

Annotated output from -regress-

This is an annotated output from Stata's regress command. The example output is from a multivariate regression with the variable intolerance as dependent variable (Y) and v357 (age), male (gender), and v337 (size of dwelling) as independent variables. The regression corresponds to exercise 180a in K.M. Sønderskov (2015), *Stata: a practical introduction*. intolerance is a metric variable (0-100) tapping the respondents' attitudes towards immigrants with high values indicating high levels of intolerances towards immigrants. v357 is the respondents' age (in years), male is an dummy variable where 1 indicates male. v337 is a categorical variable where the values 1-5 indicates that the respondent lives in 1) 'a rural area', 2) 'a town with less than 10,00 inhabitants', 3) 'a town with 10,000-50,000 inhabitants', 4) 'a town with 50,001-500,000 inhabitants', 5) Denmark's metropolitan area.

The regression is estimated using the following command: regress intolerance v357 i.male i.v337

SS is the Sum of Squares where Total SS is the total variance $\sum(Y - \bar{Y})^2$, Residual SS is $\sum(Y - \hat{Y})^2$ and Model SS = TotalSS – ResidualSS.

The df column shows the degrees of freedom for the variance components. Total df equals N-1, Model df equals the number of independent variables subtracted by 1

MS is the Mean Squares, which are SS divided by df.

The Source column divides the sources of variance on Y into a) the part that is accounted for by the model (Model), the residual part (Residual), and the total variance (Total).

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. regress intolerance v357 i.male i.v337
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Source	SS	df	MS
Model	125415.142	6	20902.5237
Residual	1328644.94	2233	595.004451
Total	1454060.08	2239	649.423886

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Number of obs = 2240
F( 6, 2233) = 35.13
Prob > F = 0.0000
R-squared = 0.0863
Adj R-squared = 0.0838
Root MSE = 24.393
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The column shows (from the top) N, the joint F value, the P value for the F value, R², adjusted R² og Root Mean Square error (i.e. the square root of Residual MS).

The dependent variable

intolerance	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
v357	.2925543	.0305002	9.59	0.000	.2327427 .3523659
male					
Male	3.396117	1.036383	3.28	0.001	1.363742 5.428492
v337					
Town, <10.000	-.7966848	1.499881	-0.53	0.595	-3.737991 2.144621
Town, 10-50.000	-3.769547	1.512256	-2.49	0.013	-6.735122 -.8039723
Town, 50-500.000	-3.827396	1.719994	-2.23	0.026	-7.200351 -.4544408
Metropolitan area	-13.06927	1.636201	-7.99	0.000	-16.27791 -9.860638
_cons	39.61703	1.982949	19.98	0.000	35.72842 43.50565

The independent variables and the constant. Since male and v337 are entered as categorical variables (as per i.) the variable name is shown a long with the categories (except from the reference category).

From left to right: regression coefficients, standard errors, t values, the two sided P values, and 95% confidence intervals.