

## **Measuring Athletic Performance    the Role of Luck in Sports**

A general problem in sports is the measurement of performance. In baseball, one wishes to measure the abilities of batters, pitchers, and fielders to determine salaries, to make predictions of future performance, and to give awards. The problem is that any measurement of performance is only an estimate of a player's ability and this estimate can be poor when chance variability is present. We describe good and poor measurements of baseball performance for learning players' abilities.

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