

FORECAST UNCERTAINTY, ITS REPRESENTATION AND EVALUATION

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1. Introduction

Forecasts of future economic outcomes are subject to uncertainty. It is increasingly accepted that forecasters who publish forecasts for the use of the general public should accompany their point forecasts with an indication of the associated uncertainty. These lectures first describe the various available methods of communicating information about forecast uncertainty. It is equally important that forecasters' statements about the underlying uncertainty should be reliable. The lectures go on to consider the various available statistical techniques for assessing the reliability of statements about forecast uncertainty.

The lectures draw on and extend material covered in previous survey articles such as Wallis (1995) and, most notably, Tay and Wallis (2000) on density forecasting. Relevant research articles are referenced in full, but background material in statistics, econometrics, and associated mathematical methods is not; readers needing to refer to the general literature are left to consult their favourite textbooks.

This introduction first motivates the lectures by considering the “why” question – why say anything about forecast uncertainty – and then presents an overview of the issues to be addressed, based on an introductory theoretical illustration.