SIZE: 203 observations, 18 variables

ARTICLE TITLE: A Classroom Investigation of the Effect of Population Size and Income on Success in the London 2012 Olympics

DESCRIPTIVE ABSTRACT: The data set gives the names of the 203 participating countries as well as the number of gold, silver and bronze medals won by country, the total number of medals won by country, the Borda points by country, income per capita (in $1.000), population size (in 1.000.000), gross domestic product (GDP= income per capita multiplied by population size) and the polynomial variables of income per capita squared, population size squared, income per capita cubed, population size cubed, gross domestic product squared, gross domestic product cubed, natural log of income per capita, natural log of population size, and natural log of GDP.

SOURCES: The data are publically available, and were obtained from http://espn.go.com/olympics/summer2012/medals and the list of nations at http://www.london2012.com/countries/
The data on income per capita and population size by country was obtained from Wikipedia and are available at http://www.csuchico.edu/math/theses-projects.shtml under Nathan Felton.

VARIABLE DESCRIPTIONS:
A header line contains the names of the variables. The data are comma delimited. There are no missing values.
Country: The name of the country
GoldMedals: The number of gold medals won
Silver: The number of silver medals won
Bronze: The number of bronze medals won
TotalMedals: The number of total medals won
BordaPoints: The number of Borda points
Income: The income per capita (in $1.000)
PopnSize: The population size (in 1.000.000)
GDP: The gross domestic product (income multiplied by population size, units are in $1.000.000.000.000)
Income SQ: Income squared
PopnSQ: PopnSize squared
GDPSQ: GDP squared
Ln(Income): Natural log of Income
Ln(PopnSize): Natural log of PopnSize
Ln(GDP): Natural log of GDP

STORY BEHIND THE DATA:

While watching the London 2012 Olympics on television one of the authors was particularly impressed by the performance of Usain Bolt as he accumulated gold medals. From the small, relatively poor nation of Jamaica, he and his fellow Jamaicans were clearly dominating the sprinting events. While obviously, the strongest overall Olympic performances were from larger wealthier nations, Jamaican Olympic success was nevertheless spectacular. This raised the question: Is it fair to compare Jamaica or any nation's success just on the number of gold or total medals and exactly how does population size and wealth influence a nation's performance?