Ray Fair is one of my favorite econometricians. He has an excellent website, fairmodel.econ.yale.edu, where he freely shares his models. He writes clearly and his methods are reported in detail. He is concerned with the proper use of econometric methods. For example, he has long been opposed to the common practice of making ex post subjective adjustments to forecasts from econometric models. A review of empirical evidence supports his position (Armstrong and Collopy 1998).

The book is aimed at novices, which is potentially a large audience. Fair captivates the reader by showing how econometrics can be used for everyday life. This includes predicting votes in U.S. presidential elections, the quality of wine in France, whether people are likely to have extramarital affairs, how fast you can run a marathon, how attendance at college relates to grades, interest rates, and inflation.

The book produces interesting conclusions. For example, you can predict the outcome of the next U.S. presidential election rather well by using only three factors: knowledge about which party is currently in office, how long they have been in office, and the state of the economy. The candidates, issues, and advertising budgets are unimportant!

Fair’s theoretical models typically avoid policy variables. For example, he states that people who are not happy in their marriages are more likely to have a divorce. So what do you do about that... get happy? I think that he should have advised novices to select variables that allow one to take action. For example, does counseling help people to improve their marriages? Econometric models should go beyond entertainment and allow people to make better decisions. This is a concept that should be welcomed by novices.

Although he does not include policy variables in his models, Fair draws policy implications. This may mislead novices, who might think that his policy recommendations came from the model. For example, in the chapter on predicting grades, he suggests that teachers might take attendance to ensure students come to class. Much evidence exists on this issue and it leads me to conclude that this recommendation would reduce learning (Armstrong 1994). In any event, one cannot draw this conclusion from the study that Fair reports.

While I believe that most of the advice in the book is correct and useful, there were some troubling issues. For example, Fair could have offered more advice for selecting variables. Allen and Fildes (2001) summarized such advice: (1) one has good reason to believe that there is a strong relationship, (2) it is possible to estimate the relationship, (3) the variable will change substantially over the forecast horizon, and (4), it is possible to either control or forecast the change in the variable over the forecast horizon (or else the variable is accurately known, such as with leading variables).

Although Fair emphasizes theory, he also uses fit. Evidence summarized in Armstrong (2001) shows that there is only mild support for the use of fit for cross-sectional data (which is the type of data that Fair focused on). More important, however, novices might falsely assume that fit can help for developing time-series models.

In describing how to test models, Fair should have introduced the notion that the value of an approach can best be judged relative to an alternative method, such as currently used method. Thus, for example, the accuracy of his forecasts of interest rates could be compared against the accuracy of rates from the futures market.

The principles that Fair draws upon have been around a long time. This is no disadvantage, as early econometric work is of great value. In fact, there is little evidence that developments over the past half-century have done much to improve the accuracy of forecasts or to improve decision-making. For example, Allen and Fildes (2001, table 5) showed little difference in the forecast accuracy of econometric models comparing pre- and post-1985 studies.

So who is going to win the next Presidential election in the U.S.? Based on the prediction Fair made in January 2001, Bush will win unless the economy is in dire straights. His website allows you to make predictions by putting in forecasts for the independent variables.

References


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March 3, 2003