Forecasting City Tourism: The Case of Vienna

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Abstract

City tourism is a very important tourism activity and gaining rapidly in importance as an economic factor. The future growth rates of city tourism will be driven besides economic factors and the shift to post-modern structures preliminary also by socio-demographic factors: cities face an enormous growth potential due to the increasing urbanization and the fact that a big part of city-tourists live in cities. With its fast pace of growth city tourism needs reliable forecasting models to get useful information on demand growth, future room capacity requirements and the price situation to be expected. So far, we have only a handful of studies that look into forecasting issues related to city tourism. They concentrate on the demand side, measuring their findings in terms of arrivals, overnight stays and tourist expenditures. Little research is dedicated to the supply side, especially the mutual influence of demand for overnight stays and bed supply. We need to consider that dynamic demand for overnight stays impacts on occupancy rates and room prices and that these variables in turn influence investment in increasing bed capacities.

To fill this gap in research, an econometric model of the hotel bed supply and the demand for overnight stays on a monthly basis has been developed for Vienna, Austria. The out of the sample forecasting accuracy was very satisfying: in 5 cases the **M**ean-**A**bsolute-**P**ercentage-**E**rrors MAPEs were lower than 5%, in 6 cases the MAPEs have been between 5% and 10% and only in 1 cases between 10% and 15%. Forecasts for 2013 and 2014 have been carried out for overnight stays, bed supply, average daily rates charged for beds and, implicitly, also for occupancy rates. According to the model forecasts for the year 2013 and 2014 it is to expect that the strong growth of the overnight stays will weaken and will not last longer: growth rates will decline and be lower as the long term trend. The growth of the bed supply will accelerate as a reaction of the strong market forces in the last years. The occupancy rate will decrease as the relative strong increasing bed supply meets a weakening demand. The dynamic of the revenues per bed-night sold indicates no optimistic signals for further growth reflecting the unsatisfying development of the occupancy rate.

Keywords: forecasting city tourism, bed supply city tourism, econometric modeling.