + Wealth + Ineq +
##     Prob
##
##            Df Sum of Sq      RSS     AIC
## - NW        1      37417 1051467 399.43
## - Wealth    1      56259 1070309 400.08
## <none>                    1014051 400.09
## - M.F       1     121915 1135966 402.29
## - U1        1     134393 1148444 402.69
## - Ed        1     152832 1166883 403.28
## - U2        1     154945 1168996 403.35
## - M         1     205595 1219646 404.92
## - Prob      1     353848 1367899 409.16
## - Po1       1     382031 1396082 409.92
## - Ineq      1     415484 1429535 410.79
##
## Step:  AIC=399.43
## .outcome ~ M + Ed + Po1 + M.F + U1 + U2 + Wealth + Ineq + Prob
##
##            Df Sum of Sq      RSS     AIC
## - Wealth    1      36984 1088452 398.71
## <none>                    1051467 399.43
## - M.F       1      95253 1146721 400.64
## - U1        1     118073 1169541 401.36
## - U2        1     148181 1199649 402.30
## - Ed        1     156066 1207533 402.55
## - M         1     284349 1335816 406.28
## - Prob      1     317940 1369407 407.20
## - Ineq      1     523570 1575037 412.38
## - Po1       1     704532 1755999 416.40
##
## Step:  AIC=398.71
## .outcome ~ M + Ed + Po1 + M.F + U1 + U2 + Ineq + Prob
##
##          Df Sum of Sq      RSS     AIC
## <none>                  1088452 398.71
## - M.F     1     132564 1221016 400.96
## - U1      1     137503 1225955 401.11
## - Ed      1     167340 1255792 402.00
## - U2      1     173659 1262111 402.18
## - M       1     253532 1341983 404.45
## - Prob    1     388680 1477132 408.00
## - Ineq    1     594595 1683046 412.83
## - Po1     1    1152757 2241208 423.43
## Start:  AIC=411.08
## .outcome ~ M + Ed + Po1 + Po2 + LF + M.F + Pop + NW + U1 + U2 +
##     Wealth + Ineq + Prob + Time + So
##
##            Df Sum of Sq      RSS     AIC
## - So        1         71 649388 409.09
## - Pop       1        213 649530 409.10
## - NW        1        255 649572 409.10
## - Po2       1       1136 650453 409.15
## - LF        1       2722 652039 409.25
```

```
## - Wealth   1      3891 653208 409.32
## - M.F      1     14651 663968 409.95
## - Time     1     21960 671277 410.38
## <none>                 649317 411.08
## - Po1      1     57746 707063 412.41
## - U1       1     70699 720016 413.12
## - U2       1    111032 760349 415.24
## - Ineq     1    123902 773219 415.90
## - M        1    148526 797843 417.12
## - Ed       1    180843 830160 418.67
## - Prob     1    181908 831225 418.72
##
## Step:  AIC=409.09
## .outcome ~ M + Ed + Po1 + Po2 + LF + M.F + Pop + NW + U1 + U2 +
##     Wealth + Ineq + Prob + Time
##
##           Df Sum of Sq     RSS    AIC
## - NW       1       184 649572 407.10
## - Pop      1       200 649588 407.10
## - Po2      1      1071 650459 407.15
## - LF       1      2992 652380 407.27
## - Wealth   1      4231 653618 407.34
## - M.F      1     14583 663970 407.95
## - Time     1     23913 673300 408.50
## <none>                 649388 409.09
## - Po1      1     58616 708003 410.46
## - U1       1     81530 730917 411.70
## - U2       1    111636 761023 413.28
## - Ineq     1    132631 782019 414.34
## - M        1    148517 797905 415.12
## - Prob     1    181874 831262 416.72
## - Ed       1    183156 832544 416.78
##
## Step:  AIC=407.1
## .outcome ~ M + Ed + Po1 + Po2 + LF + M.F + Pop + U1 + U2 + Wealth +
##     Ineq + Prob + Time
##
##           Df Sum of Sq     RSS    AIC
## - Pop      1       164 649736 405.11
## - Po2      1       895 650468 405.15
## - LF       1      2847 652420 405.27
## - Wealth   1      4270 653843 405.36
## - M.F      1     14698 664270 405.97
## - Time     1     24479 674051 406.54
## <none>                 649572 407.10
## - Po1      1     60463 710035 408.57
## - U1       1     81933 731505 409.73
## - U2       1    111720 761292 411.29
## - Ineq     1    161472 811044 413.76
## - M        1    169857 819429 414.16
## - Ed       1    186092 835664 414.92
## - Prob     1    204318 853891 415.77
##
## Step:  AIC=405.11
```

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```
## .outcome ~ M + Ed + Po1 + Po2 + LF + M.F + U1 + U2 + Wealth +
##      Ineq + Prob + Time
##
##           Df Sum of Sq    RSS    AIC
## - Po2     1       876 650611 403.16
## - LF      1      2712 652447 403.27
## - Wealth  1      4123 653859 403.36
## - M.F     1     16443 666179 404.08
## - Time    1     24524 674260 404.55
## <none>             649736 405.11
## - Po1     1     60574 710310 406.59
## - U1      1     82993 732729 407.80
## - U2      1    112906 762641 409.36
## - M       1    169749 819484 412.16
## - Ed      1    187613 837349 413.00
## - Ineq    1    195041 844776 413.35
## - Prob    1    205378 855114 413.82
##
## Step:  AIC=403.16
## .outcome ~ M + Ed + Po1 + LF + M.F + U1 + U2 + Wealth + Ineq +
##      Prob + Time
##
##           Df Sum of Sq     RSS     AIC
## - LF      1      2082   652694 401.29
## - Wealth  1      4862   655473 401.45
## - M.F     1     17349   667960 402.19
## - Time    1     23710   674322 402.56
## <none>              650611 403.16
## - U1      1     83797   734408 405.89
## - U2      1    119527   770138 407.74
## - M       1    170193   820804 410.22
## - Ed      1    188123   838734 411.07
## - Ineq    1    194430   845041 411.36
## - Prob    1    206141   856752 411.90
## - Po1     1   1251734  1902346 443.01
##
## Step:  AIC=401.29
## .outcome ~ M + Ed + Po1 + M.F + U1 + U2 + Wealth + Ineq + Prob +
##      Time
##
##           Df Sum of Sq     RSS     AIC
## - Wealth  1      5150   657844 399.59
## - M.F     1     15338   668032 400.19
## - Time    1     28397   681090 400.95
## <none>              652694 401.29
## - U1      1     81867   734560 403.90
## - U2      1    121408   774101 405.94
## - M       1    180486   833179 408.81
## - Ineq    1    193003   845696 409.39
## - Ed      1    197128   849822 409.58
## - Prob    1    204824   857518 409.93
## - Po1     1   1287417  1940111 441.77
##
## Step:  AIC=399.59
```

```
## .outcome ~ M + Ed + Po1 + M.F + U1 + U2 + Ineq + Prob + Time
##
##          Df Sum of Sq     RSS    AIC
## - M.F    1     12954  670797 398.35
## - Time   1     30176  688019 399.34
## <none>               657844 399.59
## - U1     1     76725  734568 401.90
## - U2     1    116290  774134 403.94
## - Ed     1    192495  850338 407.60
## - M      1    196134  853977 407.77
## - Prob   1    199741  857584 407.93
## - Ineq   1    465587 1123430 418.47
## - Po1    1   1638590 2296433 446.35
##
## Step:  AIC=398.35
## .outcome ~ M + Ed + Po1 + U1 + U2 + Ineq + Prob + Time
##
##          Df Sum of Sq     RSS    AIC
## <none>               670797 398.35
## - Time   1     49459  720257 399.13
## - U1     1     63859  734656 399.90
## - U2     1    104095  774893 401.98
## - M      1    233984  904782 408.02
## - Prob   1    236589  907386 408.14
## - Ed     1    241898  912696 408.36
## - Ineq   1    569624 1240421 420.33
## - Po1    1   1861628 2532425 448.16
## Start:  AIC=420.38
## .outcome ~ M + Ed + Po1 + Po2 + LF + M.F + Pop + NW + U1 + U2 +
##     Wealth + Ineq + Prob + Time + So
##
##          Df Sum of Sq     RSS    AIC
## - LF     1        13 1043425 418.38
## - So     1      4555 1047966 418.54
## - Pop    1     16548 1059960 418.97
## - Time   1     22691 1066103 419.19
## - NW     1     28535 1071947 419.40
## - Po2    1     28610 1072021 419.40
## - U2     1     31164 1074576 419.49
## - U1     1     33602 1077014 419.58
## - M.F    1     33994 1077406 419.59
## - M      1     41240 1084652 419.85
## <none>               1043412 420.38
## - Ed     1     64954 1108366 420.67
## - Wealth 1     82489 1125901 421.27
## - Po1    1     97124 1140536 421.76
## - Prob   1    262622 1306033 426.91
## - Ineq   1    345327 1388739 429.24
##
## Step:  AIC=418.38
## .outcome ~ M + Ed + Po1 + Po2 + M.F + Pop + NW + U1 + U2 + Wealth +
##     Ineq + Prob + Time + So
##
##           Df Sum of Sq     RSS     AIC
```

```
## - So        1       6462 1049887 416.61
## - Pop       1      16948 1060372 416.99
## - Time      1      22908 1066332 417.20
## - Po2       1      29654 1073079 417.44
## - U2        1      31526 1074951 417.51
## - NW        1      31945 1075370 417.52
## - M         1      41319 1084743 417.85
## - M.F       1      41600 1085025 417.86
## - U1        1      42796 1086220 417.90
## <none>                    1043425 418.38
## - Ed        1      70798 1114223 418.87
## - Wealth  1      83602 1127027 419.31
## - Po1       1      98838 1142262 419.82
## - Prob      1     262933 1306357 424.92
## - Ineq      1     354095 1397519 427.48
##
## Step:  AIC=416.61
## .outcome ~ M + Ed + Po1 + Po2 + M.F + Pop + NW + U1 + U2 + Wealth +
##     Ineq + Prob + Time
##
##            Df Sum of Sq      RSS     AIC
## - Pop       1      23811 1073698 415.46
## - Time      1      27411 1077297 415.59
## - Po2       1      28768 1078654 415.64
## - M.F       1      37974 1087861 415.96
## - U2        1      44000 1093887 416.17
## - NW        1      48221 1098108 416.32
## - M         1      48836 1098723 416.34
## - U1        1      56338 1106225 416.60
## <none>                    1049887 416.61
## - Ed        1      66355 1116242 416.94
## - Wealth  1      96295 1146182 417.95
## - Po1       1      97710 1147597 417.99
## - Prob      1     258818 1308704 422.98
## - Ineq      1     418281 1468168 427.35
##
## Step:  AIC=415.46
## .outcome ~ M + Ed + Po1 + Po2 + M.F + NW + U1 + U2 + Wealth +
##     Ineq + Prob + Time
##
##            Df Sum of Sq      RSS     AIC
## - Po2       1      29120 1102818 414.48
## - U2        1      42257 1115955 414.93
## - NW        1      43335 1117033 414.97
## - M.F       1      47025 1120723 415.09
## - Time      1      47203 1120901 415.10
## <none>                    1073698 415.46
## - Ed        1      62734 1136432 415.62
## - U1        1      63068 1136766 415.63
## - M         1      72222 1145919 415.94
## - Wealth  1      88592 1162289 416.48
## - Po1       1      89620 1163317 416.51
## - Prob      1     253017 1326715 421.50
## - Ineq      1     395540 1469238 425.38
```

```
## 
## Step:  AIC=414.48
## .outcome ~ M + Ed + Po1 + M.F + NW + U1 + U2 + Wealth + Ineq +
##     Prob + Time
## 
##          Df Sum of Sq     RSS    AIC
## - Time    1     23685 1126503 413.29
## - NW      1     28289 1131107 413.44
## - U2      1     42180 1144998 413.91
## - M.F     1     45950 1148768 414.03
## - U1      1     50174 1152992 414.17
## <none>              1102818 414.48
## - Ed      1     75559 1178377 415.00
## - M       1     79088 1181906 415.11
## - Wealth  1     91791 1194609 415.52
## - Prob    1    225130 1327948 419.54
## - Ineq    1    475344 1578162 426.10
## - Po1     1    655805 1758623 430.21
## 
## Step:  AIC=413.29
## .outcome ~ M + Ed + Po1 + M.F + NW + U1 + U2 + Wealth + Ineq +
##     Prob
## 
##          Df Sum of Sq     RSS    AIC
## - NW      1     20824 1147327 411.98
## - U2      1     45125 1171629 412.78
## - U1      1     49123 1175627 412.91
## <none>              1126503 413.29
## - M       1     74373 1200876 413.72
## - M.F     1     78189 1204692 413.84
## - Wealth  1     78678 1205181 413.85
## - Ed      1    102403 1228906 414.59
## - Prob    1    218601 1345104 418.03
## - Ineq    1    480626 1607130 424.79
## - Po1     1    707090 1833594 429.80
## 
## Step:  AIC=411.98
## .outcome ~ M + Ed + Po1 + M.F + U1 + U2 + Wealth + Ineq + Prob
## 
##          Df Sum of Sq     RSS    AIC
## - U1      1     51326 1198653 411.65
## - U2      1     53033 1200360 411.70
## <none>              1147327 411.98
## - M.F     1     64450 1211777 412.06
## - Wealth  1     69494 1216821 412.22
## - Ed      1     99992 1247319 413.16
## - M       1    129439 1276766 414.05
## - Prob    1    198175 1345502 416.04
## - Ineq    1    562420 1709747 425.14
## - Po1     1    945916 2093243 432.83
## 
## Step:  AIC=411.65
## .outcome ~ M + Ed + Po1 + M.F + U2 + Wealth + Ineq + Prob
## 
```

```
##          Df Sum of Sq      RSS    AIC
## - U2      1      6742 1205395 409.86
## - M.F     1     24618 1223271 410.42
## <none>                1198653 411.65
## - Ed      1     86530 1285183 412.30
## - Wealth  1    109595 1308248 412.97
## - M       1    141434 1340087 413.89
## - Prob    1    199882 1398534 415.51
## - Ineq    1    698899 1897551 427.10
## - Po1     1   1044193 2242846 433.46
##
## Step:  AIC=409.86
## .outcome ~ M + Ed + Po1 + M.F + Wealth + Ineq + Prob
##
##          Df Sum of Sq      RSS    AIC
## - M.F     1     37774 1243169 409.03
## <none>                1205395 409.86
## - Ed      1     95247 1300642 410.75
## - Wealth  1    121682 1327077 411.51
## - M       1    144513 1349908 412.16
## - Prob    1    199765 1405160 413.69
## - Ineq    1    699283 1904678 425.25
## - Po1     1   1107978 2313373 432.63
##
## Step:  AIC=409.03
## .outcome ~ M + Ed + Po1 + Wealth + Ineq + Prob
##
##          Df Sum of Sq      RSS    AIC
## <none>                1243169 409.03
## - Wealth  1    138630 1381799 411.05
## - M       1    168775 1411944 411.87
## - Ed      1    189669 1432838 412.43
## - Prob    1    193739 1436908 412.54
## - Ineq    1    739033 1982202 424.76
## - Po1     1   1102753 2345922 431.16
## Start:  AIC=399.32
## .outcome ~ M + Ed + Po1 + Po2 + LF + M.F + Pop + NW + U1 + U2 +
##     Wealth + Ineq + Prob + Time + So
##
##          Df Sum of Sq      RSS    AIC
## - M.F     1       166  758124 397.32
## - NW      1      1214  759172 397.38
## - Pop     1      3285  761243 397.48
## - Po2     1      3346  761305 397.48
## - Time    1      5842  763800 397.60
## - So      1     11601  769559 397.88
## - LF      1     13442  771400 397.97
## - Wealth  1     17757  775715 398.17
## - Po1     1     18208  776167 398.19
## <none>                 757958 399.32
## - U1      1     56373  814332 399.97
## - Prob    1     94295  852254 401.65
## - U2      1    143554  901512 403.73
## - M       1    212290  970249 406.45
```

```
## - Ed       1    285349 1043308 409.14
## - Ineq     1    383442 1141400 412.46
##
## Step:  AIC=397.32
## .outcome ~ M + Ed + Po1 + Po2 + LF + Pop + NW + U1 + U2 + Wealth +
##     Ineq + Prob + Time + So
##
##           Df Sum of Sq     RSS    AIC
## - NW       1      1050  759174 395.38
## - Pop      1      3345  761469 395.49
## - Po2      1      3389  761513 395.49
## - Time     1      5775  763899 395.61
## - So       1     12748  770872 395.94
## - Wealth   1     17770  775894 396.18
## - Po1      1     18062  776186 396.20
## - LF       1     18786  776910 396.23
## <none>                  758124 397.32
## - U1       1     70005  828129 398.59
## - Prob     1     94601  852725 399.68
## - U2       1    144894  903018 401.80
## - M        1    239381  997506 405.48
## - Ed       1    285375 1043499 407.15
## - Ineq     1    386308 1144432 410.56
##
## Step:  AIC=395.38
## .outcome ~ M + Ed + Po1 + Po2 + LF + Pop + U1 + U2 + Wealth +
##     Ineq + Prob + Time + So
##
##           Df Sum of Sq     RSS    AIC
## - Po2      1      2707  761881 393.51
## - Pop      1      2807  761981 393.51
## - Time     1     11724  770898 393.94
## - Po1      1     18918  778092 394.29
## - LF       1     20502  779676 394.36
## - So       1     20691  779866 394.37
## - Wealth   1     22897  782071 394.47
## <none>                  759174 395.38
## - U1       1     71356  830530 396.70
## - Prob     1    103100  862274 398.09
## - U2       1    143881  903055 399.80
## - M        1    240120  999295 403.54
## - Ed       1    315524 1074698 406.24
## - Ineq     1    393246 1152421 408.82
##
## Step:  AIC=393.51
## .outcome ~ M + Ed + Po1 + LF + Pop + U1 + U2 + Wealth + Ineq +
##     Prob + Time + So
##
##           Df Sum of Sq     RSS    AIC
## - Pop      1      3666  765548 391.68
## - Time     1     13510  775391 392.16
## - So       1     19484  781366 392.44
## - Wealth   1     24731  786612 392.69
## - LF       1     27525  789406 392.82
```

```
## <none>                    761881 393.51
## - U1      1       72488  834370 394.87
## - Prob    1      118592  880473 396.86
## - U2      1      143918  905799 397.91
## - M       1      254563 1016444 402.17
## - Ed      1      323360 1085241 404.60
## - Ineq    1      390564 1152445 406.82
## - Po1     1      569091 1330973 412.15
##
## Step:  AIC=391.68
## .outcome ~ M + Ed + Po1 + LF + U1 + U2 + Wealth + Ineq + Prob +
##      Time + So
##
##            Df Sum of Sq     RSS    AIC
## - So       1       18853  784401 390.59
## - Time     1       24226  789774 390.84
## - Wealth   1       25031  790579 390.88
## - LF       1       25739  791287 390.91
## <none>                    765548 391.68
## - U1       1       69416  834964 392.90
## - Prob     1      115657  881204 394.89
## - U2       1      140548  906096 395.92
## - M        1      257216 1022763 400.40
## - Ed       1      327392 1092940 402.86
## - Ineq     1      389221 1154769 404.89
## - Po1      1      579990 1345538 410.55
##
## Step:  AIC=390.59
## .outcome ~ M + Ed + Po1 + LF + U1 + U2 + Wealth + Ineq + Prob +
##      Time
##
##            Df Sum of Sq     RSS    AIC
## - LF       1       13485  797886 389.22
## - Wealth   1       15283  799683 389.30
## - Time     1       24128  808528 389.71
## <none>                    784401 390.59
## - U1       1       54862  839262 391.09
## - U2       1      125698  910099 394.08
## - Prob     1      176563  960963 396.10
## - M        1      244423 1028823 398.62
## - Ed       1      343614 1128015 402.03
## - Ineq     1      391915 1176315 403.58
## - Po1      1      614816 1399216 410.00
##
## Step:  AIC=389.22
## .outcome ~ M + Ed + Po1 + U1 + U2 + Wealth + Ineq + Prob + Time
##
##            Df Sum of Sq     RSS    AIC
## - Wealth   1       20666  818552 388.16
## - Time     1       21736  819621 388.21
## <none>                    797886 389.22
## - U1       1       46628  844514 389.32
## - U2       1      126601  924487 392.66
## - Prob     1      163083  960969 394.10
```

```
## - M      1    258711 1056597 397.61
## - Ed     1    355389 1153275 400.85
## - Ineq   1    385978 1183863 401.81
## - Po1    1    601902 1399788 408.01
##
## Step:  AIC=388.16
## .outcome ~ M + Ed + Po1 + U1 + U2 + Ineq + Prob + Time
##
##          Df Sum of Sq      RSS     AIC
## - Time  1     24560   843112 387.26
## <none>             818552 388.16
## - U1    1     92958   911510 390.14
## - U2    1    181592  1000144 393.58
## - M     1    238332  1056884 395.62
## - Prob  1    244783  1063335 395.84
## - Ed    1    434881  1253433 401.93
## - Ineq  1    592514  1411066 406.31
## - Po1   1   1582805  2401357 425.98
##
## Step:  AIC=387.26
## .outcome ~ M + Ed + Po1 + U1 + U2 + Ineq + Prob
##
##          Df Sum of Sq      RSS     AIC
## <none>             843112 387.26
## - U1    1     71541   914653 388.27
## - U2    1    158451  1001563 391.63
## - M     1    228327  1071439 394.12
## - Prob  1    240827  1083939 394.55
## - Ed    1    456524  1299636 401.27
## - Ineq  1    575706  1418818 404.51
## - Po1   1   1644507  2487619 425.29
## Start:  AIC=410.73
## .outcome ~ M + Ed + Po1 + Po2 + LF + M.F + Pop + NW + U1 + U2 +
##     Wealth + Ineq + Prob + Time + So
##
##            Df Sum of Sq      RSS     AIC
## - So      1      2104  1033961 408.81
## - M.F     1      2839  1034695 408.83
## - Wealth  1      2865  1034721 408.83
## - Time    1      3314  1035171 408.85
## - LF      1      9820  1041676 409.08
## - NW      1     37190  1069046 410.04
## - Po2     1     44420  1076277 410.29
## <none>               1031856 410.73
## - Pop     1     58111  1089968 410.76
## - U1      1     68531  1100387 411.11
## - M       1     69251  1101107 411.13
## - Prob    1    120701  1152557 412.82
## - Po1     1    127758  1159615 413.05
## - U2      1    204116  1235972 415.41
## - Ed      1    211589  1243445 415.63
## - Ineq    1    227964  1259821 416.12
##
## Step:  AIC=408.81
```

```
## .outcome ~ M + Ed + Po1 + Po2 + LF + M.F + Pop + NW + U1 + U2 +
##     Wealth + Ineq + Prob + Time
##
##           Df Sum of Sq     RSS    AIC
## - M.F      1      1537 1035497 406.86
## - Wealth   1      2339 1036299 406.89
## - Time     1      2654 1036615 406.90
## - LF       1     25380 1059341 407.70
## - NW       1     37955 1071916 408.14
## - Po2      1     42383 1076344 408.29
## <none>              1033961 408.81
## - Pop      1     61879 1095840 408.96
## - M        1     74263 1108224 409.37
## - U1       1     79008 1112969 409.53
## - Prob     1    119584 1153545 410.85
## - Po1      1    125923 1159883 411.06
## - Ed       1    213668 1247629 413.76
## - U2       1    220718 1254678 413.96
## - Ineq     1    238819 1272779 414.49
##
## Step:  AIC=406.86
## .outcome ~ M + Ed + Po1 + Po2 + LF + Pop + NW + U1 + U2 + Wealth +
##     Ineq + Prob + Time
##
##           Df Sum of Sq     RSS    AIC
## - Wealth   1      2969 1038467 404.97
## - Time     1      3998 1039496 405.00
## - NW       1     37449 1072947 406.18
## - Po2      1     42296 1077793 406.34
## - LF       1     53017 1088514 406.71
## <none>              1035497 406.86
## - Pop      1     84222 1119719 407.75
## - M        1    102332 1137830 408.35
## - U1       1    105819 1141316 408.46
## - Prob     1    123192 1158689 409.02
## - Po1      1    129155 1164652 409.21
## - Ed       1    213406 1248904 411.79
## - U2       1    224690 1260187 412.13
## - Ineq     1    272956 1308453 413.52
##
## Step:  AIC=404.97
## .outcome ~ M + Ed + Po1 + Po2 + LF + Pop + NW + U1 + U2 + Ineq +
##     Prob + Time
##
##           Df Sum of Sq     RSS    AIC
## - Time     1      4034 1042500 403.11
## - NW       1     36160 1074627 404.23
## - Po2      1     41747 1080214 404.42
## <none>              1038467 404.97
## - LF       1     59040 1097507 405.01
## - Pop      1     82878 1121345 405.81
## - M        1     99965 1138431 406.37
## - U1       1    117333 1155800 406.93
## - Po1      1    130214 1168681 407.34
```

```
## - Prob  1     142528 1180995 407.73
## - Ed    1     233142 1271609 410.46
## - U2    1     252823 1291289 411.03
## - Ineq  1     328395 1366862 413.13
##
## Step:  AIC=403.11
## .outcome ~ M + Ed + Po1 + Po2 + LF + Pop + NW + U1 + U2 + Ineq +
##     Prob
##
##          Df Sum of Sq    RSS    AIC
## - NW    1      32980 1075480 402.26
## - Po2   1      38886 1081386 402.46
## <none>             1042500 403.11
## - LF    1      59011 1101511 403.15
## - M     1      97818 1140318 404.43
## - U1    1     114558 1157058 404.97
## - Pop   1     119533 1162033 405.13
## - Po1   1     127356 1169856 405.37
## - Prob  1     218551 1261051 408.15
## - Ed    1     247194 1289694 408.98
## - U2    1     249644 1292144 409.05
## - Ineq  1     371262 1413762 412.38
##
## Step:  AIC=402.26
## .outcome ~ M + Ed + Po1 + Po2 + LF + Pop + U1 + U2 + Ineq + Prob
##
##          Df Sum of Sq    RSS    AIC
## - Po2   1      34053 1109533 401.42
## - LF    1      53561 1129041 402.06
## <none>             1075480 402.26
## - Pop   1      97392 1172872 403.47
## - Po1   1     125805 1201285 404.36
## - U1    1     132123 1207603 404.55
## - M     1     137502 1212982 404.71
## - Prob  1     185625 1261105 406.15
## - Ed    1     247759 1323239 407.93
## - U2    1     255466 1330946 408.15
## - Ineq  1     557264 1632744 415.71
##
## Step:  AIC=401.42
## .outcome ~ M + Ed + Po1 + LF + Pop + U1 + U2 + Ineq + Prob
##
##          Df Sum of Sq    RSS    AIC
## <none>             1109533 401.42
## - Pop   1      88338 1197871 402.25
## - U1    1     116915 1226447 403.12
## - LF    1     116937 1226470 403.12
## - M     1     209850 1319383 405.83
## - Ed    1     214093 1323626 405.94
## - Prob  1     215556 1325089 405.98
## - U2    1     276171 1385704 407.64
## - Ineq  1     546383 1655916 414.23
## - Po1   1     926514 2036047 421.88
## Start:  AIC=388.7
```

```
## .outcome ~ M + Ed + Po1 + Po2 + LF + M.F + Pop + NW + U1 + U2 +
##     Wealth + Ineq + Prob + Time + So
##
##           Df Sum of Sq      RSS     AIC
## - Time     1       629   454042  386.76
## - Pop      1      2682   456094  386.93
## - Wealth   1     14337   467749  387.89
## - So       1     20096   473509  388.35
## <none>                   453413  388.70
## - NW       1     36015   489428  389.61
## - U1       1     42892   496305  390.14
## - M.F      1     70460   523873  392.19
## - LF       1     94300   547713  393.88
## - Ineq     1     96211   549624  394.02
## - Prob     1    127945   581358  396.15
## - U2       1    130858   584271  396.34
## - Po2      1    144746   598159  397.23
## - M        1    260369   713782  403.95
## - Po1      1    316098   769511  406.81
## - Ed       1    676422  1129835  421.40
##
## Step:  AIC=386.76
## .outcome ~ M + Ed + Po1 + Po2 + LF + M.F + Pop + NW + U1 + U2 +
##     Wealth + Ineq + Prob + So
##
##           Df Sum of Sq      RSS     AIC
## - Pop      1      3074   457116  385.01
## - Wealth   1     15322   469363  386.02
## - So       1     19875   473917  386.39
## <none>                   454042  386.76
## - NW       1     36280   490322  387.68
## - U1       1     42942   496984  388.19
## - M.F      1     85287   539329  391.30
## - Ineq     1     95762   549803  392.03
## - LF       1     97951   551993  392.18
## - U2       1    130258   584299  394.34
## - Po2      1    154752   608794  395.90
## - Prob     1    189503   643545  398.01
## - M        1    272016   726058  402.60
## - Po1      1    341078   795120  406.05
## - Ed       1    685268  1139309  419.72
##
## Step:  AIC=385.01
## .outcome ~ M + Ed + Po1 + Po2 + LF + M.F + NW + U1 + U2 + Wealth +
##     Ineq + Prob + So
##
##           Df Sum of Sq      RSS     AIC
## - Wealth   1     16125   473240  384.33
## - So       1     19855   476971  384.63
## <none>                   457116  385.01
## - NW       1     39311   496426  386.15
## - U1       1     49620   506736  386.93
## - Ineq     1     97648   554764  390.37
## - LF       1    106303   563419  390.96
```

```
## - M.F    1    128923   586039 392.46
## - U2     1    135050   592166 392.85
## - Po2    1    162061   619177 394.55
## - Prob   1    186863   643979 396.04
## - M      1    271181   728297 400.71
## - Po1    1    339942   797058 404.14
## - Ed     1    682342  1139458 417.72
##
## Step:  AIC=384.33
## .outcome ~ M + Ed + Po1 + Po2 + LF + M.F + NW + U1 + U2 + Ineq +
##      Prob + So
##
##          Df Sum of Sq    RSS    AIC
## - So    1      11965   485205 383.28
## <none>              473240 384.33
## - NW    1      50278   523518 386.17
## - U1    1      56289   529530 386.60
## - LF    1     118229   591470 390.81
## - M.F   1     127341   600582 391.39
## - U2    1     130256   603496 391.57
## - Po2   1     159854   633094 393.39
## - Prob  1     172442   645682 394.14
## - Ineq  1     246258   719498 398.25
## - M     1     290271   763511 400.51
## - Po1   1     326029   799269 402.25
## - Ed    1     666347  1139588 415.73
##
## Step:  AIC=383.28
## .outcome ~ M + Ed + Po1 + Po2 + LF + M.F + NW + U1 + U2 + Ineq +
##      Prob
##
##          Df Sum of Sq    RSS    AIC
## <none>              485205 383.28
## - U1    1      95392   580597 388.10
## - NW    1      99762   584967 388.39
## - U2    1     153705   638910 391.74
## - Po2   1     159877   645082 392.10
## - M.F   1     161169   646374 392.18
## - Prob  1     162168   647373 392.24
## - LF    1     205430   690635 394.70
## - M     1     281211   766416 398.65
## - Po1   1     322955   808161 400.67
## - Ineq  1     322993   808198 400.67
## - Ed    1     672143  1157349 414.31
## Start:  AIC=427.69
## .outcome ~ M + Ed + Po1 + Po2 + LF + M.F + Pop + NW + U1 + U2 +
##      Wealth + Ineq + Prob + Time + So
##
##           Df Sum of Sq    RSS    AIC
## - So     1       142  1264963 425.69
## - LF     1       902  1265723 425.72
## - NW     1      1411  1266231 425.73
## - Po2    1      5737  1270558 425.86
## - Time   1      5895  1270716 425.87
```

```
## - Pop      1       8321 1273141 425.94
## - Wealth  1      26283 1291104 426.47
## - Po1      1      56348 1321169 427.34
## - M.F      1      61825 1326645 427.50
## <none>                 1264820 427.69
## - U1       1     113528 1378349 428.95
## - M        1     126567 1391387 429.31
## - Prob     1     132117 1396938 429.46
## - U2       1     180600 1445420 430.76
## - Ed       1     315435 1580256 434.15
## - Ineq     1     328415 1593235 434.46
##
## Step:  AIC=425.69
## .outcome ~ M + Ed + Po1 + Po2 + LF + M.F + Pop + NW + U1 + U2 +
##     Wealth + Ineq + Prob + Time
##
##           Df Sum of Sq      RSS    AIC
## - LF       1       1445 1266408 423.74
## - NW       1       1683 1266646 423.74
## - Po2      1       5844 1270806 423.87
## - Time     1       6099 1271062 423.88
## - Pop      1       8264 1273226 423.94
## - Wealth  1      27691 1292654 424.52
## - Po1      1      56847 1321810 425.36
## - M.F      1      62365 1327328 425.52
## <none>                 1264963 425.69
## - U1       1     119795 1384758 427.13
## - M        1     136770 1401732 427.59
## - Prob     1     138034 1402997 427.63
## - U2       1     182034 1446997 428.80
## - Ed       1     316590 1581552 432.18
## - Ineq     1     421106 1686069 434.61
##
## Step:  AIC=423.74
## .outcome ~ M + Ed + Po1 + Po2 + M.F + Pop + NW + U1 + U2 + Wealth +
##     Ineq + Prob + Time
##
##           Df Sum of Sq      RSS    AIC
## - NW       1        905 1267313 421.76
## - Po2      1       4456 1270864 421.87
## - Time     1       5458 1271866 421.90
## - Pop      1       8729 1275137 422.00
## - Wealth  1      26265 1292674 422.52
## - Po1      1      57444 1323853 423.42
## - M.F      1      65852 1332260 423.66
## <none>                 1266408 423.74
## - U1       1     120639 1387047 425.19
## - Prob     1     145521 1411929 425.87
## - M        1     157833 1424241 426.20
## - U2       1     194266 1460674 427.16
## - Ed       1     344631 1611039 430.88
## - Ineq     1     419740 1686148 432.61
##
## Step:  AIC=421.76
```

```
## .outcome ~ M + Ed + Po1 + Po2 + M.F + Pop + U1 + U2 + Wealth +
##     Ineq + Prob + Time
##
##          Df Sum of Sq     RSS     AIC
## - Po2     1       3678 1270991 419.87
## - Time    1       4652 1271965 419.90
## - Pop     1       8200 1275513 420.01
## - Wealth  1      25504 1292817 420.52
## - Po1     1      56669 1323982 421.43
## - M.F     1      66719 1334033 421.71
## <none>               1267313 421.76
## - U1      1     123254 1390567 423.29
## - Prob    1     176092 1443405 424.71
## - U2      1     199624 1466938 425.32
## - M       1     207969 1475282 425.54
## - Ed      1     346736 1614049 428.95
## - Ineq    1     456254 1723567 431.45
##
## Step:  AIC=419.87
## .outcome ~ M + Ed + Po1 + M.F + Pop + U1 + U2 + Wealth + Ineq +
##     Prob + Time
##
##          Df Sum of Sq     RSS     AIC
## - Time    1       2950 1273941 417.96
## - Pop     1       7803 1278795 418.11
## - Wealth  1      24758 1295750 418.61
## <none>               1270991 419.87
## - M.F     1      85888 1356879 420.36
## - U1      1     129677 1400669 421.57
## - Prob    1     172890 1443882 422.72
## - M       1     204878 1475870 423.55
## - U2      1     210063 1481054 423.69
## - Ed      1     344338 1615329 426.98
## - Ineq    1     457931 1728922 429.57
## - Po1     1     776687 2047679 436.00
##
## Step:  AIC=417.96
## .outcome ~ M + Ed + Po1 + M.F + Pop + U1 + U2 + Wealth + Ineq +
##     Prob
##
##          Df Sum of Sq     RSS     AIC
## - Pop     1      12188 1286129 416.32
## - Wealth  1      24457 1298399 416.68
## <none>               1273941 417.96
## - M.F     1      88572 1362514 418.52
## - U1      1     128215 1402156 419.61
## - Prob    1     201910 1475851 421.55
## - M       1     205905 1479846 421.65
## - U2      1     212613 1486554 421.83
## - Ed      1     354129 1628071 425.28
## - Ineq    1     462483 1736424 427.73
## - Po1     1     836346 2110287 435.14
##
## Step:  AIC=416.32
```

```
## .outcome ~ M + Ed + Po1 + M.F + U1 + U2 + Wealth + Ineq + Prob
##
##          Df Sum of Sq     RSS     AIC
## - Wealth  1     18385 1304514 414.86
## <none>              1286129 416.32
## - U1      1    145611 1431740 418.40
## - M.F     1    153536 1439666 418.61
## - Prob    1    189980 1476109 419.56
## - M       1    209078 1495207 420.05
## - U2      1    219921 1506050 420.32
## - Ed      1    350380 1636509 423.48
## - Ineq    1    471744 1757873 426.20
## - Po1     1    886962 2173091 434.25
##
## Step:  AIC=414.86
## .outcome ~ M + Ed + Po1 + M.F + U1 + U2 + Ineq + Prob
##
##        Df Sum of Sq     RSS     AIC
## <none>            1304514 414.86
## - U1    1    171990 1476504 417.57
## - M.F   1    178869 1483383 417.75
## - M     1    192460 1496974 418.09
## - Prob  1    216720 1521234 418.70
## - U2    1    249727 1554241 419.52
## - Ed    1    386103 1690617 422.71
## - Ineq  1    650593 1955107 428.24
## - Po1   1   1308518 2613031 439.26
## Start:  AIC=401.79
## .outcome ~ M + Ed + Po1 + Po2 + LF + M.F + Pop + NW + U1 + U2 +
##     Wealth + Ineq + Prob + Time + So
##
##          Df Sum of Sq    RSS    AIC
## - LF      1        13 810476 399.79
## - M.F     1       333 810796 399.81
## - NW      1       492 810954 399.82
## - Time    1       854 811316 399.83
## - U1      1      1481 811943 399.86
## - So      1      4756 815218 400.01
## - Pop     1      7470 817933 400.13
## - Wealth  1     11637 822099 400.32
## - Po2     1     32969 843431 401.27
## - U2      1     38877 849340 401.53
## <none>            810462 401.79
## - Prob    1     89046 899508 403.65
## - Po1     1    125762 936224 405.13
## - M       1    135301 945763 405.51
## - Ed      1    217149 1027611 408.58
## - Ineq    1    302006 1112468 411.51
##
## Step:  AIC=399.79
## .outcome ~ M + Ed + Po1 + Po2 + M.F + Pop + NW + U1 + U2 + Wealth +
##     Ineq + Prob + Time + So
##
##          Df Sum of Sq     RSS     AIC
```

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```
## - M.F      1        383    810859 397.81
## - NW       1        651    811127 397.82
## - Time     1        852    811328 397.83
## - U1       1       1684    812159 397.87
## - So       1       6526    817002 398.09
## - Pop      1       8461    818937 398.18
## - Wealth   1      11624    822099 398.32
## - Po2      1      34227    844702 399.33
## - U2       1      38948    849424 399.53
## <none>               810476 399.79
## - Prob     1      90809    901285 401.72
## - Po1      1     128353    938829 403.23
## - M        1     135434    945909 403.51
## - Ed       1     218618   1029094 406.63
## - Ineq     1     302328   1112804 409.52
##
## Step:  AIC=397.81
## .outcome ~ M + Ed + Po1 + Po2 + Pop + NW + U1 + U2 + Wealth +
##     Ineq + Prob + Time + So
##
##           Df Sum of Sq      RSS    AIC
## - NW       1        636    811495 395.84
## - Time     1       1297    812155 395.87
## - U1       1       1425    812284 395.88
## - So       1       6456    817315 396.11
## - Pop      1      12040    822898 396.36
## - Wealth   1      12127    822986 396.36
## - U2       1      39033    849892 397.55
## - Po2      1      44098    854956 397.77
## <none>               810859 397.81
## - Prob     1      93420    904279 399.85
## - M        1     149227    960086 402.06
## - Po1      1     165226    976084 402.67
## - Ed       1     307724   1118583 407.72
## - Ineq     1     340615   1151474 408.79
##
## Step:  AIC=395.84
## .outcome ~ M + Ed + Po1 + Po2 + Pop + U1 + U2 + Wealth + Ineq +
##     Prob + Time + So
##
##           Df Sum of Sq      RSS    AIC
## - U1       1       1882    813377 393.93
## - Time     1       2211    813706 393.94
## - So       1       5829    817324 394.11
## - Pop      1      12639    824134 394.41
## - Wealth   1      14064    825559 394.48
## - U2       1      41409    852904 395.68
## <none>               811495 395.84
## - Po2      1      51000    862495 396.10
## - Prob     1     112867    924361 398.66
## - M        1     149239    960734 400.09
## - Po1      1     174190    985685 401.04
## - Ed       1     314490   1125985 405.96
## - Ineq     1     340487   1151982 406.80
```

```
## 
## Step:  AIC=393.93
## .outcome ~ M + Ed + Po1 + Po2 + Pop + U2 + Wealth + Ineq + Prob +
##     Time + So
## 
##          Df Sum of Sq     RSS    AIC
## - Time    1      1618  814994 392.00
## - So      1      6480  819857 392.22
## - Pop     1     11812  825189 392.46
## - Wealth  1     15641  829018 392.63
## <none>                 813377 393.93
## - Po2     1     49118  862495 394.10
## - U2      1    104057  917434 396.38
## - Prob    1    111445  924822 396.68
## - M       1    148002  961378 398.11
## - Po1     1    172603  985979 399.05
## - Ineq    1    339684 1153061 404.84
## - Ed      1    358460 1171837 405.44
## 
## Step:  AIC=392
## .outcome ~ M + Ed + Po1 + Po2 + Pop + U2 + Wealth + Ineq + Prob +
##     So
## 
##          Df Sum of Sq     RSS    AIC
## - So      1      5714  820708 390.26
## - Wealth  1     17704  832699 390.80
## - Pop     1     18496  833491 390.83
## <none>                 814994 392.00
## - Po2     1     48149  863143 392.12
## - U2      1    102449  917443 394.38
## - Prob    1    134310  949305 395.64
## - M       1    163800  978794 396.78
## - Po1     1    176661  991656 397.26
## - Ed      1    410377 1225371 405.09
## - Ineq    1    417640 1232634 405.31
## 
## Step:  AIC=390.26
## .outcome ~ M + Ed + Po1 + Po2 + Pop + U2 + Wealth + Ineq + Prob
## 
##          Df Sum of Sq     RSS    AIC
## - Pop     1     17873  838581 389.06
## - Wealth  1     27817  848525 389.49
## - Po2     1     43194  863903 390.16
## <none>                 820708 390.26
## - U2      1    105747  926456 392.74
## - Prob    1    137860  958568 394.00
## - Po1     1    171439  992147 395.28
## - M       1    213928 1034636 396.83
## - Ed      1    456899 1277607 404.63
## - Ineq    1    536971 1357680 406.88
## 
## Step:  AIC=389.06
## .outcome ~ M + Ed + Po1 + Po2 + U2 + Wealth + Ineq + Prob
## 
```

```
##           Df Sum of Sq     RSS    AIC
## - Wealth  1      23321  861903 388.07
## - Po2     1      40884  879466 388.82
## <none>                   838581 389.06
## - U2      1      95892  934473 391.06
## - Prob    1     121099  959681 392.05
## - Po1     1     162780 1001362 393.62
## - M       1     230998 1069580 396.06
## - Ed      1     479719 1318301 403.79
## - Ineq    1     521055 1359636 404.94
##
## Step:  AIC=388.07
## .outcome ~ M + Ed + Po1 + Po2 + U2 + Ineq + Prob
##
##           Df Sum of Sq     RSS    AIC
## - Po2     1      42099  904002 387.84
## <none>                   861903 388.07
## - U2      1     107012  968915 390.40
## - Prob    1     142821 1004724 391.74
## - Po1     1     188748 1050651 393.40
## - M       1     211174 1073077 394.18
## - Ed      1     570646 1432549 404.87
## - Ineq    1     623589 1485492 406.21
##
## Step:  AIC=387.84
## .outcome ~ M + Ed + Po1 + U2 + Ineq + Prob
##
##           Df Sum of Sq     RSS    AIC
## <none>                   904002 387.84
## - U2      1     128948 1032951 390.77
## - Prob    1     151369 1055371 391.56
## - M       1     224079 1128081 394.03
## - Ed      1     562073 1466075 403.73
## - Ineq    1     669227 1573230 406.34
## - Po1     1    1885946 2789949 427.53
## Start:  AIC=409.57
## .outcome ~ M + Ed + Po1 + Po2 + LF + M.F + Pop + NW + U1 + U2 +
##     Wealth + Ineq + Prob + Time + So
##
##           Df Sum of Sq     RSS    AIC
## - Wealth  1          1 1000116 407.57
## - LF      1       2002 1002116 407.65
## - Time    1       2020 1002135 407.65
## - Pop     1       2212 1002327 407.66
## - Po2     1       3690 1003805 407.71
## - So      1      15516 1015631 408.14
## - Po1     1      26620 1026735 408.55
## - M.F     1      52991 1053106 409.48
## <none>                 1000115 409.57
## - NW      1      74456 1074571 410.23
## - Prob    1     104433 1104547 411.25
## - M       1     109903 1110018 411.43
## - Ineq    1     123639 1123753 411.89
## - U1      1     125922 1126037 411.96
```

```
## - Ed       1     222097 1222212 414.99
## - U2       1     248297 1248412 415.78
##
## Step:  AIC=407.57
## .outcome ~ M + Ed + Po1 + Po2 + LF + M.F + Pop + NW + U1 + U2 +
##     Ineq + Prob + Time + So
##
##          Df Sum of Sq     RSS    AIC
## - Time  1       2029 1002145 405.65
## - LF    1       2036 1002151 405.65
## - Pop   1       2242 1002358 405.66
## - Po2   1       3747 1003863 405.71
## - So    1      15690 1015806 406.15
## - Po1   1      26921 1027036 406.56
## - M.F   1      55036 1055152 407.56
## <none>              1000116 407.57
## - NW    1      74488 1074604 408.23
## - Prob  1     109066 1109182 409.40
## - M     1     113659 1113775 409.56
## - U1    1     133028 1133144 410.19
## - Ineq  1     181774 1181890 411.75
## - Ed    1     226034 1226150 413.11
## - U2    1     271624 1271740 414.46
##
## Step:  AIC=405.65
## .outcome ~ M + Ed + Po1 + Po2 + LF + M.F + Pop + NW + U1 + U2 +
##     Ineq + Prob + So
##
##          Df Sum of Sq     RSS    AIC
## - LF    1       1513 1003658 403.71
## - Po2   1       2991 1005136 403.76
## - Pop   1       3911 1006055 403.79
## - So    1      16182 1018326 404.24
## - Po1   1      25535 1027680 404.58
## <none>              1002145 405.65
## - M.F   1      63624 1065769 405.93
## - NW    1      74207 1076352 406.29
## - M     1     115340 1117485 407.68
## - U1    1     131015 1133160 408.20
## - Prob  1     150614 1152758 408.83
## - Ineq  1     188727 1190872 410.03
## - Ed    1     236860 1239005 411.50
## - U2    1     272516 1274661 412.55
##
## Step:  AIC=403.71
## .outcome ~ M + Ed + Po1 + Po2 + M.F + Pop + NW + U1 + U2 + Ineq +
##     Prob + So
##
##          Df Sum of Sq     RSS    AIC
## - Pop   1       3488 1007146 401.83
## - Po2   1       9050 1012708 402.04
## - So    1      43387 1047044 403.27
## - Po1   1      45464 1049121 403.34
## <none>              1003658 403.71
```

```
## - M.F    1      99685 1103343 405.21
## - NW     1     106445 1110103 405.43
## - M      1     137879 1141537 406.47
## - U1     1     156194 1159852 407.06
## - Prob   1     160478 1164136 407.19
## - Ineq   1     234825 1238482 409.48
## - U2     1     272875 1276533 410.60
## - Ed     1     424416 1428074 414.75
##
## Step:  AIC=401.83
## .outcome ~ M + Ed + Po1 + Po2 + M.F + NW + U1 + U2 + Ineq + Prob +
##     So
##
##          Df Sum of Sq     RSS    AIC
## - Po2   1       7941 1015087 400.12
## - So    1      41596 1048742 401.33
## - Po1   1      42076 1049222 401.35
## <none>              1007146 401.83
## - NW    1     104108 1111254 403.47
## - M     1     136832 1143978 404.55
## - Prob  1     157809 1164955 405.22
## - M.F   1     167823 1174969 405.54
## - U1    1     193265 1200411 406.33
## - Ineq  1     246096 1253242 407.92
## - U2    1     312396 1319542 409.83
## - Ed    1     421496 1428642 412.77
##
## Step:  AIC=400.12
## .outcome ~ M + Ed + Po1 + M.F + NW + U1 + U2 + Ineq + Prob +
##     So
##
##          Df Sum of Sq     RSS    AIC
## - So    1      40720 1055807 399.58
## <none>              1015087 400.12
## - NW    1      96198 1111285 401.47
## - M     1     151653 1166740 403.28
## - Prob  1     161794 1176881 403.60
## - M.F   1     216942 1232029 405.29
## - U1    1     218576 1233663 405.34
## - Ineq  1     280515 1295602 407.15
## - U2    1     354521 1369608 409.21
## - Po1   1     364011 1379098 409.46
## - Ed    1     415181 1430268 410.81
##
## Step:  AIC=399.58
## .outcome ~ M + Ed + Po1 + M.F + NW + U1 + U2 + Ineq + Prob
##
##          Df Sum of Sq     RSS    AIC
## - NW    1      58425 1114232 399.57
## <none>              1055807 399.58
## - M     1     135861 1191668 402.06
## - Prob  1     171579 1227386 403.15
## - U1    1     193434 1249241 403.80
## - M.F   1     224246 1280053 404.71
```

```
## - Ineq  1     250224 1306031 405.45
## - U2    1     321863 1377671 407.42
## - Ed    1     404552 1460359 409.58
## - Po1   1     427667 1483474 410.16
##
## Step:  AIC=399.57
## .outcome ~ M + Ed + Po1 + M.F + U1 + U2 + Ineq + Prob
##
##          Df Sum of Sq     RSS     AIC
## <none>                1114232 399.57
## - Prob  1     125545 1239777 401.52
## - M.F   1     197977 1312209 403.62
## - U1    1     229590 1343822 404.50
## - M     1     245641 1359873 404.94
## - Ed    1     372667 1486899 408.25
## - U2    1     374293 1488525 408.29
## - Ineq  1     504649 1618881 411.39
## - Po1   1     728513 1842745 416.19
## Start:  AIC=419.67
## .outcome ~ M + Ed + Po1 + Po2 + LF + M.F + Pop + NW + U1 + U2 +
##     Wealth + Ineq + Prob + Time + So
##
##          Df Sum of Sq     RSS     AIC
## - Time   1       389 1024612 417.69
## - Pop    1      3092 1027315 417.79
## - So     1     14467 1038690 418.20
## - Wealth 1     34286 1058509 418.92
## - NW     1     43908 1068131 419.27
## <none>                1024223 419.67
## - LF     1     80162 1104385 420.53
## - Po2    1     83878 1108101 420.66
## - Ineq   1    111055 1135278 421.58
## - U1     1    144693 1168916 422.69
## - M.F    1    155399 1179622 423.04
## - Prob   1    157658 1181881 423.11
## - U2     1    161195 1185418 423.22
## - Po1    1    178677 1202900 423.78
## - M      1    203171 1227394 424.55
## - Ed     1    536182 1560405 433.67
##
## Step:  AIC=417.69
## .outcome ~ M + Ed + Po1 + Po2 + LF + M.F + Pop + NW + U1 + U2 +
##     Wealth + Ineq + Prob + So
##
##          Df Sum of Sq     RSS     AIC
## - Pop    1      2821 1027432 415.79
## - So     1     15590 1040202 416.26
## - Wealth 1     34238 1058850 416.93
## - NW     1     46358 1070969 417.37
## <none>                1024612 417.69
## - LF     1     79783 1104395 418.53
## - Po2    1     90139 1114751 418.89
## - Ineq   1    110699 1135310 419.58
## - U1     1    146227 1170838 420.75
```

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```
## - U2       1      164603 1189214 421.35
## - M.F      1      165380 1189992 421.37
## - Po1      1      190019 1214631 422.15
## - M        1      202855 1227467 422.55
## - Prob     1      213153 1237765 422.87
## - Ed       1      536004 1560615 431.67
##
## Step:  AIC=415.79
## .outcome ~ M + Ed + Po1 + Po2 + LF + M.F + NW + U1 + U2 + Wealth +
##     Ineq + Prob + So
##
##           Df Sum of Sq     RSS     AIC
## - So       1       14689 1042121 414.33
## - Wealth   1       37223 1064655 415.14
## - NW       1       45083 1072515 415.42
## <none>                   1027432 415.79
## - LF       1       76966 1104398 416.53
## - Po2      1       87680 1115112 416.90
## - Ineq     1      140286 1167719 418.65
## - U1       1      143790 1171222 418.77
## - U2       1      162568 1190000 419.37
## - M.F      1      183395 1210827 420.03
## - Po1      1      190131 1217563 420.24
## - M        1      200199 1227631 420.55
## - Prob     1      216751 1244183 421.06
## - Ed       1      533901 1561333 429.69
##
## Step:  AIC=414.33
## .outcome ~ M + Ed + Po1 + Po2 + LF + M.F + NW + U1 + U2 + Wealth +
##     Ineq + Prob
##
##           Df Sum of Sq     RSS     AIC
## - Wealth   1       44988 1087109 413.93
## - NW       1       51823 1093944 414.17
## <none>                   1042121 414.33
## - Po2      1       77227 1119348 415.05
## - LF       1       94498 1136619 415.63
## - Po1      1      177583 1219704 418.31
## - M.F      1      188054 1230175 418.63
## - U1       1      190098 1232219 418.70
## - U2       1      197897 1240018 418.94
## - Prob     1      209074 1251195 419.28
## - M        1      220398 1262519 419.62
## - Ineq     1      276151 1318272 421.26
## - Ed       1      522616 1564737 427.77
##
## Step:  AIC=413.93
## .outcome ~ M + Ed + Po1 + Po2 + LF + M.F + NW + U1 + U2 + Ineq +
##     Prob
##
##           Df Sum of Sq     RSS     AIC
## - NW       1       29680 1116788 412.96
## <none>                   1087109 413.93
## - LF       1       65007 1152115 414.14
```

```
## - Po2    1      66064 1153173 414.18
## - M.F    1     163315 1250423 417.25
## - U1     1     172875 1259983 417.54
## - Po1    1     188943 1276051 418.02
## - Prob   1     207711 1294820 418.58
## - M      1     212852 1299961 418.73
## - U2     1     228703 1315812 419.19
## - Ineq   1     231196 1318305 419.26
## - Ed     1     519231 1606340 426.77
##
## Step:  AIC=412.96
## .outcome ~ M + Ed + Po1 + Po2 + LF + M.F + U1 + U2 + Ineq + Prob
##
##          Df Sum of Sq     RSS    AIC
## - LF     1      41153 1157941 412.33
## - Po2    1      42847 1159635 412.39
## <none>                1116788 412.96
## - M.F    1     134080 1250868 415.27
## - U1     1     147820 1264609 415.68
## - Po1    1     164104 1280893 416.17
## - Prob   1     182025 1298814 416.70
## - U2     1     220630 1337418 417.81
## - M      1     358298 1475086 421.53
## - Ed     1     496066 1612855 424.93
## - Ineq   1     519599 1636387 425.48
##
## Step:  AIC=412.33
## .outcome ~ M + Ed + Po1 + Po2 + M.F + U1 + U2 + Ineq + Prob
##
##          Df Sum of Sq     RSS    AIC
## - Po2    1      26018 1183959 411.18
## <none>                1157941 412.33
## - M.F    1      93359 1251300 413.28
## - U1     1     108170 1266111 413.73
## - Po1    1     138546 1296487 414.63
## - Prob   1     150009 1307951 414.96
## - U2     1     235336 1393278 417.36
## - M      1     383962 1541903 421.22
## - Ed     1     457743 1615684 422.99
## - Ineq   1     517482 1675423 424.37
##
## Step:  AIC=411.18
## .outcome ~ M + Ed + Po1 + M.F + U1 + U2 + Ineq + Prob
##
##          Df Sum of Sq     RSS    AIC
## <none>                1183959 411.18
## - U1     1     116379 1300339 412.74
## - M.F    1     126767 1310726 413.04
## - Prob   1     148418 1332378 413.67
## - U2     1     234364 1418324 416.04
## - M      1     367986 1551945 419.46
## - Ed     1     436080 1620039 421.09
## - Ineq   1     568700 1752659 424.08
## - Po1    1    1318518 2502477 437.62
```

```
## Start:  AIC=424.46
## .outcome ~ M + Ed + Po1 + Po2 + LF + M.F + Pop + NW + U1 + U2 +
##     Wealth + Ineq + Prob + Time + So
##
##          Df Sum of Sq     RSS    AIC
## - So      1        262 1162107 422.47
## - M.F     1        299 1162144 422.47
## - Pop     1       1182 1163026 422.50
## - NW      1       8093 1169938 422.73
## - LF      1       9408 1171252 422.77
## - Po2     1       9910 1171755 422.78
## - U1      1      15319 1177163 422.96
## - Time    1      16473 1178317 423.00
## - Po1     1      42705 1204549 423.83
## <none>               1161844 424.46
## - U2      1      85892 1247736 425.17
## - Wealth  1     144840 1306685 426.93
## - M       1     155183 1317027 427.23
## - Prob    1     158786 1320630 427.33
## - Ed      1     425592 1587436 434.32
## - Ineq    1     518310 1680154 436.48
##
## Step:  AIC=422.47
## .outcome ~ M + Ed + Po1 + Po2 + LF + M.F + Pop + NW + U1 + U2 +
##     Wealth + Ineq + Prob + Time
##
##          Df Sum of Sq     RSS    AIC
## - M.F     1        421 1162528 420.48
## - Pop     1       1127 1163234 420.51
## - Po2     1      10248 1172355 420.80
## - NW      1      11804 1173911 420.85
## - LF      1      14491 1176598 420.94
## - Time    1      17894 1180000 421.05
## - U1      1      20348 1182454 421.13
## - Po1     1      43032 1205138 421.85
## <none>               1162107 422.47
## - U2      1      92310 1254416 423.37
## - Wealth  1     151000 1313107 425.11
## - M       1     156477 1318583 425.27
## - Prob    1     158986 1321092 425.34
## - Ed      1     429818 1591924 432.43
## - Ineq    1     565469 1727576 435.54
##
## Step:  AIC=420.48
## .outcome ~ M + Ed + Po1 + Po2 + LF + Pop + NW + U1 + U2 + Wealth +
##     Ineq + Prob + Time
##
##          Df Sum of Sq     RSS    AIC
## - Pop     1       1515 1164043 418.53
## - Po2     1       9868 1172396 418.80
## - NW      1      11504 1174032 418.86
## - LF      1      14595 1177123 418.96
## - Time    1      19078 1181606 419.10
## - U1      1      25034 1187562 419.29
```

```
## - Po1      1       42652 1205180 419.85
## <none>                   1162528 420.48
## - U2       1       93306 1255834 421.42
## - Prob     1      158900 1321428 423.35
## - M        1      178097 1340625 423.90
## - Wealth   1      181602 1344130 424.00
## - Ed       1      443939 1606467 430.77
## - Ineq     1      725742 1888269 436.92
##
## Step:  AIC=418.53
## .outcome ~ M + Ed + Po1 + Po2 + LF + NW + U1 + U2 + Wealth +
##      Ineq + Prob + Time
##
##            Df Sum of Sq      RSS      AIC
## - Po2      1        8471 1172514 416.81
## - LF       1       14271 1178314 417.00
## - NW       1       14435 1178478 417.00
## - U1       1       23557 1187600 417.29
## - Time     1       35030 1199074 417.66
## - Po1      1       43893 1207936 417.94
## <none>                   1164043 418.53
## - U2       1       96794 1260837 419.57
## - Prob     1      160408 1324451 421.44
## - M        1      176882 1340925 421.91
## - Wealth   1      190615 1354658 422.30
## - Ed       1      454992 1619035 429.07
## - Ineq     1      729000 1893044 435.01
##
## Step:  AIC=416.81
## .outcome ~ M + Ed + Po1 + LF + NW + U1 + U2 + Wealth + Ineq +
##      Prob + Time
##
##            Df Sum of Sq      RSS      AIC
## - LF       1       10320 1182834 415.14
## - NW       1       11396 1183910 415.18
## - U1       1       20007 1192521 415.45
## - Time     1       27992 1200506 415.71
## <none>                   1172514 416.81
## - U2       1       93617 1266131 417.73
## - Prob     1      152264 1324777 419.45
## - M        1      172402 1344916 420.02
## - Wealth   1      196070 1368583 420.68
## - Po1      1      364721 1537235 425.10
## - Ed       1      446793 1619307 427.08
## - Ineq     1      803420 1975933 434.64
##
## Step:  AIC=415.14
## .outcome ~ M + Ed + Po1 + NW + U1 + U2 + Wealth + Ineq + Prob +
##      Time
##
##            Df Sum of Sq      RSS      AIC
## - NW       1       11124 1193957 413.50
## - U1       1       18963 1201797 413.75
## - Time     1       29743 1212577 414.09
```

```
## <none>                    1182834 415.14
## - U2      1      101983 1284816 416.28
## - Prob    1      145373 1328207 417.55
## - M       1      177582 1360416 418.46
## - Wealth  1      185779 1368613 418.69
## - Po1     1      428856 1611690 424.90
## - Ed      1      461861 1644694 425.67
## - Ineq    1      828893 2011727 433.32
##
## Step:  AIC=413.5
## .outcome ~ M + Ed + Po1 + U1 + U2 + Wealth + Ineq + Prob + Time
##
##           Df Sum of Sq     RSS    AIC
## - Time    1       19548 1213506 412.11
## - U1      1       27837 1221795 412.37
## <none>                  1193957 413.50
## - U2      1      127760 1321718 415.36
## - Prob    1      137458 1331415 415.64
## - Wealth  1      177102 1371059 416.75
## - M       1      300183 1494140 420.02
## - Ed      1      450850 1644808 423.67
## - Po1     1      592248 1786205 426.80
## - Ineq    1      847897 2041855 431.89
##
## Step:  AIC=412.11
## .outcome ~ M + Ed + Po1 + U1 + U2 + Wealth + Ineq + Prob
##
##           Df Sum of Sq     RSS    AIC
## - U1      1       23410 1236915 410.84
## <none>                  1213506 412.11
## - Prob    1      122425 1335931 413.77
## - U2      1      123571 1337077 413.80
## - Wealth  1      176472 1389977 415.27
## - M       1      300571 1514077 418.52
## - Ed      1      509125 1722631 423.43
## - Po1     1      587493 1800998 425.12
## - Ineq    1      830589 2044095 429.93
##
## Step:  AIC=410.84
## .outcome ~ M + Ed + Po1 + U2 + Wealth + Ineq + Prob
##
##           Df Sum of Sq     RSS    AIC
## <none>                  1236915 410.84
## - Prob    1      117223 1354138 412.28
## - U2      1      153040 1389955 413.27
## - Wealth  1      200597 1437512 414.55
## - M       1      280983 1517898 416.62
## - Ed      1      490151 1727066 421.53
## - Po1     1      697020 1933935 425.82
## - Ineq    1      990097 2227012 431.19
## Start:  AIC=405.26
## .outcome ~ M + Ed + Po1 + Po2 + LF + M.F + Pop + NW + U1 + U2 +
##     Wealth + Ineq + Prob + Time + So
##
```

```
##            Df Sum of Sq      RSS    AIC
## - M.F     1        26   700920 403.26
## - Po2     1      4180   705074 403.48
## - LF      1      4275   705169 403.49
## - So      1      5360   706255 403.55
## - NW      1     29425   730320 404.82
## <none>                  700894 405.26
## - Wealth  1     40886   741780 405.41
## - M       1     42743   743638 405.51
## - Po1     1     63155   764050 406.53
## - Ed      1     67177   768072 406.73
## - Time    1     71107   772001 406.93
## - U2      1    116646   817540 409.11
## - U1      1    118848   819743 409.21
## - Pop     1    147279   848174 410.50
## - Ineq    1    319341  1020235 417.52
## - Prob    1    334315  1035210 418.08
##
## Step:  AIC=403.26
## .outcome ~ M + Ed + Po1 + Po2 + LF + Pop + NW + U1 + U2 + Wealth +
##     Ineq + Prob + Time + So
##
##            Df Sum of Sq      RSS    AIC
## - Po2     1      4224   705144 401.49
## - So      1      5377   706297 401.55
## - LF      1      5528   706449 401.56
## - NW      1     30510   731430 402.88
## <none>                  700920 403.26
## - Wealth  1     40929   741850 403.41
## - M       1     46285   747206 403.69
## - Po1     1     63134   764054 404.53
## - Ed      1     67168   768088 404.73
## - Time    1     74974   775894 405.12
## - U2      1    117205   818125 407.13
## - U1      1    141263   842183 408.23
## - Pop     1    173637   874557 409.67
## - Ineq    1    323750  1024671 415.69
## - Prob    1    334889  1035810 416.10
##
## Step:  AIC=401.49
## .outcome ~ M + Ed + Po1 + LF + Pop + NW + U1 + U2 + Wealth +
##     Ineq + Prob + Time + So
##
##            Df Sum of Sq      RSS    AIC
## - LF      1      3926   709070 399.70
## - So      1      6043   711187 399.81
## - NW      1     27041   732185 400.92
## <none>                  705144 401.49
## - Wealth  1     39082   744226 401.54
## - M       1     48960   754104 402.04
## - Ed      1     66535   771679 402.91
## - Time    1     72357   777501 403.20
## - U2      1    125078   830222 405.69
## - U1      1    139661   844805 406.35
```

```
## - Pop      1     186366   891510 408.40
## - Ineq     1     336852  1041996 414.32
## - Prob     1     341109  1046253 414.48
## - Po1      1    1000392  1705536 433.05
##
## Step:  AIC=399.7
## .outcome ~ M + Ed + Po1 + Pop + NW + U1 + U2 + Wealth + Ineq +
##     Prob + Time + So
##
##           Df Sum of Sq      RSS    AIC
## - So       1       2761   711831 397.84
## - NW       1      23947   733017 398.96
## - Wealth   1      36574   745644 399.61
## <none>                    709070 399.70
## - M        1      47139   756209 400.14
## - Ed       1      64230   773301 400.99
## - Time     1      68606   777677 401.21
## - U2       1     121292   830362 403.70
## - U1       1     141566   850636 404.61
## - Pop      1     182721   891791 406.41
## - Prob     1     338421  1047491 412.52
## - Ineq     1     348260  1057330 412.88
## - Po1      1    1045323  1754393 432.12
##
## Step:  AIC=397.84
## .outcome ~ M + Ed + Po1 + Pop + NW + U1 + U2 + Wealth + Ineq +
##     Prob + Time
##
##           Df Sum of Sq      RSS    AIC
## - NW       1      21235   733067 396.96
## - Wealth   1      34191   746023 397.63
## <none>                    711831 397.84
## - M        1      45547   757378 398.20
## - Time     1      66226   778057 399.22
## - Ed       1      74012   785843 399.60
## - U2       1     119769   831600 401.75
## - U1       1     143633   855464 402.83
## - Pop      1     180116   891947 404.42
## - Ineq     1     348576  1060407 410.99
## - Prob     1     387973  1099805 412.38
## - Po1      1    1063476  1775308 430.57
##
## Step:  AIC=396.96
## .outcome ~ M + Ed + Po1 + Pop + U1 + U2 + Wealth + Ineq + Prob +
##     Time
##
##           Df Sum of Sq      RSS    AIC
## - Wealth   1      24999   758066 396.24
## <none>                    733067 396.96
## - Time     1      56819   789885 397.80
## - Ed       1      76596   809663 398.74
## - M        1      85859   818925 399.17
## - U2       1     144431   877497 401.80
## - U1       1     160935   894002 402.50
```

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```
## - Pop     1     165004  898071 402.68
## - Prob    1     373031 1106098 410.59
## - Ineq    1     400872 1133939 411.54
## - Po1     1    1347819 2080886 434.61
##
## Step:  AIC=396.24
## .outcome ~ M + Ed + Po1 + Pop + U1 + U2 + Ineq + Prob + Time
##
##         Df Sum of Sq     RSS    AIC
## <none>               758066 396.24
## - Time  1      55569  813634 396.92
## - M     1      78845  836911 398.00
## - Ed    1     120301  878367 399.83
## - Pop   1     163382  921448 401.65
## - U1    1     200923  958989 403.17
## - U2    1     201004  959070 403.17
## - Prob  1     415454 1173520 410.84
## - Ineq  1     449175 1207240 411.92
## - Po1   1    1724148 2482213 439.31
## Start:  AIC=514.65
## .outcome ~ M + Ed + Po1 + Po2 + LF + M.F + Pop + NW + U1 + U2 +
##     Wealth + Ineq + Prob + Time + So
##
##         Df Sum of Sq     RSS    AIC
## - So     1         29 1354974 512.65
## - LF     1       8917 1363862 512.96
## - Time   1      10304 1365250 513.00
## - Pop    1      14122 1369068 513.14
## - NW     1      18395 1373341 513.28
## - M.F    1      31967 1386913 513.74
## - Wealth 1      37613 1392558 513.94
## - Po2    1      37919 1392865 513.95
## <none>              1354946 514.65
## - U1     1      83722 1438668 515.47
## - Po1    1     144306 1499252 517.41
## - U2     1     181536 1536482 518.56
## - M      1     193770 1548716 518.93
## - Prob   1     199538 1554484 519.11
## - Ed     1     402117 1757063 524.86
## - Ineq   1     423031 1777977 525.42
##
## Step:  AIC=512.65
## .outcome ~ M + Ed + Po1 + Po2 + LF + M.F + Pop + NW + U1 + U2 +
##     Wealth + Ineq + Prob + Time
##
##         Df Sum of Sq     RSS    AIC
## - Time   1      10341 1365315 511.01
## - LF     1      10878 1365852 511.03
## - Pop    1      14127 1369101 511.14
## - NW     1      21626 1376600 511.39
## - M.F    1      32449 1387423 511.76
## - Po2    1      37954 1392929 511.95
## - Wealth 1      39223 1394197 511.99
## <none>              1354974 512.65
```

```
## - U1       1       96420 1451395 513.88
## - Po1      1      144302 1499277 515.41
## - U2       1      189859 1544834 516.81
## - M        1      195084 1550059 516.97
## - Prob     1      204463 1559437 517.26
## - Ed       1      403140 1758114 522.89
## - Ineq     1      488834 1843808 525.13
##
## Step:  AIC=511.01
## .outcome ~ M + Ed + Po1 + Po2 + LF + M.F + Pop + NW + U1 + U2 +
##     Wealth + Ineq + Prob
##
##            Df Sum of Sq     RSS    AIC
## - LF        1       10533 1375848 509.37
## - NW        1       15482 1380797 509.54
## - Pop       1       21846 1387161 509.75
## - Po2       1       28932 1394247 509.99
## - Wealth    1       36070 1401385 510.23
## - M.F       1       41784 1407099 510.42
## <none>                    1365315 511.01
## - U1        1       91420 1456735 512.05
## - Po1       1      134137 1499452 513.41
## - U2        1      184143 1549458 514.95
## - M         1      186110 1551425 515.01
## - Prob      1      237493 1602808 516.54
## - Ed        1      409448 1774763 521.33
## - Ineq      1      502909 1868224 523.75
##
## Step:  AIC=509.37
## .outcome ~ M + Ed + Po1 + Po2 + M.F + Pop + NW + U1 + U2 + Wealth +
##     Ineq + Prob
##
##            Df Sum of Sq     RSS    AIC
## - NW        1       11675 1387523 507.77
## - Po2       1       21418 1397266 508.09
## - Pop       1       27803 1403651 508.31
## - M.F       1       31252 1407100 508.42
## - Wealth    1       35035 1410883 508.55
## <none>                    1375848 509.37
## - U1        1       80954 1456802 510.06
## - Po1       1      123896 1499744 511.42
## - U2        1      190746 1566594 513.47
## - M         1      217716 1593564 514.27
## - Prob      1      226971 1602819 514.54
## - Ed        1      413254 1789103 519.71
## - Ineq      1      500944 1876792 521.96
##
## Step:  AIC=507.77
## .outcome ~ M + Ed + Po1 + Po2 + M.F + Pop + U1 + U2 + Wealth +
##     Ineq + Prob
##
##            Df Sum of Sq     RSS    AIC
## - Po2       1       16706 1404229 506.33
## - Pop       1       25793 1413315 506.63
```

```
## - M.F     1      26785 1414308 506.66
## - Wealth  1      31551 1419073 506.82
## <none>                1387523 507.77
## - U1      1      83881 1471404 508.52
## - Po1     1     118348 1505871 509.61
## - U2      1     201453 1588976 512.14
## - Prob    1     216760 1604282 512.59
## - M       1     309214 1696737 515.22
## - Ed      1     402754 1790276 517.74
## - Ineq    1     589736 1977259 522.41
##
## Step:  AIC=506.33
## .outcome ~ M + Ed + Po1 + M.F + Pop + U1 + U2 + Wealth + Ineq +
##     Prob
##
##          Df Sum of Sq     RSS    AIC
## - Pop     1      22345 1426575 505.07
## - Wealth  1      32142 1436371 505.39
## - M.F     1      36808 1441037 505.54
## <none>                1404229 506.33
## - U1      1      86373 1490602 507.13
## - U2      1     205814 1610043 510.76
## - Prob    1     218607 1622836 511.13
## - M       1     307001 1711230 513.62
## - Ed      1     389502 1793731 515.83
## - Ineq    1     608627 2012856 521.25
## - Po1     1    1050202 2454432 530.57
##
## Step:  AIC=505.07
## .outcome ~ M + Ed + Po1 + M.F + U1 + U2 + Wealth + Ineq + Prob
##
##          Df Sum of Sq     RSS    AIC
## - Wealth  1      26493 1453068 503.93
## <none>                1426575 505.07
## - M.F     1      84491 1511065 505.77
## - U1      1      99463 1526037 506.24
## - Prob    1     198571 1625145 509.20
## - U2      1     208880 1635455 509.49
## - M       1     320926 1747501 512.61
## - Ed      1     386773 1813348 514.35
## - Ineq    1     594779 2021354 519.45
## - Po1     1    1127277 2553852 530.44
##
## Step:  AIC=503.93
## .outcome ~ M + Ed + Po1 + M.F + U1 + U2 + Ineq + Prob
##
##          Df Sum of Sq     RSS    AIC
## <none>                1453068 503.93
## - M.F    1     103159 1556227 505.16
## - U1     1     127044 1580112 505.87
## - Prob   1     247978 1701046 509.34
## - U2     1     255443 1708511 509.55
## - M      1     296790 1749858 510.67
## - Ed     1     445788 1898855 514.51
```

```
## - Ineq   1    738244 2191312 521.24
## - Po1    1   1672038 3125105 537.93
```

```
model = lm(Crime~M+Ed+Po1+U1+U2+Ineq+Prob, # variables from backwards stepwise
           data = data.scaled)
summary(model)
```

```
##
## Call:
## lm(formula = Crime ~ M + Ed + Po1 + U1 + U2 + Ineq + Prob, data = data.scaled)
##
## Residuals:
##     Min      1Q  Median      3Q     Max
## -520.76 -105.67    9.53  136.28  519.37
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)    905.09      29.14  31.062  < 2e-16 ***
## M              134.20      41.70   3.218   0.0026 **
## Ed             244.38      54.07   4.520 5.62e-05 ***
## Po1            314.89      46.73   6.738 4.91e-08 ***
## U1             -63.86      54.48  -1.172   0.2482
## U2             134.13      60.71   2.209   0.0331 *
## Ineq           264.65      55.52   4.767 2.61e-05 ***
## Prob           -84.83      34.61  -2.451   0.0188 *
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 199.8 on 39 degrees of freedom
## Multiple R-squared:  0.7738, Adjusted R-squared:  0.7332
## F-statistic: 19.06 on 7 and 39 DF,  p-value: 8.805e-11
```

```
# forward stepwise
model.forward = train(Crime~.,
                      data = data.scaled,
                      method = 'glmStepAIC',
                      direction = 'forward',
                      trControl = control)
```

```
## Start:  AIC=528.4
## .outcome ~ 1
##
##           Df Deviance    AIC
## + Po1      1  2696471 512.23
## + Po2      1  2833433 514.01
## + Prob     1  3427898 520.87
## + Pop      1  3780469 524.39
## + Wealth   1  3909414 525.60
## + Ed       1  4010049 526.51
## <none>        4467154 528.40
## + LF       1  4369226 529.60
## + M.F      1  4373291 529.63
## + U2       1  4384948 529.73
```

```
## + Ineq    1   4411023 529.94
## + So      1   4434060 530.13
## + U1      1   4459937 530.34
## + Time    1   4463479 530.37
## + M       1   4464180 530.37
## + NW      1   4466854 530.40
##
## Step:  AIC=512.23
## .outcome ~ Po1
##
##           Df Deviance    AIC
## + Ineq    1   2098915 505.21
## + M       1   2131099 505.75
## + So      1   2452460 510.81
## + M.F     1   2497287 511.46
## + NW      1   2529238 511.92
## + Wealth  1   2529444 511.92
## <none>        2696471 512.23
## + Po2     1   2562309 512.39
## + LF      1   2626643 513.28
## + Prob    1   2675892 513.95
## + Time    1   2688253 514.12
## + U1      1   2690313 514.14
## + Pop     1   2694365 514.20
## + Ed      1   2696220 514.22
## + U2      1   2696434 514.22
##
## Step:  AIC=505.21
## .outcome ~ Po1 + Ineq
##
##           Df Deviance    AIC
## + M.F     1   1632226 498.15
## + Ed      1   1634182 498.20
## + LF      1   1836113 502.39
## + Prob    1   1901730 503.65
## + M       1   1906249 503.74
## + Wealth  1   1933515 504.25
## + Pop     1   1955627 504.66
## <none>        2098915 505.21
## + NW      1   2014558 505.73
## + Time    1   2035786 506.11
## + Po2     1   2053163 506.41
## + So      1   2067303 506.66
## + U2      1   2087456 507.01
## + U1      1   2098871 507.21
##
## Step:  AIC=498.15
## .outcome ~ Po1 + Ineq + M.F
##
##           Df Deviance    AIC
## + Ed      1   1483439 496.71
## + M       1   1497285 497.05
## + Prob    1   1503253 497.19
## <none>        1632226 498.15
```

```
## + U1      1  1550330 498.30
## + LF      1  1554504 498.40
## + Po2     1  1559197 498.51
## + Wealth  1  1579571 498.97
## + Pop     1  1602625 499.49
## + U2      1  1606448 499.58
## + NW      1  1617684 499.83
## + So      1  1631121 500.13
## + Time    1  1631975 500.15
##
## Step:  AIC=496.71
## .outcome ~ Po1 + Ineq + M.F + Ed
##
##           Df Deviance    AIC
## + M       1  1271796 493.17
## + Prob    1  1312490 494.30
## + Po2     1  1396580 496.54
## <none>       1483439 496.71
## + U1      1  1456970 498.06
## + Pop     1  1458287 498.10
## + Wealth  1  1467092 498.31
## + LF      1  1472749 498.45
## + So      1  1474316 498.49
## + Time    1  1481933 498.68
## + NW      1  1483106 498.70
## + U2      1  1483334 498.71
##
## Step:  AIC=493.17
## .outcome ~ Po1 + Ineq + M.F + Ed + M
##
##           Df Deviance    AIC
## + Prob    1  1118884 490.56
## + Po2     1  1165359 492.02
## + U2      1  1202238 493.15
## + NW      1  1202623 493.16
## <none>       1271796 493.17
## + Wealth  1  1228312 493.92
## + U1      1  1258076 494.78
## + Pop     1  1264177 494.95
## + So      1  1267467 495.05
## + LF      1  1268836 495.09
## + Time    1  1269852 495.12
##
## Step:  AIC=490.56
## .outcome ~ Po1 + Ineq + M.F + Ed + M + Prob
##
##           Df Deviance    AIC
## + Time    1  1011245 488.92
## + U2      1  1029491 489.56
## <none>       1118884 490.56
## + Po2     1  1071652 491.01
## + U1      1  1097235 491.86
## + NW      1  1111238 492.31
## + Pop     1  1111514 492.32
```

```
## + LF       1   1115150  492.44
## + Wealth  1   1116398  492.48
## + So       1   1118297  492.54
##
## Step:  AIC=488.92
## .outcome ~ Po1 + Ineq + M.F + Ed + M + Prob + Time
##
##            Df Deviance     AIC
## + Po2     1    857465  484.98
## + U2      1    911182  487.17
## <none>         1011245  488.92
## + U1      1    985002  489.97
## + Wealth  1   1008777  490.83
## + LF      1   1010137  490.88
## + Pop     1   1010180  490.88
## + NW      1   1010675  490.90
## + So      1   1011093  490.91
##
## Step:  AIC=484.98
## .outcome ~ Po1 + Ineq + M.F + Ed + M + Prob + Time + Po2
##
##            Df Deviance     AIC
## + U2      1    798124  484.40
## <none>          857465  484.98
## + U1      1    844279  486.42
## + LF      1    851795  486.74
## + Pop     1    852939  486.79
## + So      1    854007  486.83
## + NW      1    854772  486.87
## + Wealth  1    856494  486.94
##
## Step:  AIC=484.4
## .outcome ~ Po1 + Ineq + M.F + Ed + M + Prob + Time + Po2 + U2
##
##            Df Deviance     AIC
## <none>          798124  484.40
## + U1      1    760234  484.65
## + Pop     1    791007  486.08
## + So      1    796472  486.32
## + NW      1    797679  486.38
## + Wealth  1    797866  486.39
## + LF      1    798118  486.40
## Start:  AIC=579.57
## .outcome ~ 1
##
##            Df Deviance     AIC
## + Po1     1   3313684  559.33
## + Po2     1   3493580  561.39
## + Wealth  1   4650496  572.55
## + Prob    1   4683858  572.82
## + M.F     1   5196593  576.88
## + Ed      1   5274599  577.46
## + Pop     1   5278135  577.48
## + LF      1   5535639  579.34
```

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```
## <none>          5861606 579.57
## + Time    1    5605280 579.83
## + Ineq    1    5690750 580.42
## + So      1    5695175 580.45
## + U2      1    5761730 580.90
## + U1      1    5842292 581.44
## + M       1    5855732 581.53
## + NW      1    5860123 581.56
##
## Step:  AIC=559.33
## .outcome ~ Po1
##
##           Df Deviance    AIC
## + Ineq    1    2554837 551.18
## + M       1    2592423 551.75
## + M.F     1    2910537 556.27
## <none>         3313684 559.33
## + Po2     1    3152111 559.38
## + NW      1    3157859 559.45
## + LF      1    3184998 559.78
## + Prob    1    3188249 559.82
## + Wealth  1    3192593 559.88
## + So      1    3194944 559.90
## + Time    1    3228631 560.31
## + U2      1    3296277 561.12
## + Pop     1    3309585 561.28
## + Ed      1    3311118 561.30
## + U1      1    3313450 561.32
##
## Step:  AIC=551.18
## .outcome ~ Po1 + Ineq
##
##           Df Deviance    AIC
## + M.F     1    2015128 543.93
## + Ed      1    2020721 544.04
## + Wealth  1    2224515 547.79
## + LF      1    2271372 548.60
## + Prob    1    2299899 549.08
## + M       1    2351281 549.95
## <none>         2554837 551.18
## + Pop     1    2444288 551.46
## + So      1    2452537 551.59
## + NW      1    2465918 551.80
## + Po2     1    2535131 552.88
## + Time    1    2547804 553.08
## + U2      1    2551891 553.14
## + U1      1    2554822 553.18
##
## Step:  AIC=543.93
## .outcome ~ Po1 + Ineq + M.F
##
##           Df Deviance    AIC
## + Prob    1    1709881 539.52
## + Time    1    1824277 542.05
```

```
## + Wealth  1  1835457 542.29
## + M       1  1865480 542.92
## + Ed      1  1906500 543.77
## <none>       2015128 543.93
## + U1      1  1988786 545.42
## + So      1  1999886 545.63
## + LF      1  2006111 545.75
## + NW      1  2008297 545.80
## + Pop     1  2012375 545.88
## + U2      1  2014523 545.92
## + Po2     1  2014684 545.92
##
## Step:  AIC=539.52
## .outcome ~ Po1 + Ineq + M.F + Prob
##
##          Df Deviance    AIC
## + M       1  1543840 537.54
## <none>       1709881 539.52
## + Wealth  1  1632666 539.72
## + Ed      1  1634439 539.76
## + Time    1  1689974 541.07
## + U1      1  1691532 541.10
## + So      1  1695032 541.18
## + NW      1  1698847 541.27
## + Pop     1  1701594 541.33
## + LF      1  1708307 541.49
## + U2      1  1709224 541.51
## + Po2     1  1709674 541.52
##
## Step:  AIC=537.54
## .outcome ~ Po1 + Ineq + M.F + Prob + M
##
##          Df Deviance    AIC
## + Wealth  1  1332882 533.81
## + Ed      1  1444770 536.95
## <none>       1543840 537.54
## + U2      1  1531117 539.22
## + LF      1  1538064 539.39
## + Time    1  1538077 539.39
## + U1      1  1540925 539.47
## + So      1  1541804 539.49
## + NW      1  1542237 539.50
## + Po2     1  1542287 539.50
## + Pop     1  1543079 539.52
##
## Step:  AIC=533.81
## .outcome ~ Po1 + Ineq + M.F + Prob + M + Wealth
##
##         Df Deviance    AIC
## <none>      1332882 533.81
## + Ed     1  1266931 533.83
## + LF     1  1324477 535.56
## + So     1  1324820 535.57
## + U2     1  1325828 535.60
```

```
## + Time  1  1326226 535.61
## + Po2   1  1326910 535.63
## + U1    1  1331378 535.77
## + Pop   1  1332845 535.81
## + NW    1  1332870 535.81
## Start:  AIC=551.8
## .outcome ~ 1
##
##          Df Deviance    AIC
## + Po1     1  2740175 525.87
## + Po2     1  2884586 527.77
## + Wealth  1  4313851 542.66
## + Prob    1  4904451 547.41
## + Pop     1  4984112 548.00
## + Ed      1  5098057 548.84
## + Ineq    1  5436437 551.22
## <none>       5829056 551.80
## + U2      1  5601859 552.33
## + LF      1  5648866 552.64
## + M.F     1  5666606 552.75
## + M       1  5683990 552.86
## + Time    1  5700248 552.97
## + U1      1  5810550 553.68
## + NW      1  5817124 553.72
## + So      1  5817928 553.73
##
## Step:  AIC=525.87
## .outcome ~ Po1
##
##          Df Deviance    AIC
## + Ineq    1  2361887 522.37
## + M       1  2379333 522.64
## + So      1  2477078 524.13
## + M.F     1  2559512 525.34
## <none>       2740175 525.87
## + NW      1  2603794 525.98
## + Po2     1  2675769 526.99
## + Wealth  1  2688157 527.16
## + Prob    1  2688583 527.16
## + LF      1  2710555 527.47
## + Time    1  2718752 527.58
## + U2      1  2723692 527.64
## + Ed      1  2736517 527.82
## + U1      1  2737734 527.84
## + Pop     1  2737809 527.84
##
## Step:  AIC=522.37
## .outcome ~ Po1 + Ineq
##
##          Df Deviance    AIC
## + Ed      1  1981471 517.87
## + M.F     1  2056996 519.26
## + Prob    1  2120894 520.39
## + Wealth  1  2157079 521.02
```

```
## + LF       1   2176209 521.34
## + M        1   2228950 522.23
## <none>         2361887 522.37
## + Pop      1   2291517 523.25
## + So       1   2352483 524.22
## + Po2      1   2353949 524.25
## + NW       1   2357104 524.30
## + Time     1   2358964 524.33
## + U1       1   2361518 524.37
## + U2       1   2361680 524.37
##
## Step:  AIC=517.87
## .outcome ~ Po1 + Ineq + Ed
##
##            Df Deviance    AIC
## + Prob     1   1737758 515.02
## + M        1   1784423 516.00
## + Wealth   1   1866032 517.65
## + M.F      1   1875706 517.84
## <none>         1981471 517.87
## + Time     1   1886543 518.06
## + U2       1   1909858 518.51
## + So       1   1917803 518.67
## + Po2      1   1943317 519.15
## + Pop      1   1964684 519.56
## + U1       1   1972752 519.71
## + NW       1   1977269 519.79
## + LF       1   1981304 519.87
##
## Step:  AIC=515.02
## .outcome ~ Po1 + Ineq + Ed + Prob
##
##            Df Deviance    AIC
## + M        1   1508730 511.79
## + So       1   1551259 512.82
## + M.F      1   1594270 513.83
## + Pop      1   1636724 514.80
## <none>         1737758 515.02
## + Wealth   1   1651489 515.13
## + NW       1   1673158 515.62
## + U2       1   1687631 515.93
## + Po2      1   1701445 516.24
## + U1       1   1730395 516.86
## + Time     1   1735130 516.96
## + LF       1   1737446 517.01
##
## Step:  AIC=511.79
## .outcome ~ Po1 + Ineq + Ed + Prob + M
##
##            Df Deviance    AIC
## + U2       1   1322508 508.91
## + Wealth   1   1324771 508.98
## + M.F      1   1396263 510.92
## + So       1   1411631 511.33
```

```
## <none>           1508730 511.79
## + U1      1   1456745 512.49
## + Pop     1   1464365 512.68
## + Po2     1   1472312 512.88
## + NW      1   1493852 513.42
## + LF      1   1497957 513.52
## + Time    1   1507584 513.76
##
## Step:  AIC=508.91
## .outcome ~ Po1 + Ineq + Ed + Prob + M + U2
##
##            Df Deviance    AIC
## + Wealth  1   1200214 507.32
## + So      1   1238009 508.47
## <none>        1322508 508.91
## + LF      1   1260902 509.15
## + M.F     1   1274721 509.55
## + U1      1   1274743 509.55
## + Pop     1   1283589 509.81
## + Po2     1   1289845 509.99
## + NW      1   1313240 510.65
## + Time    1   1322386 510.91
##
## Step:  AIC=507.32
## .outcome ~ Po1 + Ineq + Ed + Prob + M + U2 + Wealth
##
##          Df Deviance    AIC
## + Pop    1   1135746 507.28
## <none>       1200214 507.32
## + LF     1   1156229 507.94
## + M.F    1   1158075 508.00
## + So     1   1161597 508.11
## + Po2    1   1169877 508.38
## + U1     1   1181960 508.76
## + NW     1   1183764 508.81
## + Time   1   1197982 509.26
##
## Step:  AIC=507.28
## .outcome ~ Po1 + Ineq + Ed + Prob + M + U2 + Wealth + Pop
##
##          Df Deviance    AIC
## <none>       1135746 507.28
## + NW     1   1094949 507.93
## + LF     1   1101480 508.15
## + So     1   1106167 508.30
## + Po2    1   1108899 508.40
## + U1     1   1115090 508.60
## + M.F    1   1125953 508.96
## + Time   1   1133610 509.21
## Start:  AIC=552.92
## .outcome ~ 1
##
##            Df Deviance    AIC
## + Po1     1   2333294 519.92
```

```
## + Po2     1  2386543 520.76
## + Wealth  1  4626858 545.25
## + Prob    1  4842850 546.94
## + Ed      1  5151352 549.22
## + Pop     1  5331852 550.50
## + Ineq    1  5653623 552.67
## <none>       6008244 552.92
## + LF      1  5694478 552.93
## + M.F     1  5733592 553.19
## + Time    1  5769574 553.42
## + So      1  5882984 554.14
## + U2      1  5900714 554.25
## + U1      1  5928291 554.42
## + NW      1  5952305 554.57
## + M       1  5955006 554.59
##
## Step:  AIC=519.92
## .outcome ~ Po1
##
##           Df Deviance    AIC
## + Ineq    1  1731942 510.89
## + M       1  1877266 513.87
## + Wealth  1  1968506 515.63
## + NW      1  2112203 518.24
## + Prob    1  2196282 519.68
## <none>       2333294 519.92
## + Time    1  2236911 520.36
## + So      1  2251862 520.61
## + M.F     1  2280399 521.07
## + U1      1  2304967 521.47
## + LF      1  2318165 521.68
## + Ed      1  2329282 521.86
## + Po2     1  2332439 521.91
## + U2      1  2332525 521.91
## + Pop     1  2332996 521.92
##
## Step:  AIC=510.89
## .outcome ~ Po1 + Ineq
##
##           Df Deviance    AIC
## + Ed      1  1340026 503.40
## + Prob    1  1501091 507.60
## + M       1  1590915 509.75
## + M.F     1  1604492 510.07
## <none>       1731942 510.89
## + So      1  1653117 511.17
## + LF      1  1668752 511.52
## + Time    1  1697472 512.15
## + Pop     1  1710464 512.43
## + Po2     1  1724682 512.74
## + NW      1  1728075 512.81
## + U2      1  1728420 512.82
## + U1      1  1731665 512.89
## + Wealth  1  1731919 512.89
```

```
##
## Step:  AIC=503.4
## .outcome ~ Po1 + Ineq + Ed
##
##            Df Deviance    AIC
## + M         1  1174523 500.52
## + Prob      1  1179329 500.67
## + Time      1  1225944 502.11
## <none>         1340026 503.40
## + U2        1  1307141 504.48
## + NW        1  1310770 504.58
## + Wealth    1  1321806 504.89
## + LF        1  1332018 505.18
## + M.F       1  1335509 505.28
## + So        1  1337149 505.32
## + U1        1  1337915 505.34
## + Pop       1  1339511 505.39
## + Po2       1  1339861 505.40
##
## Step:  AIC=500.52
## .outcome ~ Po1 + Ineq + Ed + M
##
##            Df Deviance    AIC
## + Prob      1   984730 496.00
## + U2        1  1031327 497.71
## + Time      1  1085575 499.61
## <none>         1174523 500.52
## + U1        1  1140523 501.44
## + So        1  1152167 501.81
## + LF        1  1155423 501.92
## + Pop       1  1170660 502.40
## + Po2       1  1173911 502.50
## + Wealth    1  1174025 502.51
## + NW        1  1174516 502.52
## + M.F       1  1174521 502.52
##
## Step:  AIC=496
## .outcome ~ Po1 + Ineq + Ed + M + Prob
##
##            Df Deviance    AIC
## + U2        1   867413 493.31
## + LF        1   930349 495.90
## <none>          984730 496.00
## + U1        1   959645 497.05
## + Wealth    1   973038 497.56
## + NW        1   975213 497.64
## + Po2       1   981020 497.86
## + So        1   981346 497.87
## + Pop       1   983132 497.94
## + Time      1   984271 497.98
## + M.F       1   984654 498.00
##
## Step:  AIC=493.31
## .outcome ~ Po1 + Ineq + Ed + M + Prob + U2
```

```
##
##            Df Deviance    AIC
## <none>         867413 493.31
## + U1      1    824812 493.45
## + Wealth  1    851063 494.60
## + NW      1    854147 494.74
## + LF      1    857231 494.87
## + Po2     1    858963 494.95
## + Pop     1    860170 495.00
## + M.F     1    864352 495.18
## + So      1    866477 495.27
## + Time    1    867285 495.30
## Start:  AIC=575.59
## .outcome ~ 1
##
##            Df Deviance    AIC
## + Po1     1   3130841 557.11
## + Po2     1   3321205 559.42
## + Wealth  1   4431948 570.67
## + Prob    1   4513802 571.38
## + U2      1   4859683 574.26
## + Pop     1   4878456 574.41
## + Ed      1   4967369 575.12
## <none>        5292711 575.59
## + M.F     1   5095059 576.11
## + LF      1   5173594 576.70
## + Time    1   5178616 576.74
## + M       1   5191559 576.84
## + Ineq    1   5229092 577.12
## + NW      1   5272285 577.44
## + U1      1   5292325 577.59
## + So      1   5292692 577.59
##
## Step:  AIC=557.11
## .outcome ~ Po1
##
##            Df Deviance    AIC
## + Ineq    1   2521286 550.67
## + M       1   2782501 554.51
## + Po2     1   2805505 554.83
## + NW      1   2930564 556.54
## + M.F     1   2935687 556.60
## + So      1   2937978 556.63
## <none>        3130841 557.11
## + Wealth  1   3019540 557.70
## + U2      1   3026422 557.79
## + Prob    1   3040280 557.97
## + Time    1   3065603 558.29
## + LF      1   3065876 558.30
## + Pop     1   3118765 558.96
## + U1      1   3125215 559.04
## + Ed      1   3127690 559.07
##
## Step:  AIC=550.67
```

```
## .outcome ~ Po1 + Ineq
##
##           Df Deviance    AIC
## + Ed       1  1963002 542.91
## + M.F      1  2137719 546.23
## + Wealth   1  2194095 547.25
## + Prob     1  2276860 548.69
## + LF       1  2302049 549.12
## + Pop      1  2318433 549.40
## + Po2      1  2392514 550.62
## <none>        2521286 550.67
## + M        1  2468118 551.84
## + NW       1  2483166 552.08
## + U1       1  2495383 552.27
## + U2       1  2501022 552.35
## + So       1  2508082 552.46
## + Time     1  2521285 552.67
##
## Step:  AIC=542.91
## .outcome ~ Po1 + Ineq + Ed
##
##           Df Deviance    AIC
## + Wealth   1  1767926 540.83
## + Prob     1  1828780 542.15
## + U2       1  1843347 542.45
## + M.F      1  1849029 542.57
## <none>        1963002 542.91
## + M        1  1870343 543.02
## + Pop      1  1912761 543.90
## + U1       1  1931028 544.27
## + So       1  1946193 544.57
## + NW       1  1947984 544.61
## + Po2      1  1951363 544.68
## + Time     1  1954801 544.74
## + LF       1  1959802 544.84
##
## Step:  AIC=540.83
## .outcome ~ Po1 + Ineq + Ed + Wealth
##
##        Df Deviance    AIC
## + M     1  1632859 539.73
## + U2    1  1659462 540.36
## + M.F   1  1674483 540.71
## <none>     1767926 540.83
## + Pop   1  1703599 541.38
## + Prob  1  1709289 541.51
## + U1    1  1718759 541.73
## + NW    1  1720151 541.76
## + So    1  1744880 542.31
## + Po2   1  1765225 542.77
## + LF    1  1766883 542.80
## + Time  1  1767923 542.83
##
## Step:  AIC=539.73
```

```
## .outcome ~ Po1 + Ineq + Ed + Wealth + M
##
##         Df Deviance    AIC
## + U2    1  1426147 536.45
## + U1    1  1540055 539.44
## <none>     1632859 539.73
## + Prob  1  1560004 539.95
## + M.F   1  1565574 540.09
## + Pop   1  1598471 540.90
## + NW    1  1627317 541.59
## + LF    1  1630527 541.67
## + So    1  1631113 541.68
## + Po2   1  1631640 541.70
## + Time  1  1632277 541.71
##
## Step:  AIC=536.45
## .outcome ~ Po1 + Ineq + Ed + Wealth + M + U2
##
##         Df Deviance    AIC
## + Prob  1  1322623 535.51
## <none>     1426147 536.45
## + Pop   1  1414417 538.13
## + M.F   1  1414716 538.13
## + U1    1  1416156 538.17
## + Time  1  1417278 538.20
## + LF    1  1420734 538.30
## + Po2   1  1425031 538.42
## + So    1  1425300 538.42
## + NW    1  1425751 538.44
##
## Step:  AIC=535.51
## .outcome ~ Po1 + Ineq + Ed + Wealth + M + U2 + Prob
##
##         Df Deviance    AIC
## <none>     1322623 535.51
## + Pop   1  1279484 536.22
## + So    1  1296520 536.73
## + U1    1  1308185 537.08
## + M.F   1  1311317 537.17
## + Po2   1  1314006 537.25
## + NW    1  1315839 537.31
## + Time  1  1318530 537.39
## + LF    1  1322367 537.50
## Start:  AIC=563.73
## .outcome ~ 1
##
##          Df Deviance    AIC
## + Po1    1  2571041 536.48
## + Po2    1  2681370 538.08
## + Prob   1  4705612 559.45
## + Wealth 1  4709686 559.49
## + M.F    1  4802335 560.23
## + Ed     1  4906527 561.04
## + Pop    1  5121931 562.67
```

```
## + U2      1 5205947 563.29
## <none>      5551399 563.73
## + Ineq    1 5391799 564.63
## + LF      1 5422397 564.84
## + So      1 5508872 565.44
## + U1      1 5518850 565.51
## + M       1 5545844 565.70
## + NW      1 5551281 565.73
## + Time    1 5551383 565.73
##
## Step:  AIC=536.48
## .outcome ~ Po1
##
##          Df Deviance     AIC
## + Ineq   1  1810543 525.16
## + M      1  1931711 527.62
## + Wealth 1  2099484 530.78
## + So     1  2374241 535.46
## + NW     1  2389329 535.70
## <none>      2571041 536.48
## + M.F    1  2457174 536.76
## + Prob   1  2475031 537.04
## + Time   1  2543971 538.08
## + Po2    1  2550246 538.18
## + U2     1  2553613 538.23
## + Ed     1  2558757 538.30
## + Pop    1  2566663 538.42
## + LF     1  2570432 538.48
## + U1     1  2571041 538.48
##
## Step:  AIC=525.16
## .outcome ~ Po1 + Ineq
##
##          Df Deviance    AIC
## + Ed     1  1406481 517.56
## + Prob   1  1486626 519.67
## + M.F    1  1603308 522.54
## + M      1  1647848 523.58
## <none>      1810543 525.16
## + LF     1  1764021 526.17
## + NW     1  1766027 526.21
## + So     1  1777889 526.47
## + Pop    1  1778856 526.49
## + U1     1  1795275 526.84
## + Po2    1  1803734 527.02
## + Wealth 1  1804257 527.03
## + Time   1  1809340 527.13
## + U2     1  1810473 527.16
##
## Step:  AIC=517.56
## .outcome ~ Po1 + Ineq + Ed
##
##          Df Deviance    AIC
## + M      1  1125537 511.09
```

```
## + Prob    1  1158875 512.20
## <none>        1406481 517.56
## + Time    1  1364208 518.40
## + U2      1  1382278 518.90
## + LF      1  1383804 518.94
## + Pop     1  1400340 519.40
## + U1      1  1402138 519.44
## + M.F     1  1402527 519.45
## + So      1  1403150 519.47
## + Wealth  1  1404603 519.51
## + Po2     1  1406071 519.55
## + NW      1  1406436 519.56
##
## Step:  AIC=511.09
## .outcome ~ Po1 + Ineq + Ed + M
##
##           Df Deviance    AIC
## + Prob    1   877505 503.63
## + U2      1   977054 507.72
## + NW      1  1062097 510.89
## + U1      1  1065965 511.03
## <none>       1125537 511.09
## + LF      1  1084505 511.68
## + Time    1  1111160 512.61
## + Wealth  1  1113894 512.70
## + M.F     1  1119322 512.88
## + Po2     1  1120270 512.92
## + So      1  1121348 512.95
## + Pop     1  1125306 513.09
##
## Step:  AIC=503.63
## .outcome ~ Po1 + Ineq + Ed + M + Prob
##
##           Df Deviance    AIC
## + U2      1   747593 499.55
## + LF      1   801076 502.17
## + U1      1   824385 503.26
## <none>        877505 503.63
## + Time    1   833989 503.70
## + So      1   859056 504.83
## + Pop     1   864076 505.05
## + NW      1   870738 505.34
## + M.F     1   876886 505.61
## + Wealth  1   876915 505.61
## + Po2     1   877360 505.63
##
## Step:  AIC=499.55
## .outcome ~ Po1 + Ineq + Ed + M + Prob + U2
##
##           Df Deviance    AIC
## + Time    1   691725 498.59
## <none>        747593 499.55
## + U1      1   713161 499.75
## + Pop     1   720565 500.15
```

```
## + LF      1    722126 500.23
## + So      1    731360 500.71
## + M.F     1    734861 500.89
## + NW      1    739846 501.15
## + Wealth  1    747259 501.53
## + Po2     1    747540 501.54
##
## Step:  AIC=498.59
## .outcome ~ Po1 + Ineq + Ed + M + Prob + U2 + Time
##
##          Df Deviance    AIC
## + M.F     1    630368 497.07
## + U1      1    634962 497.34
## <none>         691725 498.59
## + LF      1    662243 498.94
## + So      1    673421 499.58
## + Pop     1    681700 500.04
## + Po2     1    688438 500.41
## + NW      1    691183 500.57
## + Wealth  1    691210 500.57
##
## Step:  AIC=497.07
## .outcome ~ Po1 + Ineq + Ed + M + Prob + U2 + Time + M.F
##
##          Df Deviance    AIC
## + Pop     1    574418 495.53
## <none>         630368 497.07
## + U1      1    604730 497.49
## + Po2     1    607034 497.63
## + So      1    623674 498.66
## + LF      1    624483 498.71
## + NW      1    624669 498.72
## + Wealth  1    630235 499.06
##
## Step:  AIC=495.53
## .outcome ~ Po1 + Ineq + Ed + M + Prob + U2 + Time + M.F + Pop
##
##          Df Deviance    AIC
## + Po2     1    540142 495.20
## <none>         574418 495.53
## + U1      1    557390 496.39
## + So      1    569576 497.21
## + NW      1    569886 497.23
## + LF      1    573552 497.48
## + Wealth  1    573993 497.51
##
## Step:  AIC=495.2
## .outcome ~ Po1 + Ineq + Ed + M + Prob + U2 + Time + M.F + Pop +
##     Po2
##
##          Df Deviance    AIC
## <none>         540142 495.20
## + U1      1    526807 496.25
## + So      1    528916 496.40
```

```
## + LF       1    535911 496.90
## + Wealth 1    538122 497.05
## + NW       1    539666 497.16
## Start:  AIC=566.72
## .outcome ~ 1
##
##          Df Deviance    AIC
## + Po1    1   3262613 545.54
## + Po2    1   3473993 547.92
## + Wealth 1   4712432 559.51
## + Prob   1   5120516 562.66
## + Ed     1   5329931 564.19
## + Pop    1   5371504 564.48
## + M.F    1   5557643 565.78
## <none>       6004856 566.72
## + U2     1   5753415 567.09
## + LF     1   5756881 567.12
## + Ineq   1   5811824 567.48
## + Time   1   5815610 567.50
## + So     1   5865276 567.82
## + NW     1   5941732 568.32
## + M      1   6001136 568.69
## + U1     1   6004656 568.72
##
## Step:  AIC=545.54
## .outcome ~ Po1
##
##          Df Deviance    AIC
## + Ineq   1   2538896 538.01
## + M      1   2615707 539.14
## + M.F    1   2820183 542.00
## + NW     1   2966494 543.92
## + Po2    1   2979636 544.09
## <none>       3262613 545.54
## + LF     1   3124847 545.90
## + Wealth 1   3126328 545.92
## + So     1   3164055 546.37
## + Prob   1   3175808 546.51
## + Time   1   3190508 546.69
## + U2     1   3232635 547.19
## + Pop    1   3256722 547.47
## + Ed     1   3262250 547.53
## + U1     1   3262504 547.54
##
## Step:  AIC=538.01
## .outcome ~ Po1 + Ineq
##
##          Df Deviance    AIC
## + Ed     1   2073429 532.31
## + M.F    1   2099514 532.79
## + Prob   1   2281208 535.94
## + LF     1   2293839 536.15
## + Wealth 1   2309559 536.41
## + M      1   2319935 536.58
```

```
## <none>        2538896 538.01
## + Po2    1    2431466 538.36
## + Pop    1    2441378 538.52
## + So     1    2466360 538.90
## + Time   1    2487758 539.23
## + U2     1    2538572 540.00
## + U1     1    2538846 540.01
## + NW     1    2538874 540.01
##
## Step:  AIC=532.31
## .outcome ~ Po1 + Ineq + Ed
##
##           Df Deviance    AIC
## + M      1   1801311 528.96
## + Prob   1   1850988 530.00
## + Time   1   1904598 531.08
## + M.F    1   1908990 531.17
## <none>       2073429 532.31
## + NW     1   1992144 532.79
## + U2     1   1999865 532.94
## + Wealth 1   2000700 532.95
## + Po2    1   2016568 533.25
## + Pop    1   2032057 533.54
## + LF     1   2059634 534.06
## + U1     1   2060264 534.07
## + So     1   2073428 534.31
##
## Step:  AIC=528.96
## .outcome ~ Po1 + Ineq + Ed + M
##
##           Df Deviance    AIC
## + U2     1   1542215 525.06
## + Prob   1   1563413 525.58
## + Wealth 1   1601076 526.49
## + Time   1   1667442 528.03
## + M.F    1   1698929 528.74
## <none>       1801311 528.96
## + U1     1   1713933 529.07
## + Po2    1   1744073 529.74
## + So     1   1775012 530.41
## + LF     1   1794225 530.81
## + Pop    1   1795224 530.84
## + NW     1   1797739 530.89
##
## Step:  AIC=525.06
## .outcome ~ Po1 + Ineq + Ed + M + U2
##
##           Df Deviance    AIC
## + Prob   1   1362827 522.36
## + Wealth 1   1414129 523.77
## + Time   1   1440260 524.46
## <none>       1542215 525.06
## + LF     1   1476333 525.40
## + M.F    1   1496232 525.91
```

```
## + U1      1  1504555 526.12
## + So      1  1505071 526.14
## + Po2     1  1524530 526.62
## + Pop     1  1529896 526.76
## + NW      1  1534188 526.86
##
## Step:  AIC=522.36
## .outcome ~ Po1 + Ineq + Ed + M + U2 + Prob
##
##             Df Deviance    AIC
## + Wealth  1  1272469 521.76
## + M.F     1  1286750 522.18
## <none>       1362827 522.36
## + Pop     1  1312281 522.93
## + NW      1  1320075 523.15
## + LF      1  1323185 523.24
## + U1      1  1332662 523.51
## + Po2     1  1344102 523.84
## + Time    1  1356037 524.17
## + So      1  1362417 524.35
##
## Step:  AIC=521.76
## .outcome ~ Po1 + Ineq + Ed + M + U2 + Prob + Wealth
##
##           Df Deviance    AIC
## + M.F   1  1204424 521.67
## <none>     1272469 521.76
## + Pop   1  1219843 522.15
## + LF    1  1238457 522.73
## + NW    1  1240434 522.79
## + Po2   1  1255889 523.26
## + U1    1  1259893 523.38
## + So    1  1266447 523.58
## + Time  1  1270285 523.69
##
## Step:  AIC=521.67
## .outcome ~ Po1 + Ineq + Ed + M + U2 + Prob + Wealth + M.F
##
##           Df Deviance    AIC
## + U1    1  1135143 521.42
## + NW    1  1136078 521.45
## <none>     1204424 521.67
## + Time  1  1179360 522.87
## + Pop   1  1188867 523.17
## + LF    1  1192739 523.30
## + Po2   1  1200551 523.55
## + So    1  1204207 523.66
##
## Step:  AIC=521.42
## .outcome ~ Po1 + Ineq + Ed + M + U2 + Prob + Wealth + M.F + U1
##
##           Df Deviance    AIC
## <none>     1135143 521.42
## + NW    1  1078046 521.46
```

```
## + Time   1  1118920 522.87
## + Pop    1  1125725 523.10
## + Po2    1  1133049 523.35
## + LF     1  1134533 523.40
## + So     1  1134684 523.40
## Start:  AIC=560.86
## .outcome ~ 1
##
##            Df Deviance     AIC
## + Po1     1  3117531 543.81
## + Po2     1  3225611 545.10
## + Prob    1  3806909 551.40
## + Pop     1  4116313 554.37
## + Wealth  1  4354696 556.51
## + Ed      1  4812042 560.30
## + Time    1  4853650 560.63
## <none>       5147640 560.86
## + U2      1  4893179 560.94
## + Ineq    1  5087982 562.42
## + M.F     1  5121075 562.67
## + LF      1  5130023 562.73
## + M       1  5134714 562.77
## + NW      1  5137443 562.79
## + So      1  5142095 562.82
## + U1      1  5147233 562.86
##
## Step:  AIC=543.81
## .outcome ~ Po1
##
##            Df Deviance     AIC
## + M       1  2529299 537.86
## + Ineq    1  2559209 538.31
## + So      1  2803018 541.77
## + NW      1  2883098 542.84
## <none>       3117531 543.81
## + M.F     1  2969077 543.95
## + Wealth  1  3029840 544.72
## + Po2     1  3043432 544.89
## + Time    1  3057969 545.07
## + Prob    1  3062912 545.14
## + U2      1  3070177 545.23
## + LF      1  3095631 545.54
## + Pop     1  3116663 545.80
## + Ed      1  3117061 545.80
## + U1      1  3117398 545.81
##
## Step:  AIC=537.86
## .outcome ~ Po1 + M
##
##            Df Deviance     AIC
## + M.F     1  2337653 536.87
## + Ineq    1  2353774 537.13
## <none>       2529299 537.86
## + U2      1  2433366 538.39
```

```
## + Ed      1  2444431 538.57
## + Prob    1  2454110 538.72
## + LF      1  2469274 538.95
## + So      1  2472617 539.00
## + Po2     1  2483001 539.16
## + U1      1  2495802 539.36
## + NW      1  2520705 539.73
## + Wealth  1  2522533 539.76
## + Time    1  2524504 539.79
## + Pop     1  2529165 539.86
##
## Step:  AIC=536.87
## .outcome ~ Po1 + M + M.F
##
##           Df Deviance    AIC
## + Ineq     1  2029859 533.50
## + So       1  2105940 534.90
## <none>        2337653 536.87
## + NW       1  2235152 537.16
## + U2       1  2239846 537.24
## + Time     1  2270252 537.76
## + Po2      1  2277095 537.87
## + Pop      1  2296832 538.20
## + Prob     1  2305306 538.34
## + Wealth   1  2326363 538.68
## + Ed       1  2332840 538.79
## + LF       1  2335751 538.84
## + U1       1  2337653 538.87
##
## Step:  AIC=533.5
## .outcome ~ Po1 + M + M.F + Ineq
##
##           Df Deviance    AIC
## + Ed       1  1796782 530.87
## + Wealth   1  1805083 531.04
## + Prob     1  1878853 532.57
## <none>        2029859 533.50
## + Time     1  1979196 534.54
## + So       1  2006854 535.07
## + U2       1  2008781 535.11
## + Po2      1  2009727 535.12
## + LF       1  2015545 535.23
## + U1       1  2025503 535.42
## + NW       1  2025822 535.43
## + Pop      1  2028511 535.48
##
## Step:  AIC=530.87
## .outcome ~ Po1 + M + M.F + Ineq + Ed
##
##           Df Deviance    AIC
## + Prob     1  1586538 528.14
## + U2       1  1613210 528.77
## + Wealth   1  1651925 529.67
## <none>        1796782 530.87
```

```
## + Time    1  1716010 531.12
## + So      1  1745960 531.78
## + Po2     1  1767750 532.25
## + U1      1  1782492 532.56
## + LF      1  1784228 532.60
## + NW      1  1796071 532.85
## + Pop     1  1796619 532.86
##
## Step:  AIC=528.14
## .outcome ~ Po1 + M + M.F + Ineq + Ed + Prob
##
##            Df Deviance    AIC
## + U2      1  1365788 524.45
## <none>       1586538 528.14
## + So      1  1509757 528.25
## + LF      1  1520522 528.52
## + Wealth  1  1539880 529.01
## + U1      1  1545657 529.15
## + NW      1  1574357 529.85
## + Po2     1  1581792 530.03
## + Time    1  1585681 530.12
## + Pop     1  1585697 530.12
##
## Step:  AIC=524.45
## .outcome ~ Po1 + M + M.F + Ineq + Ed + Prob + U2
##
##            Df Deviance    AIC
## + U1      1  1288159 524.22
## <none>       1365788 524.45
## + So      1  1295932 524.45
## + Wealth  1  1320623 525.17
## + Pop     1  1353275 526.10
## + LF      1  1361018 526.31
## + Po2     1  1361974 526.34
## + Time    1  1364395 526.41
## + NW      1  1364438 526.41
##
## Step:  AIC=524.22
## .outcome ~ Po1 + M + M.F + Ineq + Ed + Prob + U2 + U1
##
##            Df Deviance    AIC
## <none>       1288159 524.22
## + So      1  1250059 525.08
## + Wealth  1  1267670 525.61
## + LF      1  1267714 525.61
## + Po2     1  1278733 525.94
## + Pop     1  1281415 526.02
## + NW      1  1284701 526.12
## + Time    1  1286994 526.19
## Start:  AIC=568.6
## .outcome ~ 1
##
##            Df Deviance    AIC
## + Po1     1  3043571 542.90
```

```
## + Po2    1  3273277 545.66
## + Wealth 1  4896137 560.96
## + Prob   1  4992484 561.70
## + Pop    1  5544006 565.68
## + Ed     1  5555181 565.76
## + LF     1  5833874 567.62
## <none>      6309115 568.60
## + M.F    1  6067187 569.11
## + Time   1  6069327 569.12
## + Ineq   1  6094157 569.28
## + U1     1  6142414 569.58
## + M      1  6173445 569.77
## + U2     1  6225032 570.09
## + So     1  6243798 570.20
## + NW     1  6309046 570.60
##
## Step:  AIC=542.9
## .outcome ~ Po1
##
##           Df Deviance    AIC
## + Ineq   1  2412934 536.07
## + M      1  2652305 539.67
## + M.F    1  2788518 541.57
## + Po2    1  2814097 541.92
## + LF     1  2814554 541.92
## <none>      3043571 542.90
## + NW     1  2889198 542.92
## + So     1  2889321 542.92
## + Wealth 1  2904608 543.12
## + Prob   1  2949653 543.70
## + U1     1  3010065 544.47
## + Time   1  3020247 544.60
## + Pop    1  3033187 544.77
## + U2     1  3043290 544.89
## + Ed     1  3043326 544.89
##
## Step:  AIC=536.07
## .outcome ~ Po1 + Ineq
##
##           Df Deviance    AIC
## + Ed     1  1853086 528.04
## + M.F    1  1969539 530.36
## + LF     1  1983809 530.63
## + Prob   1  2162193 533.90
## + Wealth 1  2195151 534.48
## + Pop    1  2266755 535.70
## + NW     1  2287760 536.05
## <none>      2412934 536.07
## + M      1  2321457 536.60
## + Po2    1  2322355 536.62
## + So     1  2365003 537.31
## + U2     1  2386631 537.66
## + U1     1  2403238 537.92
## + Time   1  2406523 537.97
```

```
##
## Step:  AIC=528.04
## .outcome ~ Po1 + Ineq + Ed
##
##           Df Deviance    AIC
## + Prob     1  1611687 524.74
## + M        1  1720848 527.23
## + Po2      1  1729736 527.42
## + M.F      1  1737069 527.58
## + Wealth   1  1757314 528.02
## <none>        1853086 528.04
## + Time     1  1773409 528.37
## + LF       1  1785973 528.64
## + Pop      1  1796798 528.87
## + NW       1  1842256 529.82
## + U2       1  1843406 529.84
## + U1       1  1851052 530.00
## + So       1  1851974 530.02
##
## Step:  AIC=524.74
## .outcome ~ Po1 + Ineq + Ed + Prob
##
##           Df Deviance    AIC
## + Po2      1  1474186 523.35
## + Pop      1  1479401 523.48
## + M        1  1482802 523.57
## + M.F      1  1490533 523.77
## <none>        1611687 524.74
## + Wealth   1  1561880 525.54
## + LF       1  1578484 525.95
## + So       1  1589119 526.20
## + U2       1  1604155 526.56
## + NW       1  1609688 526.69
## + U1       1  1609720 526.69
## + Time     1  1611681 526.74
##
## Step:  AIC=523.35
## .outcome ~ Po1 + Ineq + Ed + Prob + Po2
##
##           Df Deviance    AIC
## + Pop      1  1340645 521.74
## + M        1  1370091 522.57
## <none>        1474186 523.35
## + M.F      1  1403248 523.47
## + Wealth   1  1421663 523.97
## + So       1  1433959 524.30
## + U1       1  1463814 525.08
## + LF       1  1464483 525.10
## + NW       1  1465662 525.13
## + Time     1  1466945 525.16
## + U2       1  1472589 525.31
##
## Step:  AIC=521.74
## .outcome ~ Po1 + Ineq + Ed + Prob + Po2 + Pop
```

```
##
##          Df Deviance    AIC
## + Wealth  1  1268341 521.63
## <none>       1340645 521.74
## + M       1  1277333 521.90
## + So      1  1307690 522.79
## + M.F     1  1327457 523.36
## + U1      1  1330358 523.45
## + NW      1  1331903 523.49
## + U2      1  1336975 523.64
## + Time    1  1337896 523.66
## + LF      1  1338119 523.67
##
## Step:  AIC=521.63
## .outcome ~ Po1 + Ineq + Ed + Prob + Po2 + Pop + Wealth
##
##        Df Deviance    AIC
## + M     1  1173650 520.68
## <none>     1268341 521.63
## + So    1  1251530 523.13
## + NW    1  1252909 523.17
## + U1    1  1253782 523.19
## + M.F   1  1261068 523.41
## + Time  1  1264544 523.52
## + LF    1  1265776 523.56
## + U2    1  1268240 523.63
##
## Step:  AIC=520.68
## .outcome ~ Po1 + Ineq + Ed + Prob + Po2 + Pop + Wealth + M
##
##        Df Deviance    AIC
## <none>     1173650 520.68
## + U2    1  1152478 521.99
## + M.F   1  1168156 522.51
## + Time  1  1170862 522.59
## + So    1  1171644 522.62
## + U1    1  1173531 522.68
## + NW    1  1173645 522.68
## + LF    1  1173647 522.68
## Start:  AIC=528.49
## .outcome ~ 1
##
##          Df Deviance    AIC
## + Po1     1  2361753 507.45
## + Po2     1  2463040 508.97
## + Wealth  1  3411657 520.69
## + Prob    1  3733684 523.94
## + Ed      1  3970404 526.15
## + Pop     1  4136726 527.63
## + Ineq    1  4173945 527.95
## + LF      1  4187848 528.07
## + M       1  4225169 528.39
## <none>       4478456 528.49
## + M.F     1  4362355 529.54
```

```
## + U1      1  4365325 529.57
## + Time    1  4401359 529.86
## + U2      1  4448024 530.24
## + So      1  4453936 530.29
## + NW      1  4475944 530.47
##
## Step:  AIC=507.45
## .outcome ~ Po1
##
##          Df Deviance    AIC
## + Ineq    1  2000802 503.48
## + M       1  2143452 505.96
## + So      1  2219196 507.21
## <none>       2361753 507.45
## + NW      1  2252336 507.75
## + M.F     1  2284902 508.26
## + Prob    1  2290138 508.35
## + Po2     1  2303931 508.56
## + Wealth  1  2316738 508.76
## + LF      1  2326535 508.91
## + Time    1  2332479 509.00
## + Pop     1  2332788 509.01
## + U1      1  2345599 509.21
## + U2      1  2360338 509.43
## + Ed      1  2360813 509.44
##
## Step:  AIC=503.48
## .outcome ~ Po1 + Ineq
##
##          Df Deviance    AIC
## + Ed      1  1575451 496.88
## + LF      1  1723939 500.12
## + M.F     1  1733536 500.32
## + Wealth  1  1815118 501.98
## + Prob    1  1866539 502.98
## + Pop     1  1878866 503.22
## <none>       2000802 503.48
## + M       1  1964992 504.83
## + NW      1  1975914 505.03
## + So      1  1983466 505.17
## + Po2     1  1996474 505.41
## + Time    1  1998824 505.45
## + U1      1  2000360 505.48
## + U2      1  2000627 505.48
##
## Step:  AIC=496.88
## .outcome ~ Po1 + Ineq + Ed
##
##          Df Deviance    AIC
## + Wealth  1  1462634 496.20
## <none>       1575451 496.88
## + M.F     1  1494727 496.99
## + U2      1  1517987 497.54
## + Prob    1  1526779 497.75
```

```
## + LF      1  1541720 498.10
## + M       1  1542408 498.12
## + Pop     1  1564187 498.62
## + U1      1  1567435 498.70
## + Po2     1  1568355 498.72
## + So      1  1574096 498.85
## + Time    1  1575095 498.87
## + NW      1  1575368 498.88
##
## Step:  AIC=496.2
## .outcome ~ Po1 + Ineq + Ed + Wealth
##
##          Df Deviance     AIC
## + M      1  1381449 496.15
## <none>      1462634 496.20
## + M.F    1  1389593 496.36
## + U2     1  1431561 497.43
## + Pop    1  1433729 497.49
## + NW     1  1439552 497.63
## + So     1  1449729 497.88
## + Prob   1  1450613 497.91
## + Time   1  1452062 497.94
## + LF     1  1455400 498.03
## + U1     1  1457952 498.09
## + Po2    1  1462114 498.19
##
## Step:  AIC=496.15
## .outcome ~ Po1 + Ineq + Ed + Wealth + M
##
##          Df Deviance     AIC
## <none>      1381449 496.15
## + U2     1  1318014 496.46
## + M.F    1  1322407 496.58
## + Prob   1  1332965 496.86
## + LF     1  1363987 497.69
## + Pop    1  1368685 497.81
## + U1     1  1369275 497.83
## + NW     1  1377084 498.03
## + Time   1  1377609 498.05
## + Po2    1  1380369 498.12
## + So     1  1381091 498.14
## Start:  AIC=551.78
## .outcome ~ 1
##
##           Df Deviance     AIC
## + Po1     1  2956524 528.68
## + Po2     1  3165247 531.20
## + Prob    1  4749555 546.22
## + Wealth  1  4768421 546.37
## + Pop     1  5076970 548.69
## + M.F     1  5277115 550.12
## + Ed      1  5421887 551.12
## + U2      1  5483753 551.54
## <none>       5826579 551.78
```

```
## + Time    1   5565823 552.09
## + LF      1   5671988 552.79
## + Ineq    1   5679749 552.84
## + NW      1   5690623 552.91
## + M       1   5796792 553.59
## + So      1   5811115 553.68
## + U1      1   5825297 553.77
##
## Step:  AIC=528.68
## .outcome ~ Po1
##
##          Df Deviance    AIC
## + Ineq    1   2186233 519.51
## + M       1   2430356 523.43
## + M.F     1   2535375 524.99
## + NW      1   2655958 526.71
## + Wealth  1   2699788 527.32
## + So      1   2703951 527.38
## + Po2     1   2761232 528.15
## <none>        2956524 528.68
## + LF      1   2860826 529.46
## + Prob    1   2885723 529.78
## + U2      1   2913819 530.14
## + Ed      1   2935639 530.42
## + Time    1   2940258 530.48
## + Pop     1   2951861 530.62
## + U1      1   2956507 530.68
##
## Step:  AIC=519.51
## .outcome ~ Po1 + Ineq
##
##          Df Deviance    AIC
## + M.F     1   1633555 510.73
## + Ed      1   1821042 514.75
## + LF      1   1953343 517.34
## + Prob    1   2028152 518.74
## + Pop     1   2066557 519.43
## <none>        2186233 519.51
## + Wealth  1   2083246 519.73
## + M       1   2086118 519.78
## + So      1   2139380 520.71
## + Po2     1   2154678 520.97
## + NW      1   2173358 521.29
## + U1      1   2180518 521.42
## + Time    1   2182958 521.46
## + U2      1   2184660 521.49
##
## Step:  AIC=510.73
## .outcome ~ Po1 + Ineq + M.F
##
##          Df Deviance    AIC
## + Prob    1   1421854 507.59
## + Time    1   1528253 510.26
## <none>        1633555 510.73
```

```
## + M        1  1567054 511.19
## + Wealth 1  1600313 511.97
## + Ed       1  1600464 511.97
## + U1       1  1618697 512.39
## + NW       1  1627092 512.58
## + Po2      1  1628640 512.62
## + U2       1  1629419 512.64
## + LF       1  1629642 512.64
## + Pop      1  1632661 512.71
## + So       1  1633154 512.72
##
## Step:  AIC=507.59
## .outcome ~ Po1 + Ineq + M.F + Prob
##
##            Df Deviance    AIC
## <none>        1421854 507.59
## + M        1  1362733 508.02
## + NW       1  1390568 508.77
## + So       1  1396431 508.93
## + Ed       1  1401070 509.05
## + Wealth 1  1408375 509.24
## + U1       1  1411250 509.32
## + Pop      1  1412032 509.34
## + Po2      1  1416907 509.46
## + U2       1  1417955 509.49
## + Time     1  1420647 509.56
## + LF       1  1420956 509.57
## Start:  AIC=566.91
## .outcome ~ 1
##
##            Df Deviance    AIC
## + Po1      1  2493195 535.32
## + Po2      1  2529845 535.87
## + Wealth 1  4639635 558.92
## + Prob     1  4769604 559.97
## + Ed       1  5176680 563.08
## + Pop      1  5236800 563.52
## + LF       1  5687350 566.65
## <none>        6035531 566.91
## + Ineq     1  5729481 566.93
## + M.F      1  5759870 567.14
## + Time     1  5872779 567.87
## + M        1  5904770 568.08
## + U1       1  5941980 568.32
## + So       1  5942511 568.32
## + U2       1  5972274 568.51
## + NW       1  6034329 568.90
##
## Step:  AIC=535.32
## .outcome ~ Po1
##
##            Df Deviance    AIC
## + Ineq     1  1834399 525.66
## + M        1  1950820 527.99
```

```
## + Wealth  1  2184563 532.29
## + Prob    1  2328142 534.71
## + NW      1  2330561 534.75
## + Time    1  2335302 534.83
## + So      1  2354826 535.15
## <none>       2493195 535.32
## + U1      1  2436796 536.45
## + M.F     1  2478252 537.09
## + LF      1  2484713 537.19
## + Pop     1  2487505 537.23
## + Ed      1  2488851 537.25
## + U2      1  2491915 537.30
## + Po2     1  2492840 537.31
##
## Step:  AIC=525.66
## .outcome ~ Po1 + Ineq
##
##           Df Deviance    AIC
## + Ed       1  1254132 513.21
## + Prob     1  1537434 520.94
## + M.F      1  1697412 524.71
## + M        1  1706700 524.91
## + LF       1  1722732 525.27
## <none>        1834399 525.66
## + So       1  1776279 526.43
## + NW       1  1776536 526.44
## + Wealth   1  1783924 526.60
## + Po2      1  1807228 527.09
## + U2       1  1811052 527.17
## + Time     1  1816219 527.28
## + Pop      1  1822705 527.41
## + U1       1  1829357 527.55
##
## Step:  AIC=513.21
## .outcome ~ Po1 + Ineq + Ed
##
##           Df Deviance    AIC
## + Prob     1  1062090 508.89
## + M        1  1162528 512.32
## + Time     1  1171257 512.61
## <none>        1254132 513.21
## + Wealth   1  1218926 514.12
## + U2       1  1233229 514.57
## + Pop      1  1234786 514.61
## + Po2      1  1250358 515.09
## + LF       1  1250814 515.10
## + M.F      1  1253403 515.18
## + U1       1  1253637 515.19
## + So       1  1253843 515.20
## + NW       1  1254111 515.20
##
## Step:  AIC=508.89
## .outcome ~ Po1 + Ineq + Ed + Prob
##
```

```
##            Df Deviance    AIC
## + M      1    909644 505.00
## <none>        1062090 508.89
## + So     1    1015950 509.20
## + LF     1    1041676 510.15
## + NW     1    1047363 510.36
## + U2     1    1051668 510.51
## + Time   1    1057416 510.72
## + Po2    1    1058357 510.76
## + Wealth 1    1060175 510.82
## + U1     1    1061358 510.86
## + M.F    1    1061854 510.88
## + Pop    1    1062030 510.89
##
## Step:  AIC=505
## .outcome ~ Po1 + Ineq + Ed + Prob + M
##
##            Df Deviance    AIC
## + U2     1    840354 503.99
## + LF     1    854241 504.61
## <none>        909644 505.00
## + So     1    887403 506.06
## + Wealth 1    887976 506.09
## + U1     1    905632 506.83
## + Po2    1    907411 506.91
## + NW     1    908206 506.94
## + M.F    1    908404 506.95
## + Pop    1    909166 506.98
## + Time   1    909352 506.99
##
## Step:  AIC=503.99
## .outcome ~ Po1 + Ineq + Ed + Prob + M + U2
##
##            Df Deviance    AIC
## + U1     1    761921 502.27
## <none>        840354 503.99
## + LF     1    819589 505.04
## + So     1    822087 505.16
## + Wealth 1    822477 505.17
## + M.F    1    831278 505.58
## + Po2    1    837353 505.86
## + NW     1    838148 505.89
## + Pop    1    840157 505.98
## + Time   1    840302 505.99
##
## Step:  AIC=502.27
## .outcome ~ Po1 + Ineq + Ed + Prob + M + U2 + U1
##
##            Df Deviance    AIC
## <none>        761921 502.27
## + LF     1    733947 502.85
## + Pop    1    751994 503.77
## + NW     1    752200 503.78
## + Wealth 1    754248 503.88
```

```
## + Time    1    756275 503.99
## + So      1    760146 504.18
## + M.F     1    760210 504.18
## + Po2     1    761023 504.22
## Start:  AIC=580.54
## .outcome ~ 1
##
##          Df Deviance    AIC
## + Po1     1  3174066 557.65
## + Po2     1  3406253 560.40
## + Wealth  1  4585810 572.00
## + Prob    1  4626112 572.34
## + Ed      1  5269486 577.42
## + Pop     1  5383479 578.25
## + LF      1  5637203 580.05
## + U2      1  5639357 580.06
## + M.F     1  5657591 580.19
## <none>       6008977 580.54
## + Ineq    1  5822629 581.31
## + Time    1  5823327 581.32
## + So      1  5842487 581.44
## + M       1  5956189 582.20
## + NW      1  6001091 582.49
## + U1      1  6008937 582.54
##
## Step:  AIC=557.65
## .outcome ~ Po1
##
##          Df Deviance    AIC
## + Ineq    1  2590432 551.72
## + M       1  2599664 551.86
## + M.F     1  2884126 555.91
## + Po2     1  2897607 556.09
## + NW      1  2946467 556.75
## + So      1  3007263 557.54
## <none>       3174066 557.65
## + LF      1  3046080 558.04
## + Wealth  1  3102517 558.76
## + Time    1  3142588 559.26
## + U2      1  3143443 559.27
## + Pop     1  3155730 559.42
## + Prob    1  3156673 559.43
## + U1      1  3172143 559.63
## + Ed      1  3174035 559.65
##
## Step:  AIC=551.72
## .outcome ~ Po1 + Ineq
##
##          Df Deviance    AIC
## + Ed      1  2080678 545.18
## + M.F     1  2127635 546.05
## + Wealth  1  2173620 546.88
## + LF      1  2334858 549.67
## + M       1  2394036 550.65
```

```
## + Pop    1  2430612 551.24
## + Prob   1  2433744 551.29
## <none>      2590432 551.72
## + Po2    1  2477385 551.98
## + NW     1  2547390 553.07
## + U1     1  2562448 553.30
## + So     1  2563486 553.32
## + U2     1  2580863 553.58
## + Time   1  2590430 553.72
##
## Step:  AIC=545.18
## .outcome ~ Po1 + Ineq + Ed
##
##            Df Deviance    AIC
## + M      1  1880564 543.23
## + Prob   1  1908712 543.81
## + Wealth 1  1913019 543.90
## + M.F    1  1965104 544.95
## <none>      2080678 545.18
## + Po2    1  1989138 545.42
## + U2     1  2001856 545.67
## + Pop    1  2029777 546.21
## + Time   1  2034362 546.30
## + LF     1  2063708 546.86
## + NW     1  2074808 547.07
## + U1     1  2075124 547.07
## + So     1  2077634 547.12
##
## Step:  AIC=543.23
## .outcome ~ Po1 + Ineq + Ed + M
##
##            Df Deviance    AIC
## + Wealth 1  1575402 538.33
## + U2     1  1669035 540.58
## + Prob   1  1695928 541.20
## + Po2    1  1784729 543.19
## <none>      1880564 543.23
## + M.F    1  1793053 543.38
## + U1     1  1829040 544.15
## + Time   1  1852923 544.66
## + LF     1  1864619 544.90
## + Pop    1  1865904 544.93
## + NW     1  1871002 545.04
## + So     1  1872146 545.06
##
## Step:  AIC=538.33
## .outcome ~ Po1 + Ineq + Ed + M + Wealth
##
##          Df Deviance    AIC
## + U2     1  1349013 534.28
## + U1     1  1451270 537.13
## + Po2    1  1488300 538.11
## + M.F    1  1489823 538.15
## <none>      1575402 538.33
```

```
## + Prob   1  1532810 539.26
## + Pop    1  1536522 539.35
## + So     1  1550268 539.70
## + NW     1  1559518 539.93
## + Time   1  1573354 540.28
## + LF     1  1575131 540.32
##
## Step:  AIC=534.28
## .outcome ~ Po1 + Ineq + Ed + M + Wealth + U2
##
##         Df Deviance    AIC
## + Po2   1  1278587 534.19
## <none>    1349013 534.28
## + Prob  1  1281694 534.28
## + NW    1  1282885 534.32
## + Pop   1  1300127 534.84
## + So    1  1311741 535.19
## + M.F   1  1313045 535.22
## + LF    1  1329022 535.70
## + U1    1  1342373 536.09
## + Time  1  1343553 536.12
##
## Step:  AIC=534.19
## .outcome ~ Po1 + Ineq + Ed + M + Wealth + U2 + Po2
##
##         Df Deviance    AIC
## <none>    1278587 534.19
## + Prob  1  1225917 534.55
## + Pop   1  1231372 534.72
## + NW    1  1243906 535.12
## + M.F   1  1256089 535.50
## + So    1  1256275 535.50
## + U1    1  1270565 535.94
## + LF    1  1272625 536.01
## + Time  1  1278182 536.18
## Start:  AIC=533.52
## .outcome ~ 1
##
##           Df Deviance    AIC
## + Po1     1  2603025 523.97
## + Po2     1  2691516 525.21
## + Prob    1  3136402 530.87
## + Wealth  1  3308334 532.84
## + Ed      1  3343146 533.23
## <none>      3556770 533.52
## + Pop     1  3438299 534.27
## + U2      1  3525329 535.19
## + LF      1  3537334 535.32
## + Ineq    1  3542162 535.37
## + U1      1  3542732 535.37
## + M.F     1  3545209 535.40
## + NW      1  3548293 535.43
## + Time    1  3552548 535.47
## + M       1  3554859 535.50
```

```
## + So      1  3556194 535.51
##
## Step:  AIC=523.97
## .outcome ~ Po1
##
##            Df Deviance    AIC
## + M        1  2168886 519.22
## + Ineq     1  2193280 519.63
## + So       1  2460502 523.88
## <none>        2603025 523.97
## + Wealth   1  2484731 524.25
## + Po2      1  2485074 524.25
## + NW       1  2501215 524.49
## + M.F      1  2505061 524.55
## + Prob     1  2541165 525.08
## + Pop      1  2560611 525.36
## + LF       1  2588899 525.77
## + U2       1  2595630 525.86
## + Ed       1  2596922 525.88
## + Time     1  2601488 525.95
## + U1       1  2602460 525.96
##
## Step:  AIC=519.22
## .outcome ~ Po1 + M
##
##            Df Deviance    AIC
## + Prob     1  2008692 518.38
## + Ineq     1  2018941 518.57
## + M.F      1  2048234 519.10
## + Ed       1  2051049 519.15
## <none>        2168886 519.22
## + LF       1  2056201 519.24
## + Po2      1  2111071 520.22
## + U2       1  2117003 520.32
## + Pop      1  2123526 520.44
## + U1       1  2134932 520.63
## + Time     1  2158737 521.04
## + So       1  2161336 521.09
## + NW       1  2167598 521.20
## + Wealth   1  2167791 521.20
##
## Step:  AIC=518.38
## .outcome ~ Po1 + M + Prob
##
##            Df Deviance    AIC
## + Ineq     1  1741563 515.10
## + Time     1  1902001 518.36
## <none>        2008692 518.38
## + So       1  1904554 518.41
## + M.F      1  1919275 518.69
## + LF       1  1939463 519.08
## + Ed       1  1943015 519.15
## + U2       1  1945558 519.20
## + Pop      1  1960540 519.48
```

```
## + Po2    1  1970080 519.66
## + NW     1  1974919 519.75
## + U1     1  1980204 519.85
## + Wealth 1  1980847 519.86
##
## Step:  AIC=515.1
## .outcome ~ Po1 + M + Prob + Ineq
##
##            Df Deviance    AIC
## + Ed     1  1298444 506.23
## + Pop    1  1444443 510.18
## + Time   1  1466513 510.74
## + M.F    1  1546111 512.69
## + LF     1  1600928 513.98
## + Wealth 1  1644068 514.97
## <none>      1741563 515.10
## + U1     1  1722659 516.69
## + NW     1  1729286 516.84
## + U2     1  1731005 516.87
## + Po2    1  1735776 516.98
## + So     1  1738394 517.03
##
## Step:  AIC=506.23
## .outcome ~ Po1 + M + Prob + Ineq + Ed
##
##            Df Deviance    AIC
## + U2     1  1105787 502.29
## + Pop    1  1180682 504.72
## + Time   1  1211907 505.68
## + U1     1  1228225 506.18
## <none>      1298444 506.23
## + So     1  1244986 506.68
## + M.F    1  1267802 507.35
## + Wealth 1  1268058 507.36
## + Po2    1  1284479 507.83
## + LF     1  1288475 507.95
## + NW     1  1296519 508.18
##
## Step:  AIC=502.29
## .outcome ~ Po1 + M + Prob + Ineq + Ed + U2
##
##            Df Deviance    AIC
## + Pop    1   994769 500.38
## + Time   1  1039565 502.01
## <none>      1105787 502.29
## + So     1  1059291 502.70
## + U1     1  1082580 503.51
## + Wealth 1  1089339 503.74
## + Po2    1  1098925 504.06
## + LF     1  1098927 504.06
## + NW     1  1103646 504.22
## + M.F    1  1104340 504.24
##
## Step:  AIC=500.38
```

```
## .outcome ~ Po1 + M + Prob + Ineq + Ed + U2 + Pop
##
##           Df Deviance    AIC
## + So       1   942132 500.37
## <none>         994769 500.38
## + U1       1   961596 501.12
## + Time     1   973685 501.58
## + Po2      1   973781 501.59
## + NW       1   983202 501.94
## + Wealth   1   985887 502.05
## + LF       1   988025 502.13
## + M.F      1   989011 502.16
##
## Step:  AIC=500.37
## .outcome ~ Po1 + M + Prob + Ineq + Ed + U2 + Pop + So
##
##           Df Deviance    AIC
## <none>         942132 500.37
## + LF       1   900248 500.68
## + Po2      1   906025 500.92
## + Time     1   919282 501.46
## + U1       1   928331 501.82
## + Wealth   1   938313 502.22
## + NW       1   940932 502.32
## + M.F      1   940978 502.32
## Start:  AIC=552.48
## .outcome ~ 1
##
##           Df Deviance    AIC
## + Po1      1  2831769 527.08
## + Po2      1  2981569 528.99
## + Wealth   1  4469823 543.97
## + Prob     1  4830157 546.84
## + Pop      1  4918720 547.51
## + Ed       1  5193542 549.53
## + Ineq     1  5564773 552.08
## <none>        5937116 552.48
## + M.F      1  5709164 553.03
## + U2       1  5743658 553.25
## + LF       1  5746134 553.27
## + Time     1  5799166 553.61
## + M        1  5844797 553.90
## + So       1  5875796 554.09
## + U1       1  5901473 554.25
## + NW       1  5936916 554.48
##
## Step:  AIC=527.08
## .outcome ~ Po1
##
##           Df Deviance    AIC
## + Ineq     1  2318022 521.68
## + M        1  2425908 523.36
## + So       1  2643558 526.54
## + M.F      1  2662036 526.80
```

```
## + NW      1   2671466  526.93
## <none>        2831769  527.08
## + Prob     1   2717766  527.56
## + Po2      1   2739394  527.86
## + Wealth   1   2741054  527.88
## + Time     1   2771144  528.28
## + LF       1   2774412  528.33
## + U2       1   2815813  528.88
## + U1       1   2824663  528.99
## + Ed       1   2827081  529.02
## + Pop      1   2830764  529.07
##
## Step:  AIC=521.68
## .outcome ~ Po1 + Ineq
##
##           Df Deviance     AIC
## + Ed       1   1977822  517.81
## + Prob     1   2002589  518.27
## + M.F      1   2050901  519.15
## + LF       1   2099621  520.02
## + Wealth   1   2129746  520.54
## + M        1   2171167  521.26
## <none>         2318022  521.68
## + Time     1   2276178  523.00
## + Pop      1   2280779  523.08
## + Po2      1   2296096  523.33
## + NW       1   2298042  523.36
## + So       1   2300729  523.40
## + U2       1   2306904  523.50
## + U1       1   2311359  523.57
##
## Step:  AIC=517.81
## .outcome ~ Po1 + Ineq + Ed
##
##           Df Deviance     AIC
## + Prob     1   1712446  514.47
## + M        1   1742001  515.11
## + Time     1   1857646  517.49
## + M.F      1   1870745  517.75
## <none>         1977822  517.81
## + Wealth   1   1902408  518.37
## + LF       1   1942823  519.14
## + Pop      1   1958837  519.45
## + Po2      1   1959118  519.45
## + U2       1   1962260  519.51
## + So       1   1974063  519.73
## + NW       1   1976468  519.78
## + U1       1   1977194  519.79
##
## Step:  AIC=514.47
## .outcome ~ Po1 + Ineq + Ed + Prob
##
##           Df Deviance     AIC
## + M        1   1467060  510.75
```

```
## + M.F      1  1576043 513.40
## + So       1  1608928 514.17
## <none>        1712446 514.47
## + Pop      1  1640135 514.88
## + NW       1  1667311 515.49
## + Po2      1  1683309 515.84
## + Wealth   1  1686878 515.92
## + LF       1  1696237 516.12
## + Time     1  1704476 516.30
## + U2       1  1706277 516.34
## + U1       1  1710935 516.44
##
## Step:  AIC=510.75
## .outcome ~ Po1 + Ineq + Ed + Prob + M
##
##           Df Deviance    AIC
## + M.F      1  1380070 510.49
## <none>        1467060 510.75
## + U2       1  1401202 511.05
## + Wealth   1  1401796 511.07
## + Pop      1  1437301 511.99
## + Po2      1  1438693 512.03
## + So       1  1448172 512.27
## + LF       1  1454353 512.43
## + U1       1  1460697 512.59
## + NW       1  1465933 512.72
## + Time     1  1466583 512.74
##
## Step:  AIC=510.49
## .outcome ~ Po1 + Ineq + Ed + Prob + M + M.F
##
##           Df Deviance    AIC
## <none>        1380070 510.49
## + So       1  1318341 510.80
## + Wealth   1  1335505 511.28
## + U2       1  1346152 511.57
## + Time     1  1362219 512.01
## + Po2      1  1373395 512.31
## + U1       1  1374783 512.35
## + NW       1  1375859 512.38
## + Pop      1  1376870 512.40
## + LF       1  1378290 512.44
## Start:  AIC=549.57
## .outcome ~ 1
##
##           Df Deviance    AIC
## + Po1      1  2917353 528.19
## + Po2      1  3120989 530.68
## + Wealth   1  4129540 541.04
## + Pop      1  4258263 542.18
## + Prob     1  4459802 543.89
## + Ed       1  5087622 548.76
## + U2       1  5124469 549.03
## <none>        5488559 549.57
```

```
## + Time    1  5205897 549.61
## + LF      1  5210023 549.64
## + M.F     1  5225089 549.75
## + Ineq    1  5295965 550.25
## + M       1  5389349 550.90
## + So      1  5389748 550.90
## + NW      1  5482111 551.53
## + U1      1  5487932 551.57
##
## Step:  AIC=528.19
## .outcome ~ Po1
##
##           Df Deviance    AIC
## + Ineq    1  2394719 522.88
## + M       1  2428683 523.40
## + Po2     1  2690307 527.19
## + M.F     1  2745527 527.94
## <none>       2917353 528.19
## + NW      1  2776224 528.35
## + Time    1  2779558 528.40
## + So      1  2792880 528.57
## + Prob    1  2812674 528.83
## + U2      1  2813336 528.84
## + Wealth  1  2845470 529.26
## + Pop     1  2858640 529.43
## + LF      1  2869724 529.58
## + U1      1  2899207 529.96
## + Ed      1  2912256 530.12
##
## Step:  AIC=522.88
## .outcome ~ Po1 + Ineq
##
##           Df Deviance    AIC
## + Ed      1  1993003 518.09
## + M.F     1  2016751 518.53
## + Wealth  1  2116856 520.32
## + LF      1  2129760 520.54
## + Prob    1  2148678 520.87
## + M       1  2213579 521.97
## <none>       2394719 522.88
## + So      1  2314975 523.63
## + Po2     1  2335649 523.96
## + NW      1  2345302 524.11
## + U1      1  2366856 524.45
## + Time    1  2370337 524.50
## + Pop     1  2380420 524.66
## + U2      1  2381869 524.68
##
## Step:  AIC=518.09
## .outcome ~ Po1 + Ineq + Ed
##
##           Df Deviance    AIC
## + M       1  1729029 514.83
## + Prob    1  1801579 516.35
```

```
## + M.F    1  1860357 517.54
## + Wealth 1  1887237 518.07
## <none>       1993003 518.09
## + U2     1  1923071 518.77
## + Time   1  1925219 518.81
## + Po2    1  1929751 518.89
## + U1     1  1965502 519.57
## + Pop    1  1982065 519.88
## + LF     1  1982092 519.89
## + NW     1  1989259 520.02
## + So     1  1989508 520.02
##
## Step:  AIC=514.83
## .outcome ~ Po1 + Ineq + Ed + M
##
##           Df Deviance    AIC
## + Wealth 1  1446637 510.23
## + Prob   1  1481978 511.13
## + U2     1  1554746 512.90
## + So     1  1636649 514.80
## <none>      1729029 514.83
## + NW     1  1643994 514.97
## + M.F    1  1644952 514.99
## + U1     1  1647224 515.04
## + LF     1  1676004 515.68
## + Time   1  1683983 515.85
## + Po2    1  1688044 515.94
## + Pop    1  1727026 516.79
##
## Step:  AIC=510.23
## .outcome ~ Po1 + Ineq + Ed + M + Wealth
##
##         Df Deviance    AIC
## + U2    1  1284421 507.83
## + So    1  1296699 508.18
## + Prob  1  1299154 508.25
## + U1    1  1352536 509.74
## <none>     1446637 510.23
## + M.F   1  1399033 511.00
## + Po2   1  1406447 511.19
## + LF    1  1412481 511.35
## + Time  1  1424696 511.67
## + NW    1  1425002 511.68
## + Pop   1  1442991 512.14
##
## Step:  AIC=507.83
## .outcome ~ Po1 + Ineq + Ed + M + Wealth + U2
##
##         Df Deviance    AIC
## + Prob  1  1126544 504.98
## + LF    1  1141978 505.48
## + So    1  1142352 505.50
## <none>     1284421 507.83
## + Time  1  1240631 508.55
```

```
## + Po2   1  1245285 508.69
## + NW    1  1269846 509.41
## + M.F   1  1277478 509.63
## + U1    1  1278508 509.66
## + Pop   1  1284376 509.83
##
## Step:  AIC=504.98
## .outcome ~ Po1 + Ineq + Ed + M + Wealth + U2 + Prob
##
##         Df Deviance    AIC
## + LF    1   999741 502.56
## <none>     1126544 504.98
## + So    1  1085522 505.61
## + Po2   1  1086775 505.65
## + M.F   1  1115206 506.61
## + Pop   1  1116080 506.63
## + U1    1  1118638 506.72
## + Time  1  1125927 506.96
## + NW    1  1126137 506.97
##
## Step:  AIC=502.56
## .outcome ~ Po1 + Ineq + Ed + M + Wealth + U2 + Prob + LF
##
##         Df Deviance    AIC
## <none>      999741 502.56
## + M.F   1   985778 504.04
## + So    1   991050 504.24
## + U1    1   993785 504.34
## + NW    1   996584 504.44
## + Po2   1   999186 504.54
## + Time  1   999735 504.56
## + Pop   1   999739 504.56
## Start:  AIC=567.35
## .outcome ~ 1
##
##          Df Deviance    AIC
## + Po1    1  3448425 547.64
## + Po2    1  3607118 549.35
## + Wealth 1  5135031 562.77
## + Ed     1  5265226 563.72
## + Prob   1  5421970 564.84
## + Pop    1  5456480 565.08
## + M.F    1  5620847 566.21
## <none>      6105770 567.35
## + LF     1  5880812 567.92
## + NW     1  5926640 568.22
## + Ineq   1  5998689 568.68
## + U2     1  6004770 568.72
## + Time   1  6023573 568.84
## + U1     1  6076488 569.17
## + So     1  6102532 569.33
## + M      1  6105382 569.35
##
## Step:  AIC=547.64
```

```
## .outcome ~ Po1
##
##           Df Deviance    AIC
## + Ineq    1  2647520 539.60
## + M       1  2712134 540.51
## + M.F     1  2967130 543.93
## + NW      1  3084358 545.40
## + So      1  3186034 546.63
## + Wealth  1  3241498 547.29
## <none>       3448425 547.64
## + Po2     1  3325026 548.26
## + LF      1  3329284 548.31
## + Prob    1  3397934 549.08
## + Time    1  3426590 549.40
## + U2      1  3426644 549.40
## + Ed      1  3433462 549.48
## + Pop     1  3438625 549.53
## + U1      1  3448274 549.64
##
## Step:  AIC=539.6
## .outcome ~ Po1 + Ineq
##
##           Df Deviance    AIC
## + Ed      1  1764160 526.17
## + M.F     1  2062632 532.11
## + LF      1  2350302 537.07
## + Prob    1  2417552 538.15
## + Wealth  1  2425632 538.27
## + M       1  2428279 538.31
## <none>       2647520 539.60
## + Pop     1  2539880 540.02
## + So      1  2627353 541.31
## + Po2     1  2632502 541.38
## + U2      1  2635022 541.42
## + Time    1  2643420 541.54
## + U1      1  2646449 541.58
## + NW      1  2647518 541.60
##
## Step:  AIC=526.17
## .outcome ~ Po1 + Ineq + Ed
##
##           Df Deviance    AIC
## + M.F     1  1600342 524.47
## + M       1  1604722 524.57
## + NW      1  1625371 525.06
## + Prob    1  1638774 525.37
## <none>       1764160 526.17
## + U2      1  1677099 526.25
## + Wealth  1  1685913 526.45
## + Time    1  1716311 527.13
## + So      1  1720693 527.22
## + U1      1  1733784 527.51
## + Pop     1  1754875 527.97
## + LF      1  1762299 528.13
```

```
## + Po2     1  1762741 528.14
##
## Step:  AIC=524.47
## .outcome ~ Po1 + Ineq + Ed + M.F
##
##           Df Deviance    AIC
## + NW      1  1396523 521.29
## + Time    1  1445868 522.61
## + Prob    1  1457081 522.90
## + M       1  1486426 523.66
## + So      1  1502728 524.08
## <none>       1600342 524.47
## + Wealth  1  1537181 524.94
## + U2      1  1549138 525.23
## + Pop     1  1589240 526.20
## + Po2     1  1594128 526.32
## + LF      1  1596912 526.39
## + U1      1  1600341 526.47
##
## Step:  AIC=521.29
## .outcome ~ Po1 + Ineq + Ed + M.F + NW
##
##           Df Deviance    AIC
## + Prob    1  1174297 516.71
## + Time    1  1214999 518.00
## + Wealth  1  1306825 520.77
## <none>       1396523 521.29
## + U2      1  1327155 521.36
## + Pop     1  1353461 522.10
## + M       1  1374824 522.70
## + So      1  1382177 522.90
## + LF      1  1387900 523.06
## + U1      1  1393228 523.20
## + Po2     1  1396434 523.29
##
## Step:  AIC=516.71
## .outcome ~ Po1 + Ineq + Ed + M.F + NW + Prob
##
##           Df Deviance    AIC
## + So      1  1085446 515.72
## <none>       1174297 516.71
## + Wealth  1  1122892 517.00
## + U2      1  1125120 517.08
## + Time    1  1142460 517.66
## + LF      1  1150175 517.92
## + M       1  1163070 518.34
## + Pop     1  1172865 518.66
## + Po2     1  1173573 518.68
## + U1      1  1173648 518.68
##
## Step:  AIC=515.72
## .outcome ~ Po1 + Ineq + Ed + M.F + NW + Prob + So
##
##           Df Deviance    AIC
```

```
## <none>           1085446 515.72
## + Time    1    1038157 516.02
## + U2      1    1044406 516.25
## + Wealth  1    1056730 516.70
## + Pop     1    1076645 517.41
## + M       1    1080020 517.53
## + Po2     1    1081453 517.58
## + U1      1    1082722 517.62
## + LF      1    1084749 517.69
## Start:  AIC=561.01
## .outcome ~ 1
##
##          Df Deviance    AIC
## + Po1     1    2436236 534.44
## + Po2     1    2708220 538.46
## + Wealth  1    4292945 555.97
## + Prob    1    4325715 556.25
## + M.F     1    4564599 558.30
## + Ed      1    4842450 560.54
## <none>         5167435 561.01
## + LF      1    4934985 561.26
## + U2      1    5020966 561.92
## + Ineq    1    5031155 562.00
## + Pop     1    5032122 562.00
## + So      1    5110212 562.59
## + M       1    5116167 562.63
## + Time    1    5146855 562.86
## + U1      1    5154603 562.92
## + NW      1    5164048 562.99
##
## Step:  AIC=534.44
## .outcome ~ Po1
##
##          Df Deviance    AIC
## + Ineq    1    1695380 522.66
## + M       1    2037387 529.64
## + Po2     1    2113988 531.05
## + Wealth  1    2118725 531.13
## + M.F     1    2173553 532.10
## + NW      1    2253767 533.48
## <none>         2436236 534.44
## + So      1    2315777 534.51
## + Ed      1    2355068 535.15
## + Prob    1    2362576 535.27
## + LF      1    2381204 535.57
## + Time    1    2408789 536.01
## + U1      1    2432432 536.38
## + U2      1    2433364 536.39
## + Pop     1    2435160 536.42
##
## Step:  AIC=522.66
## .outcome ~ Po1 + Ineq
##
##          Df Deviance    AIC
```

```
## + M.F    1  1345965 515.89
## + Prob   1  1486832 519.67
## + Ed     1  1493565 519.84
## + LF     1  1538412 520.97
## + Po2    1  1583321 522.06
## + So     1  1594618 522.33
## <none>      1695380 522.66
## + M      1  1620126 522.94
## + NW     1  1638640 523.37
## + Wealth 1  1646156 523.54
## + Pop    1  1648374 523.59
## + U2     1  1679470 524.30
## + U1     1  1694448 524.64
## + Time   1  1695136 524.66
##
## Step:  AIC=515.89
## .outcome ~ Po1 + Ineq + M.F
##
##           Df Deviance    AIC
## + Prob    1  1088626 509.83
## + Time    1  1253017 515.17
## <none>       1345965 515.89
## + M       1  1284051 516.10
## + Po2     1  1298933 516.54
## + U1      1  1316545 517.05
## + So      1  1322970 517.24
## + Wealth  1  1325637 517.31
## + Pop     1  1334284 517.56
## + U2      1  1337084 517.64
## + Ed      1  1337557 517.65
## + LF      1  1339089 517.70
## + NW      1  1340514 517.74
##
## Step:  AIC=509.83
## .outcome ~ Po1 + Ineq + M.F + Prob
##
##           Df Deviance    AIC
## + M       1  1006184 508.83
## <none>       1088626 509.83
## + U1      1  1060221 510.82
## + Po2     1  1062875 510.92
## + U2      1  1079093 511.49
## + NW      1  1080949 511.56
## + So      1  1082260 511.60
## + LF      1  1085929 511.73
## + Ed      1  1087594 511.79
## + Time    1  1088311 511.82
## + Pop     1  1088473 511.82
## + Wealth  1  1088603 511.83
##
## Step:  AIC=508.83
## .outcome ~ Po1 + Ineq + M.F + Prob + M
##
##           Df Deviance    AIC
```

```
## <none>          1006184 508.83
## + Po2     1     981543 509.89
## + Wealth  1     992516 510.31
## + Ed      1     995254 510.42
## + U1      1    1000263 510.61
## + Pop     1    1001391 510.65
## + LF      1    1002365 510.69
## + NW      1    1005117 510.79
## + Time    1    1005241 510.80
## + So      1    1005973 510.83
## + U2      1    1006184 510.83
## Start:  AIC=570.14
## .outcome ~ 1
##
##           Df Deviance    AIC
## + Po1     1  2900242 554.13
## + Po2     1  2948909 554.78
## + Prob    1  3657241 563.17
## + Wealth  1  3939208 566.07
## + Pop     1  3971808 566.39
## + Ed      1  4110875 567.74
## <none>      4602868 570.14
## + Ineq    1  4457392 570.89
## + Time    1  4507411 571.33
## + U2      1  4561855 571.79
## + U1      1  4584592 571.99
## + So      1  4585661 572.00
## + LF      1  4591969 572.05
## + M.F     1  4599363 572.11
## + M       1  4602808 572.14
## + NW      1  4602834 572.14
##
## Step:  AIC=554.13
## .outcome ~ Po1
##
##           Df Deviance    AIC
## + M       1  2321011 547.44
## + Ineq    1  2454234 549.62
## <none>      2900242 554.13
## + So      1  2755340 554.13
## + Prob    1  2762345 554.23
## + NW      1  2786679 554.57
## + Wealth  1  2795432 554.69
## + M.F     1  2805560 554.84
## + Time    1  2871697 555.74
## + LF      1  2886975 555.95
## + Po2     1  2887064 555.95
## + Ed      1  2890093 555.99
## + U1      1  2893136 556.03
## + Pop     1  2900117 556.13
## + U2      1  2900136 556.13
##
## Step:  AIC=547.44
## .outcome ~ Po1 + M
```

```
##
##           Df Deviance    AIC
## + Prob    1  2136650 546.21
## + Ed      1  2164223 546.71
## + Ineq    1  2195768 547.28
## <none>       2321011 547.44
## + M.F     1  2206608 547.47
## + LF      1  2277347 548.70
## + U2      1  2290810 548.93
## + U1      1  2299057 549.07
## + NW      1  2310406 549.26
## + Po2     1  2311348 549.28
## + Time    1  2316590 549.37
## + So      1  2319511 549.42
## + Wealth  1  2320171 549.43
## + Pop     1  2320879 549.44
##
## Step:  AIC=546.21
## .outcome ~ Po1 + M + Prob
##
##           Df Deviance    AIC
## + Ineq    1  1905709 543.75
## <none>       2136650 546.21
## + Ed      1  2046641 546.54
## + So      1  2058781 546.77
## + Time    1  2059358 546.78
## + M.F     1  2062801 546.84
## + U2      1  2104337 547.62
## + U1      1  2122442 547.95
## + LF      1  2125924 548.02
## + Wealth  1  2126095 548.02
## + NW      1  2128735 548.07
## + Po2     1  2130633 548.10
## + Pop     1  2135474 548.19
##
## Step:  AIC=543.75
## .outcome ~ Po1 + M + Prob + Ineq
##
##           Df Deviance    AIC
## + Ed      1  1382229 533.23
## + M.F     1  1723798 541.84
## + Time    1  1735874 542.11
## + Wealth  1  1749561 542.42
## <none>       1905709 543.75
## + Pop     1  1834481 544.27
## + LF      1  1841919 544.42
## + NW      1  1861470 544.84
## + U1      1  1899753 545.63
## + U2      1  1903634 545.71
## + So      1  1905165 545.74
## + Po2     1  1905271 545.74
##
## Step:  AIC=533.23
## .outcome ~ Po1 + M + Prob + Ineq + Ed
```

```
##
##           Df Deviance    AIC
## + U2       1  1185439 529.24
## <none>        1382229 533.23
## + U1       1  1315200 533.29
## + So       1  1330795 533.75
## + Wealth   1  1331704 533.78
## + LF       1  1339846 534.01
## + Time     1  1344389 534.14
## + Pop      1  1360075 534.60
## + Po2      1  1365057 534.74
## + M.F      1  1368454 534.84
## + NW       1  1382202 535.23
##
## Step:  AIC=529.24
## .outcome ~ Po1 + M + Prob + Ineq + Ed + U2
##
##           Df Deviance    AIC
## <none>        1185439 529.24
## + Time     1  1130303 529.38
## + Pop      1  1142198 529.79
## + So       1  1150895 530.08
## + U1       1  1158815 530.35
## + Po2      1  1163174 530.50
## + Wealth   1  1167026 530.63
## + M.F      1  1183850 531.19
## + LF       1  1184020 531.19
## + NW       1  1184778 531.22
## Start:  AIC=539.6
## .outcome ~ 1
##
##           Df Deviance    AIC
## + Po1      1  2551992 510.24
## + Po2      1  2622132 511.22
## + Prob     1  4430277 530.10
## + Wealth   1  4439334 530.17
## + Ed       1  5140155 535.45
## + Pop      1  5439739 537.49
## + LF       1  5682087 539.06
## + U2       1  5732911 539.38
## + Ineq     1  5754076 539.51
## <none>        6097226 539.60
## + Time     1  5868830 540.22
## + M        1  5879194 540.29
## + M.F      1  5916978 540.52
## + So       1  5998911 541.01
## + U1       1  6047621 541.30
## + NW       1  6083632 541.52
##
## Step:  AIC=510.24
## .outcome ~ Po1
##
##           Df Deviance    AIC
## + Ineq     1  2065447 504.63
```

```
## + M       1  2197418 506.86
## + So      1  2264170 507.93
## + NW      1  2339482 509.11
## <none>       2551992 510.24
## + Pop     1  2444207 510.69
## + Wealth  1  2462718 510.96
## + U1      1  2463033 510.97
## + LF      1  2481863 511.24
## + M.F     1  2505449 511.58
## + Prob    1  2542368 512.11
## + Po2     1  2546907 512.17
## + Time    1  2548534 512.19
## + Ed      1  2551839 512.24
## + U2      1  2551984 512.24
##
## Step:  AIC=504.63
## .outcome ~ Po1 + Ineq
##
##           Df Deviance    AIC
## + Ed      1  1690482 499.42
## + Pop     1  1792900 501.53
## + Wealth  1  1838072 502.43
## + M.F     1  1901227 503.65
## + LF      1  1922678 504.05
## <none>       2065447 504.63
## + Prob    1  1961575 504.77
## + M       1  1998440 505.44
## + NW      1  2032190 506.04
## + Time    1  2051712 506.39
## + Po2     1  2059609 506.53
## + U2      1  2059815 506.53
## + U1      1  2062902 506.58
## + So      1  2063347 506.59
##
## Step:  AIC=499.42
## .outcome ~ Po1 + Ineq + Ed
##
##           Df Deviance    AIC
## + Prob    1  1513948 497.45
## + M       1  1576747 498.91
## + Pop     1  1584726 499.09
## + Wealth  1  1594006 499.30
## <none>       1690482 499.42
## + Time    1  1639067 500.30
## + U2      1  1644706 500.43
## + So      1  1672568 501.03
## + LF      1  1677627 501.14
## + M.F     1  1678282 501.16
## + Po2     1  1678666 501.16
## + U1      1  1679354 501.18
## + NW      1  1690479 501.42
##
## Step:  AIC=497.45
## .outcome ~ Po1 + Ineq + Ed + Prob
```

```
##
##          Df Deviance    AIC
## + M       1  1367652 495.79
## + Pop     1  1376138 496.01
## <none>       1513948 497.45
## + U2      1  1451908 497.94
## + So      1  1456311 498.05
## + NW      1  1491339 498.90
## + Wealth  1  1495295 499.00
## + Po2     1  1500043 499.11
## + M.F     1  1502807 499.18
## + U1      1  1510253 499.36
## + LF      1  1513752 499.44
## + Time    1  1513769 499.44
##
## Step:  AIC=495.79
## .outcome ~ Po1 + Ineq + Ed + Prob + M
##
##          Df Deviance    AIC
## + U2      1  1215467 493.54
## + Pop     1  1290054 495.68
## <none>       1367652 495.79
## + Wealth  1  1324133 496.62
## + So      1  1345357 497.20
## + Po2     1  1355047 497.45
## + Time    1  1362798 497.66
## + LF      1  1363546 497.68
## + U1      1  1365125 497.72
## + M.F     1  1365213 497.72
## + NW      1  1367171 497.77
##
## Step:  AIC=493.54
## .outcome ~ Po1 + Ineq + Ed + Prob + M + U2
##
##          Df Deviance    AIC
## + U1      1  1042251 490.01
## + Pop     1  1120196 492.60
## <none>       1215467 493.54
## + Wealth  1  1181594 494.52
## + So      1  1193105 494.87
## + Time    1  1204907 495.23
## + NW      1  1207325 495.30
## + Po2     1  1212955 495.47
## + M.F     1  1214446 495.51
## + LF      1  1215466 495.54
##
## Step:  AIC=490.01
## .outcome ~ Po1 + Ineq + Ed + Prob + M + U2 + U1
##
##          Df Deviance    AIC
## + Pop     1   918531 487.46
## + NW      1   979106 489.76
## <none>       1042251 490.01
## + Time    1   987654 490.07
```

```
## + M.F    1  1009728 490.86
## + Po2    1  1035371 491.77
## + Wealth 1  1039754 491.92
## + So     1  1041717 491.99
## + LF     1  1041733 491.99
##
## Step:  AIC=487.46
## .outcome ~ Po1 + Ineq + Ed + Prob + M + U2 + U1 + Pop
##
##           Df Deviance   AIC
## <none>         918531 487.46
## + NW     1    884542 488.10
## + Wealth 1    906721 488.99
## + Time   1    907368 489.02
## + So     1    916871 489.39
## + LF     1    917913 489.43
## + Po2    1    918288 489.45
## + M.F    1    918439 489.45
## Start:  AIC=551.42
## .outcome ~ 1
##
##           Df Deviance   AIC
## + Po1    1   3151921 531.05
## + Po2    1   3351463 533.32
## + Wealth 1   4465988 543.94
## + Prob   1   4644029 545.39
## + Pop    1   4988238 548.03
## + Ed     1   5033543 548.37
## + LF     1   5337832 550.54
## <none>       5769927 551.42
## + M.F    1   5466581 551.42
## + Time   1   5491515 551.59
## + U2     1   5586879 552.23
## + So     1   5653774 552.67
## + Ineq   1   5655173 552.68
## + NW     1   5705878 553.01
## + M      1   5747208 553.27
## + U1     1   5769255 553.42
##
## Step:  AIC=531.05
## .outcome ~ Po1
##
##           Df Deviance   AIC
## + Ineq   1   2480356 524.18
## + M      1   2532144 524.95
## + NW     1   2849467 529.32
## + M.F    1   2901133 529.98
## + Po2    1   2929883 530.34
## + So     1   2980934 530.98
## <none>       3151921 531.05
## + LF     1   3038850 531.70
## + Wealth 1   3076974 532.16
## + Time   1   3109395 532.55
## + U2     1   3136801 532.87
```

```
## + Ed      1  3141788 532.93
## + Pop     1  3148753 533.01
## + Prob    1  3149549 533.02
## + U1      1  3150553 533.03
##
## Step:  AIC=524.18
## .outcome ~ Po1 + Ineq
##
##            Df Deviance    AIC
## + Ed      1  1655929 511.23
## + M.F     1  2018372 518.56
## + Wealth  1  2020833 518.60
## + LF      1  2060003 519.31
## + M       1  2276524 523.01
## + Pop     1  2347395 524.14
## <none>       2480356 524.18
## + Prob    1  2374479 524.57
## + Po2     1  2435960 525.51
## + So      1  2445004 525.65
## + NW      1  2475900 526.12
## + U1      1  2477181 526.13
## + U2      1  2478239 526.15
## + Time    1  2480190 526.18
##
## Step:  AIC=511.23
## .outcome ~ Po1 + Ineq + Ed
##
##            Df Deviance    AIC
## + Wealth  1  1461700 508.62
## + Prob    1  1555543 510.92
## + Time    1  1562047 511.07
## + NW      1  1566104 511.17
## <none>       1655929 511.23
## + M       1  1578446 511.46
## + U2      1  1589114 511.71
## + M.F     1  1600546 511.97
## + Po2     1  1634894 512.76
## + U1      1  1643805 512.96
## + So      1  1649035 513.08
## + Pop     1  1650953 513.12
## + LF      1  1654774 513.21
##
## Step:  AIC=508.62
## .outcome ~ Po1 + Ineq + Ed + Wealth
##
##          Df Deviance    AIC
## + M     1  1323943 506.95
## + NW    1  1330203 507.13
## <none>     1461700 508.62
## + M.F   1  1402996 509.10
## + U2    1  1432607 509.87
## + Time  1  1438607 510.03
## + Po2   1  1443782 510.16
## + Prob  1  1447413 510.25
```

```
## + Pop   1  1453705 510.41
## + U1    1  1454596 510.44
## + So    1  1458866 510.54
## + LF    1  1458996 510.55
##
## Step:  AIC=506.95
## .outcome ~ Po1 + Ineq + Ed + Wealth + M
##
##         Df Deviance    AIC
## + U2    1  1228863 506.20
## <none>     1323943 506.95
## + M.F   1  1273643 507.52
## + NW    1  1274898 507.56
## + U1    1  1284927 507.85
## + LF    1  1299863 508.27
## + Prob  1  1300596 508.30
## + Po2   1  1301025 508.31
## + Time  1  1315457 508.72
## + So    1  1315710 508.72
## + Pop   1  1320051 508.85
##
## Step:  AIC=506.2
## .outcome ~ Po1 + Ineq + Ed + Wealth + M + U2
##
##         Df Deviance    AIC
## + LF    1  1131191 505.13
## <none>     1228863 506.20
## + Prob  1  1194792 507.16
## + NW    1  1196996 507.22
## + M.F   1  1208525 507.58
## + Po2   1  1211893 507.68
## + U1    1  1214028 507.75
## + So    1  1215050 507.78
## + Time  1  1216169 507.81
## + Pop   1  1225161 508.09
##
## Step:  AIC=505.13
## .outcome ~ Po1 + Ineq + Ed + Wealth + M + U2 + LF
##
##         Df Deviance    AIC
## <none>     1131191 505.13
## + NW    1  1093055 505.86
## + Prob  1  1095966 505.96
## + U1    1  1113244 506.54
## + Time  1  1118216 506.71
## + M.F   1  1129498 507.08
## + So    1  1130882 507.12
## + Po2   1  1130993 507.13
## + Pop   1  1131023 507.13
## Start:  AIC=556.47
## .outcome ~ 1
##
##           Df Deviance    AIC
## + Po1     1  2788356 539.57
```

```
## + Po2    1  2907033 541.15
## + Prob   1  3731090 550.64
## + Pop    1  3804446 551.37
## + Wealth 1  3983568 553.12
## + U2     1  4231689 555.42
## + Ed     1  4319816 556.20
## <none>      4584851 556.47
## + Time   1  4498079 557.74
## + Ineq   1  4567160 558.32
## + M.F    1  4568584 558.33
## + NW     1  4570891 558.35
## + So     1  4578395 558.41
## + M      1  4582437 558.45
## + U1     1  4583385 558.45
## + LF     1  4583938 558.46
##
## Step:  AIC=539.57
## .outcome ~ Po1
##
##           Df Deviance    AIC
## + Ineq   1  2060524 530.07
## + M      1  2328861 534.72
## + M.F    1  2534082 537.93
## + So     1  2581968 538.65
## + Wealth 1  2633837 539.40
## <none>      2788356 539.57
## + NW     1  2647742 539.60
## + Po2    1  2672340 539.95
## + Prob   1  2688777 540.19
## + LF     1  2725376 540.70
## + U2     1  2767831 541.29
## + Ed     1  2785503 541.53
## + U1     1  2787427 541.55
## + Time   1  2787879 541.56
## + Pop    1  2788094 541.56
##
## Step:  AIC=530.07
## .outcome ~ Po1 + Ineq
##
##           Df Deviance    AIC
## + Ed     1  1653201 523.70
## + M.F    1  1670829 524.11
## + Wealth 1  1817032 527.29
## + Prob   1  1825037 527.46
## + LF     1  1922246 529.43
## + NW     1  1940029 529.78
## <none>      2060524 530.07
## + Pop    1  1967775 530.32
## + M      1  1992940 530.81
## + Time   1  2025104 531.41
## + U1     1  2035876 531.62
## + So     1  2036499 531.63
## + Po2    1  2038497 531.66
## + U2     1  2049095 531.86
```

```
##
## Step:  AIC=523.7
## .outcome ~ Po1 + Ineq + Ed
##
##           Df Deviance    AIC
## + M        1  1467332 521.17
## + Prob     1  1490320 521.76
## + M.F      1  1515478 522.40
## + U2       1  1549212 523.23
## <none>        1653201 523.70
## + Wealth 1  1578319 523.94
## + Pop      1  1591109 524.25
## + U1       1  1614936 524.81
## + Po2      1  1615442 524.83
## + NW       1  1647258 525.57
## + So       1  1649324 525.61
## + Time     1  1652099 525.68
## + LF       1  1653013 525.70
##
## Step:  AIC=521.17
## .outcome ~ Po1 + Ineq + Ed + M
##
##           Df Deviance    AIC
## + U2       1  1234328 516.60
## + Prob     1  1292658 518.36
## + Wealth 1  1366793 520.47
## + U1       1  1366953 520.48
## + M.F      1  1377117 520.76
## <none>        1467332 521.17
## + Po2      1  1405222 521.53
## + NW       1  1421701 521.97
## + Pop      1  1440268 522.46
## + Time     1  1461318 523.02
## + So       1  1466342 523.15
## + LF       1  1467332 523.17
##
## Step:  AIC=516.6
## .outcome ~ Po1 + Ineq + Ed + M + U2
##
##           Df Deviance    AIC
## + Prob     1  1090472 513.89
## + Wealth 1  1155990 516.11
## <none>        1234328 516.60
## + NW       1  1180839 516.92
## + Pop      1  1187546 517.13
## + M.F      1  1208989 517.81
## + Po2      1  1213035 517.94
## + U1       1  1219630 518.15
## + LF       1  1220677 518.18
## + Time     1  1232503 518.54
## + So       1  1234161 518.60
##
## Step:  AIC=513.89
## .outcome ~ Po1 + Ineq + Ed + M + U2 + Prob
```

```
## 
##           Df Deviance    AIC
## + Time    1  1001153 512.64
## + Pop     1  1017316 513.25
## <none>       1090472 513.89
## + Wealth  1  1045222 514.28
## + So      1  1052588 514.55
## + Po2     1  1071956 515.24
## + M.F     1  1073805 515.31
## + U1      1  1074645 515.34
## + NW      1  1076551 515.40
## + LF      1  1090458 515.89
## 
## Step:  AIC=512.64
## .outcome ~ Po1 + Ineq + Ed + M + U2 + Prob + Time
## 
##           Df Deviance    AIC
## + Po2     1   914055 511.19
## <none>        1001153 512.64
## + Wealth  1   958626 512.99
## + U1      1   962065 513.13
## + So      1   965964 513.28
## + Pop     1   971517 513.50
## + NW      1   999195 514.57
## + LF      1  1000015 514.60
## + M.F     1  1000986 514.64
## 
## Step:  AIC=511.19
## .outcome ~ Po1 + Ineq + Ed + M + U2 + Prob + Time + Po2
## 
##           Df Deviance    AIC
## + So      1   845071 510.20
## <none>         914055 511.19
## + U1      1   867515 511.20
## + Pop     1   873565 511.46
## + Wealth  1   883045 511.87
## + LF      1   906692 512.88
## + M.F     1   908371 512.95
## + NW      1   911923 513.10
## 
## Step:  AIC=510.2
## .outcome ~ Po1 + Ineq + Ed + M + U2 + Prob + Time + Po2 + So
## 
##           Df Deviance    AIC
## <none>         845071 510.20
## + Pop     1   807773 510.49
## + U1      1   826907 511.38
## + Wealth  1   827721 511.42
## + NW      1   841368 512.04
## + M.F     1   843672 512.14
## + LF      1   844759 512.19
## Start:  AIC=548.74
## .outcome ~ 1
## 
```

```
##           Df Deviance    AIC
## + Po1     1  2580754 523.65
## + Po2     1  2626779 524.30
## + Wealth  1  4011662 539.97
## + Prob    1  4190523 541.59
## + Pop     1  4698903 545.82
## + Ed      1  4895061 547.34
## + Ineq    1  4909720 547.45
## + M.F     1  4934341 547.63
## <none>       5366395 548.74
## + M       1  5213350 549.67
## + LF      1  5238646 549.85
## + So      1  5245448 549.89
## + U2      1  5251928 549.94
## + Time    1  5262022 550.01
## + U1      1  5346145 550.60
## + NW      1  5362363 550.71
##
## Step:  AIC=523.65
## .outcome ~ Po1
##
##           Df Deviance    AIC
## + M       1  2242722 520.46
## + Ineq    1  2246030 520.51
## + So      1  2401279 522.98
## + M.F     1  2417688 523.24
## + NW      1  2442626 523.62
## <none>       2580754 523.65
## + Prob    1  2485551 524.26
## + Wealth  1  2518266 524.74
## + Time    1  2552466 525.24
## + Pop     1  2555450 525.29
## + LF      1  2559601 525.35
## + U1      1  2561092 525.37
## + Ed      1  2566671 525.45
## + U2      1  2578249 525.61
## + Po2     1  2579686 525.64
##
## Step:  AIC=520.46
## .outcome ~ Po1 + M
##
##           Df Deviance    AIC
## + M.F     1  2092049 519.88
## + Prob    1  2098281 519.99
## + Ineq    1  2107425 520.15
## <none>       2242722 520.46
## + LF      1  2205586 521.84
## + So      1  2214155 521.98
## + U2      1  2216588 522.02
## + Ed      1  2231111 522.26
## + Pop     1  2233566 522.30
## + Time    1  2235745 522.34
## + NW      1  2238195 522.38
## + Wealth  1  2241108 522.43
```

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```
## + Po2     1  2242356 522.45
## + U1      1  2242367 522.45
##
## Step:  AIC=519.88
## .outcome ~ Po1 + M + M.F
##
##          Df Deviance    AIC
## + Ineq    1  1828744 516.91
## + Prob    1  1929104 518.88
## <none>       2092049 519.88
## + So      1  2011428 520.43
## + Time    1  2024988 520.68
## + NW      1  2042689 521.00
## + U2      1  2046398 521.07
## + Ed      1  2068350 521.46
## + Pop     1  2069588 521.48
## + Wealth  1  2075114 521.58
## + LF      1  2090187 521.85
## + U1      1  2090626 521.86
## + Po2     1  2092047 521.88
##
## Step:  AIC=516.91
## .outcome ~ Po1 + M + M.F + Ineq
##
##          Df Deviance    AIC
## + Prob    1  1564301 513.13
## + Wealth  1  1710937 516.44
## <none>       1828744 516.91
## + Ed      1  1745697 517.19
## + Time    1  1780670 517.92
## + NW      1  1815709 518.64
## + U2      1  1820417 518.74
## + Po2     1  1825311 518.84
## + U1      1  1826096 518.85
## + LF      1  1826685 518.86
## + So      1  1826882 518.87
## + Pop     1  1827471 518.88
##
## Step:  AIC=513.13
## .outcome ~ Po1 + M + M.F + Ineq + Prob
##
##          Df Deviance    AIC
## <none>       1564301 513.13
## + Ed      1  1508428 513.78
## + Wealth  1  1519500 514.05
## + So      1  1536587 514.47
## + Time    1  1552818 514.85
## + U2      1  1555473 514.92
## + LF      1  1556203 514.93
## + Pop     1  1556226 514.94
## + Po2     1  1559292 515.01
## + NW      1  1562193 515.08
## + U1      1  1563894 515.12
## Start:  AIC=568.76
```

```
## .outcome ~ 1
##
##          Df Deviance    AIC
## + Po1    1   3060546 543.11
## + Po2    1   3295450 545.92
## + Wealth 1   5150312 562.88
## + Prob   1   5291992 563.92
## + Ed     1   5335055 564.22
## + Pop    1   5663084 566.49
## + LF     1   5728834 566.93
## + M.F    1   5814543 567.49
## <none>       6336648 568.76
## + Ineq   1   6150177 569.63
## + Time   1   6207471 569.98
## + U1     1   6249852 570.24
## + U2     1   6281300 570.43
## + So     1   6302076 570.55
## + M      1   6302454 570.56
## + NW     1   6330736 570.73
##
## Step:  AIC=543.11
## .outcome ~ Po1
##
##          Df Deviance    AIC
## + Ineq   1   2210840 532.75
## + M      1   2454621 536.72
## + Wealth 1   2726456 540.71
## + NW     1   2821108 542.01
## + So     1   2826853 542.09
## + M.F    1   2837216 542.23
## + Po2    1   2898230 543.04
## <none>       3060546 543.11
## + Time   1   2943273 543.62
## + Prob   1   2975594 544.04
## + LF     1   2978543 544.07
## + Pop    1   3036270 544.80
## + U2     1   3055946 545.05
## + U1     1   3055989 545.05
## + Ed     1   3060132 545.10
##
## Step:  AIC=532.75
## .outcome ~ Po1 + Ineq
##
##          Df Deviance    AIC
## + Ed     1   1732811 525.49
## + Prob   1   1927300 529.53
## + M.F    1   1957218 530.12
## + LF     1   2056322 532.00
## + M      1   2094441 532.69
## <none>       2210840 532.75
## + Wealth 1   2133955 533.40
## + So     1   2158143 533.83
## + NW     1   2171217 534.06
## + Time   1   2184455 534.29
```

```
## + Po2     1   2198015 534.53
## + Pop     1   2201862 534.59
## + U1      1   2204765 534.64
## + U2      1   2207841 534.70
##
## Step:  AIC=525.49
## .outcome ~ Po1 + Ineq + Ed
##
##           Df Deviance    AIC
## + Prob    1   1502135 522.06
## + M       1   1549075 523.23
## + Time    1   1590911 524.24
## <none>        1732811 525.49
## + M.F     1   1681392 526.35
## + Po2     1   1682903 526.38
## + U2      1   1710629 527.00
## + Wealth  1   1718776 527.18
## + LF      1   1729556 527.42
## + U1      1   1730695 527.44
## + Pop     1   1732363 527.48
## + So      1   1732778 527.49
## + NW      1   1732783 527.49
##
## Step:  AIC=522.06
## .outcome ~ Po1 + Ineq + Ed + Prob
##
##           Df Deviance    AIC
## + M       1   1322726 519.23
## <none>        1502135 522.06
## + M.F     1   1441397 522.49
## + Po2     1   1459780 522.98
## + So      1   1470588 523.26
## + U2      1   1478484 523.46
## + NW      1   1487096 523.68
## + Time    1   1488052 523.70
## + Pop     1   1488761 523.72
## + U1      1   1496526 523.92
## + Wealth  1   1499560 524.00
## + LF      1   1500669 524.03
##
## Step:  AIC=519.23
## .outcome ~ Po1 + Ineq + Ed + Prob + M
##
##           Df Deviance    AIC
## + U2      1   1196312 517.41
## <none>        1322726 519.23
## + M.F     1   1276573 519.88
## + Po2     1   1279233 519.96
## + U1      1   1279589 519.97
## + Wealth  1   1291070 520.31
## + So      1   1307292 520.78
## + LF      1   1314801 521.00
## + Time    1   1320206 521.16
## + NW      1   1321407 521.19
```

```
## + Pop     1  1322167 521.21
##
## Step:  AIC=517.41
## .outcome ~ Po1 + Ineq + Ed + Prob + M + U2
##
##           Df Deviance    AIC
## <none>        1196312 517.41
## + Po2    1  1164793 518.40
## + Wealth 1  1167507 518.49
## + So     1  1176646 518.78
## + U1     1  1178099 518.83
## + M.F    1  1178890 518.85
## + Pop    1  1194441 519.35
## + Time   1  1194877 519.37
## + LF     1  1195914 519.40
## + NW     1  1196219 519.41
## Start:  AIC=562.79
## .outcome ~ 1
##
##           Df Deviance    AIC
## + Po1    1  2812772 539.90
## + Po2    1  2989491 542.21
## + Wealth 1  4420891 557.08
## + Prob   1  4517959 557.91
## + Ed     1  4910663 561.07
## + Pop    1  5129736 562.73
## <none>        5415207 562.79
## + Ineq   1  5170657 563.03
## + U2     1  5186023 563.15
## + M.F    1  5235104 563.51
## + LF     1  5267025 563.74
## + Time   1  5338516 564.25
## + So     1  5339333 564.25
## + M      1  5344247 564.29
## + U1     1  5384231 564.57
## + NW     1  5412923 564.77
##
## Step:  AIC=539.9
## .outcome ~ Po1
##
##           Df Deviance    AIC
## + Ineq   1  2312383 534.46
## + M      1  2314859 534.50
## + Po2    1  2605786 538.99
## + Wealth 1  2618391 539.18
## + NW     1  2633060 539.39
## <none>        2812772 539.90
## + Prob   1  2683833 540.12
## + So     1  2693628 540.25
## + M.F    1  2718935 540.61
## + U2     1  2739419 540.89
## + Time   1  2755564 541.12
## + Pop    1  2774835 541.38
## + LF     1  2785039 541.52
```

```
## + Ed     1   2806904 541.82
## + U1     1   2812496 541.90
##
## Step:  AIC=534.46
## .outcome ~ Po1 + Ineq
##
##          Df Deviance    AIC
## + Prob   1   1955033 530.08
## + Ed     1   1957062 530.12
## + M.F    1   2027612 531.46
## + Pop    1   2110910 532.99
## + LF     1   2112874 533.03
## + M      1   2114425 533.05
## <none>       2312383 534.46
## + Po2    1   2228649 535.05
## + So     1   2244120 535.32
## + Wealth 1   2248088 535.38
## + Time   1   2295905 536.18
## + NW     1   2297012 536.20
## + U2     1   2307974 536.38
## + U1     1   2311067 536.43
##
## Step:  AIC=530.08
## .outcome ~ Po1 + Ineq + Prob
##
##          Df Deviance    AIC
## + Ed     1   1630629 525.18
## + Pop    1   1635957 525.31
## + M.F    1   1662660 525.92
## + M      1   1732665 527.49
## + LF     1   1831029 529.59
## <none>       1955033 530.08
## + Po2    1   1905417 531.10
## + Time   1   1923024 531.45
## + Wealth 1   1940795 531.80
## + NW     1   1947256 531.92
## + U2     1   1951872 532.01
## + U1     1   1952975 532.04
## + So     1   1953593 532.05
##
## Step:  AIC=525.18
## .outcome ~ Po1 + Ineq + Prob + Ed
##
##          Df Deviance    AIC
## + M      1   1312648 518.94
## + Pop    1   1454833 522.85
## + So     1   1540097 525.01
## + M.F    1   1540295 525.02
## <none>       1630629 525.18
## + NW     1   1552900 525.33
## + U2     1   1580942 526.01
## + Po2    1   1613911 526.79
## + Wealth 1   1629155 527.15
## + U1     1   1629747 527.16
```

```
## + Time    1  1630119 527.17
## + LF      1  1630279 527.17
##
## Step:  AIC=518.94
## .outcome ~ Po1 + Ineq + Prob + Ed + M
##
##           Df Deviance    AIC
## + U2      1  1125700 515.10
## <none>       1312648 518.94
## + Pop     1  1248203 519.03
## + M.F     1  1264116 519.51
## + Wealth  1  1268147 519.63
## + U1      1  1282943 520.07
## + So      1  1296047 520.45
## + Po2     1  1308332 520.81
## + LF      1  1308817 520.83
## + Time    1  1310533 520.88
## + NW      1  1311678 520.91
##
## Step:  AIC=515.1
## .outcome ~ Po1 + Ineq + Prob + Ed + M + U2
##
##           Df Deviance    AIC
## + U1      1  1012307 513.07
## <none>       1125700 515.10
## + Pop     1  1085530 515.72
## + Wealth  1  1105057 516.40
## + So      1  1115963 516.77
## + M.F     1  1121384 516.95
## + LF      1  1121499 516.96
## + NW      1  1123527 517.03
## + Po2     1  1124877 517.07
## + Time    1  1125412 517.09
##
## Step:  AIC=513.07
## .outcome ~ Po1 + Ineq + Prob + Ed + M + U2 + U1
##
##           Df Deviance    AIC
## + Pop     1   940493 512.27
## + M.F     1   959437 513.03
## <none>       1012307 513.07
## + Time    1   988325 514.15
## + Wealth  1  1002332 514.69
## + LF      1  1012106 515.06
## + NW      1  1012197 515.06
## + Po2     1  1012297 515.06
## + So      1  1012306 515.07
##
## Step:  AIC=512.27
## .outcome ~ Po1 + Ineq + Prob + Ed + M + U2 + U1 + Pop
##
##           Df Deviance    AIC
## <none>        940493 512.27
## + M.F     1   925400 513.65
```

```
## + Wealth  1    926361 513.69
## + NW       1    935988 514.09
## + Time     1    936820 514.12
## + LF       1    939261 514.22
## + So       1    939288 514.22
## + Po2      1    940390 514.26
## Start:  AIC=696.4
## .outcome ~ 1
##
##           Df Deviance    AIC
## + Po1     1  3627626 668.32
## + Po2     1  3822302 670.77
## + Wealth  1  5540775 688.22
## + Prob    1  5623853 688.92
## + Pop     1  6097267 692.72
## + Ed      1  6163781 693.23
## + M.F     1  6566061 696.20
## <none>       6880928 696.40
## + LF      1  6635482 696.70
## + Ineq    1  6660397 696.87
## + U2      1  6664573 696.90
## + Time    1  6726383 697.34
## + So      1  6824400 698.02
## + M       1  6825844 698.03
## + U1      1  6863395 698.28
## + NW      1  6873615 698.35
##
## Step:  AIC=668.32
## .outcome ~ Po1
##
##           Df Deviance    AIC
## + Ineq    1  2887807 659.60
## + M       1  3010885 661.56
## + M.F     1  3377104 666.95
## + NW      1  3395192 667.20
## + So      1  3408528 667.39
## + Wealth  1  3446754 667.91
## <none>       3627626 668.32
## + Po2     1  3481459 668.38
## + Prob    1  3535348 669.10
## + LF      1  3550147 669.30
## + Time    1  3584441 669.75
## + U2      1  3609778 670.08
## + Pop     1  3621959 670.24
## + U1      1  3624748 670.28
## + Ed      1  3626859 670.31
##
## Step:  AIC=659.6
## .outcome ~ Po1 + Ineq
##
##           Df Deviance    AIC
## + Ed      1  2300757 650.91
## + M.F     1  2433262 653.55
## + Prob    1  2607117 656.79
```

```
## + LF      1   2627236 657.15
## + Wealth  1   2673871 657.98
## + M       1   2706571 658.55
## + Pop     1   2757430 659.42
## <none>        2887807 659.60
## + NW      1   2851369 661.00
## + So      1   2854069 661.04
## + Po2     1   2857134 661.09
## + U1      1   2885498 661.56
## + Time    1   2887310 661.59
## + U2      1   2887554 661.59
##
## Step:  AIC=650.91
## .outcome ~ Po1 + Ineq + Ed
##
##           Df Deviance    AIC
## + M       1   2061353 647.75
## + Prob    1   2065776 647.85
## + M.F     1   2183731 650.46
## <none>        2300757 650.91
## + Wealth  1   2221218 651.26
## + U2      1   2238646 651.63
## + Time    1   2238987 651.64
## + Po2     1   2258174 652.04
## + Pop     1   2261438 652.10
## + U1      1   2293392 652.76
## + LF      1   2293503 652.77
## + NW      1   2296547 652.83
## + So      1   2296622 652.83
##
## Step:  AIC=647.75
## .outcome ~ Po1 + Ineq + Ed + M
##
##           Df Deviance    AIC
## + Prob    1   1803290 643.46
## + U2      1   1860365 644.93
## + Wealth  1   1897975 645.87
## <none>        2061353 647.75
## + M.F     1   1986955 648.02
## + U1      1   2010518 648.58
## + Po2     1   2015961 648.70
## + Time    1   2018607 648.77
## + NW      1   2044865 649.37
## + Pop     1   2053251 649.57
## + So      1   2058164 649.68
## + LF      1   2058365 649.68
##
## Step:  AIC=643.46
## .outcome ~ Po1 + Ineq + Ed + M + Prob
##
##           Df Deviance    AIC
## + U2      1   1611057 640.17
## + Wealth  1   1716801 643.15
## + M.F     1   1718781 643.21
```

```
## <none>            1803290 643.46
## + U1      1  1750977 644.08
## + Pop     1  1755571 644.20
## + Po2     1  1765323 644.46
## + So      1  1781320 644.89
## + Time    1  1793096 645.20
## + LF      1  1802301 645.44
## + NW      1  1802493 645.44
##
## Step:  AIC=640.17
## .outcome ~ Po1 + Ineq + Ed + M + Prob + U2
##
##           Df Deviance    AIC
## <none>            1611057 640.17
## + Wealth  1  1551147 640.39
## + U1      1  1556227 640.54
## + Pop     1  1559737 640.64
## + M.F     1  1580112 641.25
## + Po2     1  1586040 641.43
## + So      1  1593098 641.64
## + LF      1  1597878 641.78
## + Time    1  1603898 641.96
## + NW      1  1610698 642.16
```

```r
model = lm(Crime~Po1+Ineq+Ed+Prob+M, # variables from forward stepwise
           data = data.scaled)
summary(model)
```

```
##
## Call:
## lm(formula = Crime ~ Po1 + Ineq + Ed + Prob + M, data = data.scaled)
##
## Residuals:
##    Min     1Q Median     3Q    Max
## -528.2  -74.0   -7.0  139.8  503.3
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)    905.09      30.59  29.587  < 2e-16 ***
## Po1            360.28      41.79   8.621 9.47e-11 ***
## Ineq           272.53      58.09   4.692 3.00e-05 ***
## Ed             179.16      48.58   3.688 0.000656 ***
## Prob           -87.93      36.30  -2.422 0.019930 *
## M              100.15      41.00   2.443 0.018964 *
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 209.7 on 41 degrees of freedom
## Multiple R-squared:  0.7379, Adjusted R-squared:  0.706
## F-statistic: 23.09 on 5 and 41 DF,  p-value: 5.926e-11
```

2. Lasso

```r
model.lasso = cv.glmnet(x = as.matrix(data.scaled[,-16]),
                        y = as.matrix(data.scaled$Crime),
                        alpha = 1, # 1 for lasso
                        nfolds = 5,
                        type.measure = 'mse',
                        family = 'gaussian')
coef(model.lasso, s = model.lasso$lambda.min)
```

```
## 16 x 1 sparse Matrix of class "dgCMatrix"
##                       1
## (Intercept) 905.0851064
## M            48.6326938
## Ed           12.8572539
## Po1         289.6363150
## Po2                   .
## LF                    .
## M.F          54.0372427
## Pop                   .
## NW            0.8228341
## U1                    .
## U2                    .
## Wealth                .
## Ineq         97.9391908
## Prob        -55.4515431
## Time                  .
## So                    .
```

```r
# dev.ratio = fraction of deviance explained, r squared, 1-dev/nulldev
r.lasso = model.lasso$glmnet.fit$dev.ratio[which(model.lasso$glmnet.fit$lambda == model.lasso$lambda.min
r.lasso
```

```
## [1] 0.6670144
```

3. Elastic Net

```
dev = list()
for (i in 0:10){ # 0 for ridge, 1 for lasso
  model.elastic = cv.glmnet(x = as.matrix(data.scaled[,-16]),
                            y = as.matrix(data.scaled[,16]),
                            alpha = i/10,
                            nfolds = 5,
                            type.measure = 'mse',
                            family = 'gaussian')
  dev[i] = model.elastic$glmnet.fit$dev.ratio[which(model.elastic$glmnet.fit$lambda == model.elastic$lar
}

# run model with best alpha identified
model.elastic = cv.glmnet(x = as.matrix(data.scaled[,-16]),
                          y = as.matrix(data.scaled[,16]),
                          alpha = which.max(dev)/10, # best alpha
                          nfolds = 5,
                          type.measure = 'mse',
                          family = 'gaussian')
coef(model.elastic, s = model.elastic$lambda.min)
```

```
## 16 x 1 sparse Matrix of class "dgCMatrix"
##                      1
## (Intercept) 888.338349
## M             93.088485
## Ed           145.185526
## Po1          229.282105
## Po2           54.033941
## LF             2.491774
## M.F           63.168600
## Pop           -2.627786
## NW            18.084302
## U1           -58.269017
## U2            95.919583
## Wealth        34.508410
## Ineq         201.325763
## Prob         -88.074247
## Time            .
## So            49.193601
```

```
r.elastic = model.lasso$glmnet.fit$dev.ratio[which(model.lasso$glmnet.fit$lambda == model.lasso$lambda.r
r.elastic
```

```
## [1] 0.6670144
```