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Forecasting when pattern changes occur beyond the historical data

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Title:	FORECASTING WHEN PATTERN CHANGES OCCUR BEYOND THE HISTORICAL DATA
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Abstract:	Forecasting methods currently available assume that established patterns or relationships will not change during the post-sample forecasting phase. This, however, is not a realistic assumption for business and economic series. This paper describes a new approach to forecasting which takes into account possible pattern changes beyond the historical data. This approach is based on the development of two models: one short, the other long term. These models are then reconciled to produce the final forecasts by setting certain parameters as a function of the number, extent, and duration of pattern changes that have occurred in the past. The proposed method has been applied to the 111 series used in the M-Competition. Post-sample forecasting accuracy comparisons show the superiority of the proposed approach over the most accurate methods in the A/-Competition.