Comparative Out-of-Sample Forecasting Performances Of Exponential Smoothing Models On Plano Sales Tax Revenue Data

Different Exponential Smoothing Methods are designated as follows:

Simple Exponential Smoothing = NTNS (No Trend, No Seasonality) Seasonal Exponential Smoothing = NTS (No Trend, Seasonality) Holt Exponential Smoothing = TNS (Trend, No Seasonality) Additive Winters Smoothing = TS (Trend, Seasonality)

In-Sample Period = Feb. 1990 – Dec. 2003 (167 Observations) Out-of-Sample Period = Jan. 2004 – Nov. 2005 (23 Observations)

Out-of- Sample Forecasting Performances
Of Various Exponential Smoothing Methods
At Horizons (h) 1, 3, and 6
And using the PMAE as the Measure of Accuracy

TS	NTNS	TNS	NTS	M	h
4.30	19.87	20.57	4.61	23	1
3.84	14.76	15.34	4.58	21	3
3.50	13.37	13.83	4.88	18	6

Certainly, ignorance with respect to proper choice of trend and seasonality is important in this Plano data but it seems that of the two ignorances, the ignorance of seasonality is more costly than the ignorance of trend.