|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Y | X1 | X2 | X3 | dy=Y-Ymean | d1=X1-X1mean | d2=X2-X2mean | d3=X3-X3mean | dy^2 | d1^2 | d2^2 | d3^2 | dy1 | dy2 | dy3 | d12 | d13 | d23 |
| 8.9 | 5 | 10 | 4 | -4.3 | 0 | -1 | 2 | 18.49 | 0 | 1 | 4 | 0 | 4.3 | -8.6 | 0 | 0 | -2 |
| 9.8 | 6 | 12 | 3 | -3.4 | 1 | 1 | 1 | 11.56 | 1 | 1 | 1 | -3.4 | -3.4 | -3.4 | 1 | 1 | 1 |
| 10.2 | 4 | 9 | 3 | -3 | -1 | -2 | 1 | 9 | 1 | 4 | 1 | 3 | 6 | -3 | 2 | -1 | -2 |
| 11.5 | 3 | 11 | 1 | -1.7 | -2 | 0 | -1 | 2.89 | 4 | 0 | 1 | 3.4 | 0 | 1.7 | 0 | 2 | 0 |
| 12.3 | 4 | 10 | 3 | -0.9 | -1 | -1 | 1 | 0.81 | 1 | 1 | 1 | 0.9 | 0.9 | -0.9 | 1 | -1 | -1 |
| 13.4 | 4 | 13 | 2 | 0.2 | -1 | 2 | 0 | 0.04 | 1 | 4 | 0 | -0.2 | 0.4 | 0 | -2 | 0 | 0 |
| 14.4 | 6 | 11 | 2 | 1.2 | 1 | 0 | 0 | 1.44 | 1 | 0 | 0 | 1.2 | 0 | 0 | 0 | 0 | 0 |
| 15.8 | 5 | 7 | 1 | 2.6 | 0 | -4 | -1 | 6.76 | 0 | 16 | 1 | 0 | -10.4 | -2.6 | 0 | 0 | 4 |
| 17.3 | 6 | 12 | 0 | 4.1 | 1 | 1 | -2 | 16.81 | 1 | 1 | 4 | 4.1 | 4.1 | -8.2 | 1 | -2 | -2 |
| 18.4 | 7 | 15 | 1 | 5.2 | 2 | 4 | -1 | 27.04 | 4 | 16 | 1 | 10.4 | 20.8 | -5.2 | 8 | -2 | -4 |
| **132** | **50** | **110** | **20** | **0.0** | **0** | **0** | **0** | **94.84** | **14** | **44** | **14** | **19.4** | **22.7** | **-30.2** | **11** | **-3** | **-6** |
| **13.2** | **5** | **11** | **2** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

**SIMPLE CORRELATION COEFFICIENTS**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | *Y* | *X1* | *X2* | *X3* |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Y | 1.000 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| X1 | 0.532 | 1.000 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| X2 | 0.351 | 0.443 | 1.000 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| X3 | -0.829 | -0.214 | -0.242 | 1.000 |  |  |  |  |  |  |  |  |  |  |  |  |  |

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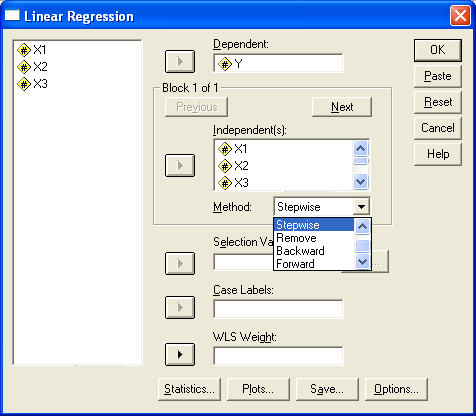
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|  |  |
| --- | --- |
| Models for calculating VIF’s | Multiple Correlation between X’s |
|  |  |
|  |  |
|  |  |

**STEPWISE METHOD**

**SPSS > Analyze > Linear Regression >**

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**Birth rate example in US[[1]](#footnote-2)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Y** | **X1** | **X2** | **X3** | **X4** | **X5** |
| **2.03** | **25.40** | **9.90** | **17.00** | **1.00** | **.00** |
| **2.22** | **26.70** | **4.70** | **18.00** | **1.00** | **.00** |
| **2.27** | **29.10** | **1.90** | **23.00** | **1.00** | **.00** |
| **2.12** | **29.20** | **1.20** | **28.00** | **1.00** | **.00** |
| **2.04** | **29.20** | **1.90** | **30.00** | **1.00** | **.00** |
| **2.41** | **27.80** | **3.90** | **27.00** | **.00** | **.00** |
| **2.66** | **27.40** | **3.90** | **24.00** | **.00** | **1.00** |
| **2.49** | **28.00** | **3.80** | **23.00** | **.00** | **1.00** |
| **2.45** | **28.30** | **5.90** | **25.00** | **.00** | **1.00** |
| **2.41** | **28.80** | **5.30** | **23.00** | **1.00** | **.00** |
| **2.49** | **29.30** | **3.30** | **24.00** | **1.00** | **.00** |
| **2.51** | **29.40** | **3.00** | **25.00** | **1.00** | **.00** |
| **2.50** | **29.20** | **2.90** | **25.00** | **1.00** | **.00** |
| **2.53** | **29.40** | **5.50** | **25.00** | **.00** | **.00** |
| **2.50** | **30.20** | **4.40** | **25.00** | **.00** | **1.00** |
| **2.52** | **31.00** | **4.10** | **24.00** | **.00** | **1.00** |
| **2.53** | **31.20** | **4.30** | **25.00** | **.00** | **1.00** |
| **2.45** | **31.50** | **6.80** | **25.00** | **.00** | **.00** |
| **2.40** | **31.70** | **5.50** | **26.00** | **.00** | **.00** |
| **2.37** | **32.30** | **5.50** | **27.00** | **.00** | **.00** |
| **2.33** | **32.60** | **6.70** | **26.00** | **.00** | **.00** |
| **2.24** | **32.70** | **5.50** | **26.00** | **.00** | **.00** |
| **2.17** | **33.20** | **5.70** | **26.00** | **.00** | **.00** |
| **2.10** | **33.60** | **5.20** | **26.00** | **.00** | **.00** |
| **1.94** | **34.00** | **4.50** | **27.00** | **1.00** | **.00** |
| **1.84** | **34.60** | **3.80** | **27.00** | **1.00** | **.00** |
| **1.78** | **35.10** | **3.80** | **27.00** | **1.00** | **.00** |
| **1.75** | **35.50** | **3.60** | **28.00** | **1.00** | **.00** |
| **1.78** | **36.30** | **3.50** | **30.00** | **1.00** | **.00** |
| **1.84** | **36.70** | **4.90** | **33.00** | **1.00** | **.00** |

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1. Source: İşletme ve İktisat için İstatistik, Paul Newbold, 4. Basımdan çeviren Ümit Şenesen [↑](#footnote-ref-2)