ECONOMIC AND BUSINESS FORECASTING

ANALYZING AND INTERPRETING ECONOMIC RESULTS

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Economic and Business Forecasting

Analyzing and Interpreting Econometric Results

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To Tiffani Kaliko, Penny and Sherman

Shahkora and Mohammad Iqbal, Nargis, Saeeda, Shahid and Noreen

And to the family and friends who remain our wellsprings of inspiration

If a man will begin with certainties, he shall end in doubts, but if he will content to begin with doubts, he shall end in certainties.

—Francis Bacon, *The Advancement of Learning*, 1605

Preface

Due to the Great Recession (2007–2009) and the accompanying financial crisis, the premium on effective economic analysis, especially the identification of time series and then accurate forecasting of economic and financial variables, has significantly increased. Our approach provides a comprehensive yet practical process to quantify and accurately forecast key economic and financial variables. Therefore, the timing of this book is appropriate in a post-2008 world, where the behavior of traditional economic relationships must be reexamined since many appear out of character with the past. The value proposition is clear: The framework and techniques advanced here are the techniques we use as practitioners. These techniques will help decision makers identify and characterize the patterns of behavior in key economic series to better forecast these essential economic series and their relationships to other economic series.

This book is for the broad audience of practitioners as well as undergraduate and graduate students with an applied economics focus. This book introduces statistical techniques that can help practitioners characterize the behavior of economic relationships. Chapters 1 to 3 provide a review of basic economic and financial fundamentals that decision makers in both the private and public sectors need to know. Our belief is that before an analyst attempts any statistical analysis, there should be a clear understanding of the data under study. Chapter 4 provides the tools that an analyst will employ to effectively characterize an economic series. One relationship of interest is the ability of leading indicators to predict the pattern of the business cycle, particularly the onset of a recession. Another way to