Secondary Market Demand for National Football League Personal Seat Licenses and Season Ticket Rights

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The sale of personal seat licenses (PSL) is a critical revenue generating instrument for National Football League (NFL) franchises. Due to the scarcity of NFL home contests (only 8 regular season games per season), NFL franchises are able to extract consumer surplus from buyers by charging a PSL fee (Howard & Crompton, 2003). The sale of a PSL can be viewed as a two-part pricing mechanism (Fort, 2003) in which an upfront charge by a franchise grants the right to the consumer to purchase season tickets in the same seat location each year, generally for as long as the stadium is in operation. But due to pricing inefficiencies by many NFL franchises, a secondary marketplace has emerged where consumers are able to buy and sell both PSLs and season ticket rights (STR) over the internet. For NFL teams that either do not utilize the PSL system or do not have the ability to sell PSL’s, season ticket owners sell “season ticket rights” as opposed to personal seat licenses. In the secondary market, the sale of a STR is equivalent to the sale of a PSL, assuming the original debt associated with the purchase of the PSL is retired. The existence of this secondary market is the result of unclaimed consumer surplus by some NFL franchises, resulting in the unrealized loss of revenue and reductions in firm profitability.

At this point in time, there is no existing empirical work examining either primary or secondary market demand for NFL personal seat licenses. Fort (2003) outlines the economic theory of PSLs and Siegfried & Zimbalist (2000), Bramlett & Sloan (2000), and Howard & Crompton (2003) discuss the operation of the primary PSL market, but no scholarly work has been completed examining demand for NFL personal seat licenses or season ticket rights. This is partially due to the limited between-market variation in demand for live NFL games, as most teams play at or close to capacity each season (Coates & Humphreys, 2007). Despite this lack of variation, there is reason to believe that there could be differing demand drivers associated with PSL sales due to the amplified financial commitment incurred by the consumer.

Conversely, there is limited existing empirical work examining single-game demand in the NFL. Welki and Zlatoper (1994) found that higher ticket prices reduced single-game attendance. Alternatively, Coates & Humphreys (2007) established that NFL demand is not sensitive to changes in the overall cost of event attendance, relating back to the relative scarcity of live NFL events. Along with Noll (1974), they also found that demand is closely tied to team winning percentage, which again supports the economic theory that fan preference for team quality is one of the strongest factors in determining attendance. Despite the lack of complete consensus in this area of research, a principal aim of this study is to determine whether or not secondary market demand for PSLs and STRs are driven by the same factors that determine single-game demand for NFL contests.

This research uses an economic model, employing multiple regression analysis, which examines the factors that drive demand for secondary market NFL personal seat licenses and season ticket rights. Pricing data was collected from two sources: seasticketrights.com and ebay.com. Over 3900 observations were gathered, ranging in date from August 2005 to September 2009. The dependent variable for the multiple regression analysis is per seat PSL or STR sale price. The model includes fifteen economic, team, seating location, and stadium specific covariates. Among the independent variables are stadium capacity, stadium age, single-game season ticket price, a seat quality indicator, previous season team winning percentage, three-year cumulative team winning percentage, a premium seating indicator, a source indicator, a linear trend variable, a non-linear trend variable, Metropolitan Statistical Area (MSA) population, MSA per capita personal income, local MSA unemployment rate, and national unemployment rate. Economic variables were gathered from the Bureau of Labor Statistics and the Bureau of Economic Analysis. Team and stadium specific variables were collected from official NFL team websites and pro-football-reference.com.

Initial data analysis uncovered that factors such as three year winning percentage, MSA population, and seat quality were the strongest predictors of PSL and STR sale price. As expected, all three were positively associated with PSL
and STR sale price. Ten of the fifteen independent variables were significant at the .05 level. Overall, the model produced an R² value of .4106 and was significant at the .01 level. The strongest predictors in this model mirror the primary demand shifters traditionally found in professional team sports, namely preferences for team quality, preferences for higher quality seat locations, and the population in a team’s city (Fort, 2003). This research also examines the variation in demand between NFL markets, how the health of the local and national economy affect consumer demand, and to what degree short-term team quality impacts long-term demand.

The findings from this research should be of benefit to NFL owners, fans, and policymakers. This work should provide us with a better understanding of the factors that drive long-term NFL demand, which could eventually impact pricing decisions. We should also have a stronger idea of how demand varies between markets and how changes in the health of the economy affect consumer willingness to pay.