Regression Analysis: Yearly Salary versus Goals

The regression equation is
Yearly Salary = - 3.132 + 0.5550 Goals

Model Summary

S	R-sq	R-sq(adj)
8.15007	42.73%	40.75%

Analysis of Variance

Source	DF	SS	MS	F	P
Regression	1	1437.17	1437.17	21.64	0.000
Error	29	1926.29	66.42		
Total	30	3363.45			

Fitted Line: Yearly Salary versus Goals

My study was to find out if goals scored in a season affected professional soccer players yearly salaries. I used the UEFA Champions League as my sample size to represent all professional soccer players. I chose the Champions League because it takes teams from multiple countries which creates a variation in the economies making for more random yearly salaries. The Champions League consists of 32 teams in the group stage with 52 countries able to have teams qualify.

I collected my data using three sites:
Total Sportek
Sportskeeda
Transfer Markt

These sources provided me with either the goal scoring data or the yearly players salary. I avoided bias in my study by narrowing my search to the leading goal scorer from each team that plays the forward position and selecting a league that contains teams from different countries with varying economies to eliminate any extraneous factors. Originally I was going to select the most expensive player from each team in all division 1 teams in England but there was too much variation because some high paid players are defenders and it only sampled one economy.

- My correlation coefficient was .653 showing that there is a moderate positive relationship between goals scored and player yearly salaries
- My R-Sq. was 42.7% meaning not a lot of the data fell in line with the line of best fit
- My regression equation was y= - 3.132 + .5550x

In conclusion, there is a weak positive correlation between goals scored and soccer player salaries.