

# Forecasting Seasonal Time Series\*

Philip Hans Franses

*Econometric Institute, Erasmus University Rotterdam*

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## Abstract

This chapter deals with seasonal time series in economics and it reviews models that can be used to forecast out-of-sample data. Some of the key properties of seasonal time series are reviewed, and various empirical examples are given for illustration. The potential limitations to seasonal adjustment are reviewed. The chapter further addresses a few basic models like the deterministic seasonality model and the airline model, and it shows what features of the data these models assume to have. Then, the chapter continues with more advanced models, like those concerning seasonal and periodic unit roots. Finally, there is a discussion of some recent advances, which mainly concern models which allow for links between seasonal variation and heteroskedasticity and non-linearity.

Key words and phrases: Forecasting, seasonality, unit roots, periodic models, cointegration

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