DYNAMIC AIRLINE PRICING AND SEAT AVAILABILITY

ABSTRACT: Airfares are determined by both intertemporal price discrimination and dynamic adjustment to stochastic demand. I estimate a model of dynamic airline pricing accounting for both forces with new flight-level data. With model estimates, I disentangle key interactions between the arrival pattern of consumer types and remaining capacity under stochastic demand. I show that the forces are complements in airline markets and lead to significantly higher revenues, as well as increased consumer surplus, compared to a more restrictive pricing regime. Finally, I show that abstracting from stochastic demand leads to a systematic bias in estimating demand elasticities.