REGRESSION

/DESCRIPTIVES MEAN STDDEV CORR SIG N

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL CHANGE ZPP

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT Lifeexpectancy

/METHOD=ENTER AdultMortality GDP HepatitisB Measles Polio Diphtheria

/PARTIALPLOT ALL

/SCATTERPLOT=(\*ZRESID ,\*ZPRED)

/RESIDUALS HISTOGRAM(ZRESID)

/SAVE COOK.

**Regression**

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| --- | --- | --- |
| **Notes** | | |
| Output Created | | 06-SEP-2024 11:37:14 |
| Comments | |  |
| Input | Data | C:\Users\Mulindwa\Downloads\Telegram Desktop\QN (2).sav |
| Active Dataset | DataSet1 |
| Filter | <none> |
| Weight | <none> |
| Split File | <none> |
| N of Rows in Working Data File | 2938 |
| Missing Value Handling | Definition of Missing | User-defined missing values are treated as missing. |
| Cases Used | Statistics are based on cases with no missing values for any variable used. |
| Syntax | | REGRESSION  /DESCRIPTIVES MEAN STDDEV CORR SIG N  /MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL CHANGE ZPP  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT Lifeexpectancy  /METHOD=ENTER AdultMortality GDP HepatitisB Measles Polio Diphtheria  /PARTIALPLOT ALL  /SCATTERPLOT=(\*ZRESID ,\*ZPRED)  /RESIDUALS HISTOGRAM(ZRESID)  /SAVE COOK. |
| Resources | Processor Time | 00:00:02.52 |
| Elapsed Time | 00:00:02.35 |
| Memory Required | 6160 bytes |
| Additional Memory Required for Residual Plots | 3232 bytes |
| Variables Created or Modified | COO\_1 | Cook's Distance |

[DataSet1] C:\Users\Mulindwa\Downloads\Telegram Desktop\QN (2).sav

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| **Descriptive Statistics** | | | |
|  | Mean | Std. Deviation | N |
| Life expectancy | 70.057 | 8.5803 | 2009 |
| Adult Mortality | 158.82 | 120.650 | 2009 |
| GDP | 6752.395963259039500 | 9223.372036854777000 | 2009 |
| Hepatitis B | 80.78 | 25.025 | 2009 |
| Measles | 1976.00 | 9454.010 | 2009 |
| Polio | 84.60 | 21.931 | 2009 |
| Diphtheria | 85.01 | 21.291 | 2009 |

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| **Correlations** | | | | | | | | |
|  | | Life expectancy | Adult Mortality | GDP | Hepatitis B | Measles | Polio | Diphtheria |
| Pearson Correlation | Life expectancy | 1.000 | -.714 | .440 | .240 | -.083 | .361 | .360 |
| Adult Mortality | -.714 | 1.000 | -.278 | -.142 | .014 | -.233 | -.215 |
| GDP | .440 | -.278 | 1.000 | .084 | -.074 | .182 | .169 |
| Hepatitis B | .240 | -.142 | .084 | 1.000 | -.122 | .478 | .617 |
| Measles | -.083 | .014 | -.074 | -.122 | 1.000 | -.065 | -.061 |
| Polio | .361 | -.233 | .182 | .478 | -.065 | 1.000 | .611 |
| Diphtheria | .360 | -.215 | .169 | .617 | -.061 | .611 | 1.000 |
| Sig. (1-tailed) | Life expectancy | . | .000 | .000 | .000 | .000 | .000 | .000 |
| Adult Mortality | .000 | . | .000 | .000 | .261 | .000 | .000 |
| GDP | .000 | .000 | . | .000 | .000 | .000 | .000 |
| Hepatitis B | .000 | .000 | .000 | . | .000 | .000 | .000 |
| Measles | .000 | .261 | .000 | .000 | . | .002 | .003 |
| Polio | .000 | .000 | .000 | .000 | .002 | . | .000 |
| Diphtheria | .000 | .000 | .000 | .000 | .003 | .000 | . |
| N | Life expectancy | 2009 | 2009 | 2009 | 2009 | 2009 | 2009 | 2009 |
| Adult Mortality | 2009 | 2009 | 2009 | 2009 | 2009 | 2009 | 2009 |
| GDP | 2009 | 2009 | 2009 | 2009 | 2009 | 2009 | 2009 |
| Hepatitis B | 2009 | 2009 | 2009 | 2009 | 2009 | 2009 | 2009 |
| Measles | 2009 | 2009 | 2009 | 2009 | 2009 | 2009 | 2009 |
| Polio | 2009 | 2009 | 2009 | 2009 | 2009 | 2009 | 2009 |
| Diphtheria | 2009 | 2009 | 2009 | 2009 | 2009 | 2009 | 2009 |

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| **Variables Entered/Removeda** | | | |
| Model | Variables Entered | Variables Removed | Method |
| 1 | Diphtheria , Measles , GDP, Adult Mortality, Polio, Hepatitis Bb | . | Enter |
| a. Dependent Variable: Life expectancy | | | |
| b. All requested variables entered. | | | |

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| **Model Summaryb** | | | | | | | | | |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics | | | | |
| R Square Change | F Change | df1 | df2 | Sig. F Change |
| 1 | .784a | .615 | .614 | 5.3311 | .615 | 533.260 | 6 | 2002 | .000 |
| a. Predictors: (Constant), Diphtheria , Measles , GDP, Adult Mortality, Polio, Hepatitis B | | | | | | | | | |
| b. Dependent Variable: Life expectancy | | | | | | | | | |

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| **ANOVAa** | | | | | | |
| Model | | Sum of Squares | df | Mean Square | F | Sig. |
| 1 | Regression | 90933.211 | 6 | 15155.535 | 533.260 | .000b |
| Residual | 56897.955 | 2002 | 28.421 |  |  |
| Total | 147831.166 | 2008 |  |  |  |
| a. Dependent Variable: Life expectancy | | | | | | |
| b. Predictors: (Constant), Diphtheria , Measles , GDP, Adult Mortality, Polio, Hepatitis B | | | | | | |

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| **Coefficientsa** | | | | | | | | | | | |
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | Correlations | | | Collinearity Statistics | |
| B | Std. Error | Beta | Zero-order | Partial | Part | Tolerance | VIF |
| 1 | (Constant) | 68.161 | .621 |  | 109.751 | .000 |  |  |  |  |  |
| Adult Mortality | -.043 | .001 | -.599 | -40.597 | .000 | -.714 | -.672 | -.563 | .883 | 1.133 |
| GDP | .000 | .000 | .231 | 15.828 | .000 | .440 | .334 | .219 | .900 | 1.111 |
| Hepatitis B | .002 | .006 | .006 | .348 | .728 | .240 | .008 | .005 | .595 | 1.680 |
| Measles | -3.883E-5 | .000 | -.043 | -3.054 | .002 | -.083 | -.068 | -.042 | .980 | 1.021 |
| Polio | .038 | .007 | .096 | 5.374 | .000 | .361 | .119 | .075 | .597 | 1.676 |
| Diphtheria | .051 | .008 | .126 | 6.330 | .000 | .360 | .140 | .088 | .484 | 2.066 |
| a. Dependent Variable: Life expectancy | | | | | | | | | | | |

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| **Collinearity Diagnosticsa** | | | | | | | | | | |
| Model | Dimension | Eigenvalue | Condition Index | Variance Proportions | | | | | | |
| (Constant) | Adult Mortality | GDP | Hepatitis B | Measles | Polio | Diphtheria |
| 1 | 1 | 4.831 | 1.000 | .00 | .01 | .01 | .00 | .00 | .00 | .00 |
| 2 | .988 | 2.211 | .00 | .00 | .10 | .00 | .81 | .00 | .00 |
| 3 | .783 | 2.484 | .00 | .06 | .62 | .00 | .17 | .00 | .00 |
| 4 | .307 | 3.968 | .00 | .71 | .26 | .01 | .00 | .01 | .01 |
| 5 | .043 | 10.590 | .14 | .04 | .01 | .77 | .02 | .17 | .00 |
| 6 | .027 | 13.414 | .80 | .17 | .00 | .01 | .01 | .54 | .01 |
| 7 | .021 | 15.145 | .05 | .01 | .00 | .21 | .00 | .29 | .98 |
| a. Dependent Variable: Life expectancy | | | | | | | | | | |

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| **Residuals Statisticsa** | | | | | |
|  | Minimum | Maximum | Mean | Std. Deviation | N |
| Predicted Value | 41.395 | 94.477 | 70.057 | 6.7294 | 2009 |
| Std. Predicted Value | -4.259 | 3.629 | .000 | 1.000 | 2009 |
| Standard Error of Predicted Value | .123 | 1.658 | .265 | .170 | 2009 |
| Adjusted Predicted Value | 41.337 | 95.036 | 70.057 | 6.7352 | 2009 |
| Residual | -29.6201 | 15.7584 | .0000 | 5.3231 | 2009 |
| Std. Residual | -5.556 | 2.956 | .000 | .999 | 2009 |
| Stud. Residual | -5.581 | 2.963 | .000 | 1.001 | 2009 |
| Deleted Residual | -29.8866 | 15.8302 | .0001 | 5.3482 | 2009 |
| Stud. Deleted Residual | -5.624 | 2.968 | .000 | 1.002 | 2009 |
| Mahal. Distance | .068 | 193.320 | 5.997 | 12.307 | 2009 |
| Cook's Distance | .000 | .132 | .001 | .004 | 2009 |
| Centered Leverage Value | .000 | .096 | .003 | .006 | 2009 |
| a. Dependent Variable: Life expectancy | | | | | |

**Charts**















