

# Assignment3

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## Regression analysis

Table 1: Regression analysis regarding (non-) violent and total crimes and independent variable marriage

|                         | <i>Dependent variable:</i> |                           |                            |
|-------------------------|----------------------------|---------------------------|----------------------------|
|                         | CrimeViolentSum            | CrimeNonViolentSum        | CrimeTotalSum              |
|                         | (1)                        | (2)                       | (3)                        |
| marriageRel             | 35.35<br>(767.19)          | -240.98<br>(2,973.20)     | -205.62<br>(3,688.89)      |
| DensityPerSQRTkm100     | 197.88***<br>(14.99)       | 585.23***<br>(58.11)      | 783.10***<br>(72.09)       |
| PopulationYoung         | 21.15<br>(40.63)           | 227.89<br>(157.48)        | 249.03<br>(195.39)         |
| MalePopulationRel       | 297.98**<br>(132.40)       | 647.63<br>(513.11)        | 945.61<br>(636.62)         |
| UnemployedPercentage    | 61.57*<br>(33.14)          | 477.11***<br>(128.41)     | 538.67***<br>(159.33)      |
| Constant                | -14,949.95**<br>(6,634.06) | -37,751.98<br>(25,710.11) | -52,701.93*<br>(31,898.87) |
| Observations            | 399                        | 399                       | 399                        |
| R <sup>2</sup>          | 0.43                       | 0.36                      | 0.38                       |
| Adjusted R <sup>2</sup> | 0.42                       | 0.35                      | 0.37                       |

*Note:*

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

This regression output shows the results using 3 different dependent variables

Table 2: Regression analysis regarding (non-) violent and total crimes and independent variable religion

|                         | <i>Dependent variable:</i> |                           |                           |
|-------------------------|----------------------------|---------------------------|---------------------------|
|                         | CrimeViolentSum            | CrimeNonViolentSum        | CrimeTotalSum             |
|                         | (1)                        | (2)                       | (3)                       |
| BelieversPercent        | -4.89<br>(5.88)            | -37.01<br>(22.76)         | -41.90<br>(28.25)         |
| DensityPerSQRTkm100     | 197.85***<br>(14.94)       | 578.41***<br>(57.78)      | 776.25***<br>(71.72)      |
| PopulationYoung         | 42.57<br>(48.52)           | 391.74**<br>(187.67)      | 434.31*<br>(232.95)       |
| MalePopulationRel       | 275.97**<br>(130.68)       | 537.90<br>(505.50)        | 813.87<br>(627.46)        |
| UnemployedPercentage    | 42.75<br>(36.90)           | 371.94***<br>(142.73)     | 414.69**<br>(177.16)      |
| Constant                | -13,928.46**<br>(6,418.16) | -33,289.10<br>(24,827.69) | -47,217.56<br>(30,817.81) |
| Observations            | 393                        | 393                       | 393                       |
| R <sup>2</sup>          | 0.43                       | 0.37                      | 0.39                      |
| Adjusted R <sup>2</sup> | 0.42                       | 0.36                      | 0.38                      |

*Note:*

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

This regression output shows the results using 3 different dependent variables

Table 3: Regression analysis regarding (non-) violent and total crimes and independent variable in- and outflow

|                         | <i>Dependent variable:</i> |                           |                           |
|-------------------------|----------------------------|---------------------------|---------------------------|
|                         | CrimeViolentSum            | CrimeNonViolentSum        | CrimeTotalSum             |
|                         | (1)                        | (2)                       | (3)                       |
| FlowPercent             | −13.30<br>(31.32)          | −170.56<br>(121.12)       | −183.86<br>(150.37)       |
| DensityPerSQRTkm100     | 198.41***<br>(14.70)       | 595.10***<br>(56.85)      | 793.51***<br>(70.58)      |
| PopulationYoung         | 26.98<br>(42.89)           | 302.75*<br>(165.84)       | 329.73<br>(205.88)        |
| MalePopulationRel       | 290.61**<br>(128.86)       | 583.18<br>(498.25)        | 873.79<br>(618.57)        |
| UnemployedPercentage    | 58.83*<br>(33.62)          | 444.14***<br>(129.98)     | 502.97***<br>(161.37)     |
| Constant                | −14,531.62**<br>(6,358.97) | −34,228.98<br>(24,587.85) | −48,760.60<br>(30,525.20) |
| Observations            | 399                        | 399                       | 399                       |
| R <sup>2</sup>          | 0.43                       | 0.37                      | 0.38                      |
| Adjusted R <sup>2</sup> | 0.42                       | 0.36                      | 0.38                      |

*Note:*

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

This regression output shows the results using 3 different dependent variables

Table 4: Regression analysis regarding (non-) violent and total crimes and independent variable voter turnout

|                         | <i>Dependent variable:</i>  |                              |                               |
|-------------------------|-----------------------------|------------------------------|-------------------------------|
|                         | CrimeViolentSum             | CrimeNonViolentSum           | CrimeTotalSum                 |
|                         | (1)                         | (2)                          | (3)                           |
| TurnoutPercentage       | 101.96***<br>(20.21)        | 510.19***<br>(76.60)         | 612.15***<br>(95.39)          |
| DensityPerSQRTkm100     | 201.09***<br>(14.18)        | 603.11***<br>(53.76)         | 804.20***<br>(66.94)          |
| PopulationYoung         | -25.44<br>(40.45)           | -5.20<br>(153.33)            | -30.64<br>(190.93)            |
| MalePopulationRel       | 391.73***<br>(125.62)       | 1,134.83**<br>(476.20)       | 1,526.56**<br>(592.99)        |
| UnemployedPercentage    | 107.36***<br>(33.29)        | 707.54***<br>(126.21)        | 814.90***<br>(157.17)         |
| Constant                | -25,978.75***<br>(6,504.16) | -94,047.52***<br>(24,656.17) | -120,026.30***<br>(30,702.76) |
| Observations            | 399                         | 399                          | 399                           |
| R <sup>2</sup>          | 0.46                        | 0.43                         | 0.44                          |
| Adjusted R <sup>2</sup> | 0.46                        | 0.42                         | 0.43                          |

*Note:*

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

This regression output shows the results using 3 different dependent variables

Table 5: Regression analysis regarding (non-) violent and total crimes and independent variable foundation

|                         | <i>Dependent variable:</i>  |                              |                              |
|-------------------------|-----------------------------|------------------------------|------------------------------|
|                         | CrimeViolentSum             | CrimeNonViolentSum           | CrimeTotalSum                |
|                         | (1)                         | (2)                          | (3)                          |
| FoundationsTotal        | 12.70***<br>(0.92)          | 36.95***<br>(3.79)           | 49.64***<br>(4.64)           |
| TurnoutPercentage       | 54.38***<br>(17.15)         | 366.49***<br>(70.84)         | 420.87***<br>(86.57)         |
| BelieversPercent        | 0.35<br>(4.89)              | −24.25<br>(20.21)            | −23.89<br>(24.69)            |
| FlowPercent             | −63.51**<br>(26.62)         | −372.39***<br>(109.96)       | −435.90***<br>(134.37)       |
| DensityPerSQRTkm100     | 110.66***<br>(13.72)        | 342.56***<br>(56.67)         | 453.22***<br>(69.25)         |
| PopulationYoung         | 61.82<br>(43.78)            | 448.05**<br>(180.84)         | 509.88**<br>(221.00)         |
| MalePopulationRel       | 251.82**<br>(106.75)        | 552.17<br>(440.90)           | 803.99<br>(538.81)           |
| UnemployedPercentage    | 150.57***<br>(32.25)        | 726.86***<br>(133.18)        | 877.42***<br>(162.76)        |
| Constant                | −17,512.23***<br>(5,518.07) | −60,563.56***<br>(22,790.99) | −78,075.80***<br>(27,852.28) |
| Observations            | 393                         | 393                          | 393                          |
| R <sup>2</sup>          | 0.64                        | 0.55                         | 0.58                         |
| Adjusted R <sup>2</sup> | 0.64                        | 0.54                         | 0.57                         |

*Note:*

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

This regression output shows the results using 3 different dependent variables

Table 6: Regression analysis regarding (non-) violent and total crimes and all independent variables at the same time

|                         | <i>Dependent variable:</i>  |                              |                              |
|-------------------------|-----------------------------|------------------------------|------------------------------|
|                         | CrimeViolentSum             | CrimeNonViolentSum           | CrimeTotalSum                |
|                         | (1)                         | (2)                          | (3)                          |
| marriageRel             | −31.04<br>(681.83)          | 1,179.49<br>(2,815.49)       | 1,148.45<br>(3,441.02)       |
| TurnoutPercentage       | 54.32***<br>(17.23)         | 368.93***<br>(71.15)         | 423.25***<br>(86.96)         |
| BelieversPercent        | 0.37<br>(4.90)              | −24.66<br>(20.25)            | −24.30<br>(24.75)            |
| FlowPercent             | −63.29**<br>(27.10)         | −380.85***<br>(111.91)       | −444.14***<br>(136.78)       |
| FoundationsTotal        | 12.70***<br>(0.92)          | 36.91***<br>(3.80)           | 49.60***<br>(4.64)           |
| DensityPerSQRTkm100     | 110.52***<br>(14.06)        | 347.77***<br>(58.08)         | 458.30***<br>(70.98)         |
| PopulationYoung         | 61.72<br>(43.90)            | 452.08**<br>(181.29)         | 513.79**<br>(221.56)         |
| MalePopulationRel       | 250.44**<br>(111.12)        | 604.73<br>(458.86)           | 855.17<br>(560.81)           |
| UnemployedPercentage    | 150.45***<br>(32.39)        | 731.31***<br>(133.75)        | 881.76***<br>(163.46)        |
| Constant                | −17,424.43***<br>(5,852.20) | −63,899.99***<br>(24,165.58) | −81,324.42***<br>(29,534.60) |
| Observations            | 393                         | 393                          | 393                          |
| R <sup>2</sup>          | 0.64                        | 0.55                         | 0.58                         |
| Adjusted R <sup>2</sup> | 0.63                        | 0.54                         | 0.57                         |

*Note:*

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

This regression output shows the results using 3 different dependent variables