MULTICOLLINEARITY EXAMPLE

from Brown, William S. Introducting Econometrics, 1991, pp. 110-116

Data Source: 1989 Economic Report of the President, Tables B-15, B-27, B-71

Model 1 CONS = - 45.2 + 0.959 DPI - 6.30 AAA

where CONS = consumption
DPI = Disposable Personal Income
AAA = Interest on AAA Rated Bonds

Predictor	Coef	Stdev	t-ratio	p
Constant	-45.20	19.53	-2.31	0.029
DPI	0.95894	0.01893	50.66	0.000
AAA	-6.301	3.028	-2.08	0.048

s = 24.28 R-sq = 99.7% R-sq(adj) = 99.7% F = 4516.70 n = 28

Model 2 CONS = - 40.8 + 0.948 DPI + 0.49 AAA - 6.03 TBILL

where TBILL = Interest on Treasury Bills

Predictor	Coef	Stdev	t-ratio	p
Constant	-40.83	19.27	-2.12	0.045
DPI	0.94752	0.01996	47.47	0.000
AAA	0.488	5.387	0.09	0.929
TBILL	-6.035	4.005	-1.51	0.145

s = 23.68 R-sq = 99.7% R-sq(adj) = 99.7% F = 3164.91 n = 28

CORRELATION MATRIX

	CONS	DPI	AAA
DPI	0.998		
AAA	0.845	0.858	
TBILL	0.671	0.691	0.904