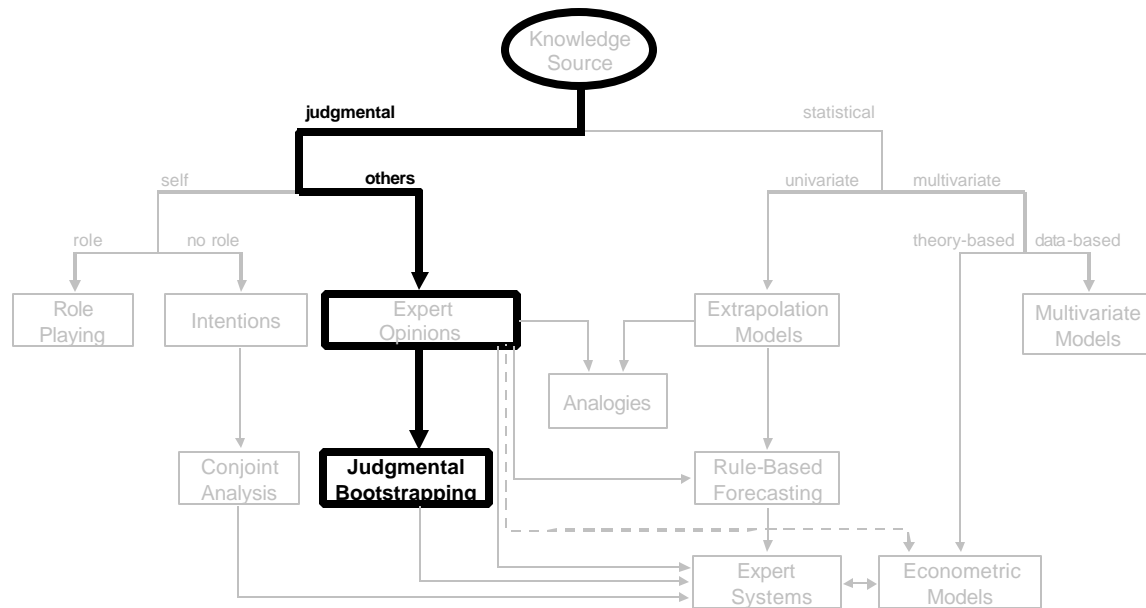


6: Judgmental Bootstrapping



Can we predict what an expert would predict? One way is to make a model of the expert's prediction process. Judgmental bootstrapping is a type of expert system that infers the expert's model by examining predictions made by that person (or group). The procedure is simple. Give a set of forecasting problems to an expert. Then, using his forecasts and the inputs that he used, develop a model of his process by running a regression.

The concept of judgmental bootstrapping (though not the name) was originally conceived and tested in the early 1900s in a problem concerning an expert's forecast of the quality of the next summer's corn crop. By applying a person's rules more consistently than the person can, judgmental bootstrapping produces reliable forecasts. It is useful for comparing policy alternatives because it yields consistent forecasts.

However, forecasters seldom use judgmental bootstrapping because they have too much confidence in their own opinions.

J. Scott Armstrong's "Judgmental Bootstrapping: Inferring Experts' Rules for Forecasting" describes the principles for using this method. While most of these principles seem obvious (e.g., use experts who differ, use stimulus cases that cover most reasonable possibilities), one is surprising: use simple analyses to represent behavior. Judgmental bootstrapping can be especially useful when data on the dependent variable is lacking or when the historical data show little variation.