

Sport Analytics Spring 2019
Exercise 3: The 4 Factors Model

1. Run the 4 Factor model for the season 2005-6 and compare coefficients with those estimated for the season 2006-2007
2. Run the 4 Factor Model on the time series data for Boston Celtics (using all available data) and compare the results with those obtained using the cross-section of data in Season 2005-2006
3. Consider the 4 Factor model estimated on the cross-section of data in Season 2005-6. Compare the coefficient on Factor 1 obtained in the 4 factor model with that obtained by projecting wins on Factor 1 only. Obtain the coefficient on Factor 1 in the 4 factor model by running a regression of WINS on one regressor and the constant. Provide a test of the joint significance of Factors 2,3 and 4
4. The 4 Factor model omits fouls. Can you assess the relevance of this mis-specification ?