Book Selection

The Oxford Handbook of Economic Forecasting

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The book offers a comprehensive survey of economic forecasting. It is a state-of-the-art work covering theoretical results, compelling applications (eg, election forecasting) and empirical findings across most of the elements of this discipline. It is a useful reference particularly for academics with previous knowledge of the topics under discussion.

The handbook is organised in six parts: (1) models and methods, (2) data issues, (3) structural breaks, (4) evaluation, (5) financial forecasting and (6) special interest areas. Naturally, all the areas are logically related and the classification is not restrictive (ie, some contributions do not fit under a single heading). One advantage is that each section can be read separately without following a particular consequential order. For instance, the chapter on dynamic factor models (Chapter 2) starts off with a general idea that a few latent dynamic factors can explain a large fraction of the variance of time series variables. It then moves on by describing how to estimate the factors (first, second and third generation models; Bayesian methods) and how to use them, for example, as instrumental variables in the generalized method of moments (GMM) framework. In addition, it proposes some extensions that can be linked to the material of other chapters (eg, Chapter 11 on forecasting breaks).

The wide range of topics offers a valuable toolbox to build up a basic understanding on different theoretical and empirical elements. The models described in the first part summarise different applications of forecasting techniques such as the forecasting of system of equations with endogenous variables, of macroeconomic variables (eg, monthly unemployment), of non-linear time series (eg, meteorological phenomena), of the optimal behaviour of economic agents or of the dynamic characteristics of time series over time. The different methods exploit data that often are revised or are unavailable because of non-synchronized publication lags. Nowcasting (Chapter 7) deals with these problems as it is used to predict the present, the very short-term future and the very recent past values of selected variables. This is paramount as revisions are often large and show systematic tendencies meaning that forecasts are a function of the release date for the range of economic variables (Chapter 8). Evaluating the forecasting performance of the different models is of interest to determine the relative performance of competing models or assess the degree of accuracy of the predictions. Both conditional and unconditional predictive ability are reported and the emphasis on the reasons and limitations of the out-of-sample methods is particularly interesting (Chapter 14).

Each chapter has a very detailed list of references that gives the opportunity to explore more in-depth some of the topics and the issues involved, although it would have also been useful to report in a final section all the cited works in the book. Another important aspect is that in many chapters there is an emphasis on open research questions that may be explored in future research (eg, Chapter 19).

One minor drawback of the book is that it does not have an introductory section or an appendix with some basic definitions and elementary concepts (eg, fundamentals of mathematical statistics; probability theory). This would have helped readers in approaching the discussion of the different topics. In each section and for every issue the authors leave out some primary concepts and do not articulate the topic on a step-by-step form, implying a sort of previous knowledge on certain issues. Moreover, the illustration of how to use some statistical software to carry out economic forecasting would have enriched the applied perspectives of the book. In this regard, links to real data might be a useful extension.

The arguments are quite complex though well-written and well-explained. The material is presented formally and the mathematics is rigorous. Several examples assist the reader in understanding of how the different elements relate to conceptual tools and practical issues. Finally, the handbook is oriented to practitioners and academics though it is more likely to be used by the latter as it lacks the appealing features of an applied resource.

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