Theatregoers’ choice of seat and performance: combined revealed-stated preference approach

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Theatrical productions are supposed to be specific economic goods. They possess the features that characterize the perishable goods: the tickets for a particular play cannot be inventoried and sold after a time of play; the limited number of seats in a house (inflexible capacity); variable and uncertain demand; significant fixed costs of a particular performance and low marginal cost of additional attendee (Hetrakul & Cirillo, 2014). In the management of a perishable good demand the methods of price discrimination are widely used since the theatre audience is heterogeneous in terms of visit purpose, ability to perceive quality, willingness to pay. The theatrical production is in turn a differentiated product and consists of characteristics, such as the type of performance, the venue, the director of performance, etc. Besides, the seats in the house vary by the distance to the stage, the quality of view and sound and by price. Thus, the theatre with heterogeneous consumers and differentiated performances and seats has an ability for ticket price discrimination.

There are very few studies where authors consider the demand for a particular seat in a house also. When the theatre administration increases the price for a ticket, the consumer may refuse from theatre visit or may switch to another seat in a house with a lower price. To perform price discrimination policy, one needs to account for cross price elasticity between seats in a house.

In this paper, we study consumers of Perm Opera and Ballet Theatre, the best regional musical theatre in Russia. We employ data on internet ticket purchases, that allows to observe consumer’s name, email and the history of her attendance. At the same time the actual data about consumer behavior do not permit to study cross price elasticity within the seats in a house due to the current pricing policy of the theatre. It assumes simultaneous proportional price change for the seats in the house. To avoid the problem of price multicollinearity and identify the cross price elasticity we collect experimental data. Having a database with consumer emails, we conduct email-based online survey. The part of survey is devoted to the discrete choice experiment, that permits to imitate the real choice of ticket in the theatre with induced variation in the price.

The study proposes an approach to collecting and combining of data that allows to estimate the parameters of own and cross price elasticity of demand in situations where actual sales data do not contain sufficient variation in prices. The combined dataset on cultural consumption and latent

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class logit model allow to identify different segments of the theater's audience. The study proves that the representatives of segments have different willingness to pay for performance and seat location characteristics, which allows developing detailed recommendations on the pricing strategy for various theater audiences. The availability of the survey data also allows obtaining a meaningful interpretation of the results and describing the resulting segments in terms of socio-demographic characteristics.