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> source("results_by_factors_aggregate.r",echo=T)

> aggregate(results.7[,c("sales08","sales09","sales10","sales.total")],list(results.7$grade),
  Group.1 sales08 sales09 sales10 sales.total
1      A    11236 16026.0   20300      44622
2      B     4947 10519.5   12310      32718
3      C     5000  9276.0    9827      18874

> aggregate(results.7[,c("sales08","sales09","sales10","sales.total")],list(results.7$grade),
  Group.1 sales08 sales09 sales10 sales.total
1      A 20430.71 26243.00 30930.24   77603.94
2      B 45175.42 22790.33 27778.79  125509.68
3      C 11458.14 15333.96 14911.00   42271.19

> aggregate(results.7[,c("jobs08","jobs09","jobs10","jobs.total")],list(results.7$grade),medi
  Group.1 jobs08 jobs09 jobs10 jobs.total
1      A      38    112  102.0      321
2      B     130    139  113.5      588
3      C      23     33   31.0      127

> aggregate(results.7[,c("jobs08","jobs09","jobs10","jobs.total")],list(results.7$grade),mean
  Group.1 jobs08 jobs09 jobs10 jobs.total
1      A 236.52941 354.76471 425.76471  1017.059
2      B 418.11111 316.73684 390.60000  1262.167
3      C  40.36364  48.40741  57.07407   152.100

> aggregate(results.7[,c("corp08","corp09","corp10","corp.total")],list(results.7$grade),medi
  Group.1 corp08 corp09 corp10 corp.total
1      A      5      4      3      16.5
2      B      3      5      2      12.0
3      C      5      2      2      12.0

> aggregate(results.7[,c("corp08","corp09","corp10","corp.total")],list(results.7$grade),mean
  Group.1 corp08 corp09 corp10 corp.total
1      A  6.230769 7.066667 6.692308  22.33333
2      B  5.461538 5.666667 3.769231  17.00000
3      C 15.363636 7.947368 4.444444  42.77778

> aggregate(results.7[,c("export08","export09","export10","export.total")],list(results.7$gra
  Group.1 export08 export09 export10 export.total
1      A   350500 390500.0   488000   1610000
2      B   353000 189330.5   394000   1219500
3      C   375500 419000.0   630000   3110000

> aggregate(results.7[,c("export08","export09","export10","export.total")],list(results.7$gra
  Group.1 export08 export09 export10 export.total
1      A 1575071.4 2190165 2789879   7586433
2      B 2293939.4 2107442 3171480   8756372
3      C  997377.3 1345384 1687106   5007708

> aggregate(results.7[household, c("income08","income09","income10","income.total")], list(re
  Group.1 income08 income09 income10 income.total
1      A      17      20    21.5      58.5
2      B      50      47    49.5     163.0
3      C      40      36    39.0     112.0

> aggregate(results.7[household, c("income08","income09","income10","income.total")], list(re
  Group.1 income08 income09 income10 income.total
1      A 27.16667 34.66667 36.00000   97.83333
2      B 51.44444 58.60000 55.10000  177.11111
3      C 67.33333 62.26667 69.13333  198.73333

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> aggregate(results.7[total, c("income08","income09","income10","income.total")],list(results
  Group.1 income08 income09 income10 income.total
1      A      6429      6199      8612.0      21240.0
2      B      9852     14808     15906.0      36137.0
3      C     10000      6907      1214.5      23245.5

> aggregate(results.7[total, c("income08","income09","income10","income.total")],list(results
  Group.1 income08 income09 income10 income.total
1      A 22852.40 12504.20 15105.20      50461.80
2      B 18781.00 14524.82 18519.64      51825.45
3      C 22495.56 18888.40  4589.60      48786.25

> aggregate(results.7[,c("leader08","leader09","leader10","leader.total")],list(results.7$gra
  Group.1 leader08 leader09 leader10 leader.total
1      A      80      103      126.0      405
2      B      79      116      94.0      412
3      C      79      128      114.5      383

> aggregate(results.7[,c("leader08","leader09","leader10","leader.total")],list(results.7$gra
  Group.1 leader08 leader09 leader10 leader.total
1      A 102.7333 205.1176 220.9412      574.9333
2      B 322.9474 226.0526 131.7368      810.6316
3      C 151.0476 191.7200 186.1667      680.4211

> aggregate(results.7[,c("sales08","sales09","sales10","sales.total")],list(results.7$Region)
  Group.1 sales08 sales09 sales10 sales.total
1   영남  7135.5 11868.5   14288   33657.0
2   중부  4430.0  7494.5   11540   23461.0
3   호남  5202.0 11277.0    9865   30870.5

> aggregate(results.7[,c("sales08","sales09","sales10","sales.total")],list(results.7$Region)
  Group.1 sales08 sales09 sales10 sales.total
1   영남 12997.72 19748.39 22666.33   56241.67
2   중부 14199.53 18047.80 19862.10   54764.84
3   호남 48739.06 22329.72 26589.32  128670.11

> aggregate(results.7[,c("jobs08","jobs09","jobs10","jobs.total")],list(results.7$Region),med
  Group.1 jobs08 jobs09 jobs10 jobs.total
1   영남   63.0   58.0   58.5      162
2   중부   31.5   35.0   46.5      100
3   호남   50.0  109.5   58.5      212

> aggregate(results.7[,c("jobs08","jobs09","jobs10","jobs.total")],list(results.7$Region),mea
  Group.1 jobs08 jobs09 jobs10 jobs.total
1   영남 108.1667 121.52632 139.9444   716.1053
2   중부 193.3000  87.22727 175.2727   576.7368
3   호남 241.8421 257.00000 246.8182  1007.8947

> aggregate(results.7[,c("corp08","corp09","corp10","corp.total")],list(results.7$Region),med
  Group.1 corp08 corp09 corp10 corp.total
1   영남     5     5     2     24.0
2   중부     2     3     2     16.0
3   호남     4     3     2     10.5

> aggregate(results.7[,c("corp08","corp09","corp10","corp.total")],list(results.7$Region),mea
  Group.1 corp08 corp09 corp10 corp.total
1   영남  8.636364  6.285714  4.461538   24.77778
2   중부 12.272727  9.666667  9.214286   40.11111
3   호남  6.066667  4.666667  5.789474   18.28571

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> aggregate(results.7[household, c("income08","income09","income10","income.total")], list(re
  Group.1 income08 income09 income10 income.total
1   영남      26.0      35      34      98.0
2   중부      39.0      36      45     123.0
3   호남      23.5      22      25      76.5

> aggregate(results.7[household, c("income08","income09","income10","income.total")], list(re
  Group.1 income08 income09 income10 income.total
1   영남 40.53846 45.69231 48.00000     134.2308
2   중부 69.00000 79.30769 83.00000     231.3077
3   호남 37.50000 28.27273 28.81818      99.7000

> aggregate(results.7[total, c("income08","income09","income10","income.total")], list(result
  Group.1 income08 income09 income10 income.total
1   영남    7636.5    5261.0   12330.5     28381.0
2   중부    2776.0    4081.5    3602.0     10414.5
3   호남   11132.0   16812.5   11202.0     36986.0

> aggregate(results.7[total, c("income08","income09","income10","income.total")], list(result
  Group.1 income08 income09 income10 income.total
1   영남   6719.333   7179.167 12254.833     26153.33
2   중부  16201.273   8905.300   7585.818     32773.10
3   호남  38097.875  27905.000  18685.000     91003.50

> aggregate(results.7[,c("leader08","leader09","leader10","leader.total")],list(results.7$Reg
  Group.1 leader08 leader09 leader10 leader.total
1   영남     111.0     199.0     152.0        561
2   중부      76.5      92.5     100.0        263
3   호남      80.0     139.0     134.5        473

> aggregate(results.7[,c("leader08","leader09","leader10","leader.total")],list(results.7$Reg
  Group.1 leader08 leader09 leader10 leader.total
1   영남  289.3333  355.2632  327.5556     1023.588
2   중부   75.7500  119.2727  108.3636      316.500
3   호남  831.8235  224.3000  190.9000    1455.875

> aggregate(results.7[,c("sales08","sales09","sales10","sales.total")],list(results.7$class),
  Group.1 sales08 sales09 sales10 sales.total
1  Better   6880.5  14702.0  13744.5     37706
2  Middle   4465.0   7141.5   8371.0     20827
3   Under   8893.0  11485.0  11087.5     34402

> aggregate(results.7[,c("sales08","sales09","sales10","sales.total")],list(results.7$class),
  Group.1 sales08 sales09 sales10 sales.total
1  Better 20852.92 30094.88 33225.77     95512.79
2  Middle 13286.61 14193.67 18506.89     45987.17
3   Under 32011.80 30693.94 26939.22     97985.93

> aggregate(results.7[,c("jobs08","jobs09","jobs10","jobs.total")],list(results.7$class),medi
  Group.1 jobs08 jobs09 jobs10 jobs.total
1  Better     44   40.0     36        131
2  Middle     76  179.5    154        534
3   Under     49   46.5     49        144

> aggregate(results.7[,c("jobs08","jobs09","jobs10","jobs.total")],list(results.7$class),mean
  Group.1 jobs08 jobs09 jobs10 jobs.total
1  Better 262.9167 256.37931 288.0000     964.8696
2  Middle 178.7778 255.50000 258.4118     713.6471
3   Under 180.5882  87.61111 251.6316     552.3529

> aggregate(results.7[,c("corp08","corp09","corp10","corp.total")],list(results.7$class),medi

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Group.1 corp08 corp09 corp10 corp.total
1 Better      6      5      2      24
2 Middle      5      4      3      18
3 Under       3      3      2       8

> aggregate(results.7[,c("corp08","corp09","corp10","corp.total")],list(results.7$class),mean
Group.1 corp08 corp09 corp10 corp.total
1 Better 13.687500 10.000000 4.444444 39.76923
2 Middle  5.818182  6.666667 5.357143 20.54545
3 Under   3.800000  3.466667 5.083333 12.12500

> aggregate(results.7[,c("export08","export09","export10","export.total")],list(results.7$class),mean
Group.1 export08 export09 export10 export.total
1 Better 320000.0 389500.0 550500 1196000
2 Middle 277636.5 217830.5 435000 1269000
3 Under  805500.0 515000.0 756000 5024000

> aggregate(results.7[,c("export08","export09","export10","export.total")],list(results.7$class),mean
Group.1 export08 export09 export10 export.total
1 Better 1732106 1664408 2033172 8320542
2 Middle 1531527 1550987 1931611 6018646
3 Under  1505363 1449990 2254464 6462238

> aggregate(results.7[household, c("income08","income09","income10","income.total")], list(results.7$class),mean
Group.1 income08 income09 income10 income.total
1 Better      39      36      43.0      120
2 Middle      16      15      16.0       54
3 Under       27      35      33.5      100

> aggregate(results.7[household, c("income08","income09","income10","income.total")], list(results.7$class),mean
Group.1 income08 income09 income10 income.total
1 Better 62.00000 66.05882 72.23529 200.2941
2 Middle 33.66667 31.70000 33.00000 104.8889
3 Under  44.20000 49.60000 46.20000 140.0000

> aggregate(results.7[total, c("income08","income09","income10","income.total")],list(results.7$class),mean
Group.1 income08 income09 income10 income.total
1 Better 2776.0 4081.5 3602 10414.5
2 Middle 6710.5 11754.5 7169 27559.5
3 Under 12466.0 12953.0 16311 40164.5

> aggregate(results.7[total, c("income08","income09","income10","income.total")],list(results.7$class),mean
Group.1 income08 income09 income10 income.total
1 Better 28959.55 20367.92 11658.455 64444.30
2 Middle 19113.33 12471.00 9386.857 42505.67
3 Under 11259.75 11492.12 16398.375 39150.25

> aggregate(results.7[,c("leader08","leader09","leader10","leader.total")],list(results.7$class),mean
Group.1 leader08 leader09 leader10 leader.total
1 Better 79.0 110.5 126 321.0
2 Middle 89.0 181.0 103 442.0
3 Under 67.5 109.0 109 376.5

> aggregate(results.7[,c("leader08","leader09","leader10","leader.total")],list(results.7$class),mean
Group.1 leader08 leader09 leader10 leader.total
1 Better 131.4000 186.7857 157.6538 502.5652
2 Middle 124.9286 196.0000 195.4706 571.0714
3 Under 364.0000 377.7778 267.3684 1088.2500
>

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