Application: The Distribution of Incomes in Competitive Sport

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The Distribution of Incomes in Competitive Sport

The purpose of this project is to explore the distribution of income among top professional athletes. Select a professional team in a collective sport like Soccer, Basketball, or some other sport. Alternatively, select an individual sport like Tennis, Golf, or some other sport. Gather data about the incomes earned by at least 10 members of the team or by the top ranked athletes, for a single year, e.g 2014.

To illustrate the type of data you are expected to put together, a data file of the Real Madrid and Barcelona soccer players is available [xls], as obtained at the start of the 2014-2015 season. Please select other teams for your project.

1. Collect the data in a worksheet with the athlete's name along the vertical direction and corresponding income next to it. Create a plot of the distribution that you feel best illustrates the data.

2. Select the best paid athlete in your list and estimate their total income accumulated over their career or over the last 10 years. Assume they save a percentage x, earn a rate of return r. Pick numbers you feel are realistic and consider alternative scenarios. How much wealth would they have accumulated over that period? How much would their annual income be at the end of that period?

3. In a separate text document, clearly indicate the data source (website, news article); the currency used; any calculations you have made (currency conversion, translation from monthly to annual, etc.); whether the data is pre-tax or post-tax; whether it includes endorsement revenues; whether it includes other sources of income such as capital income from past investment: some athletes may own a team or a share in a business venture, some athletes own multiple homes and rent them out.