

The Power of Self-Promotion: Twitter Followers and Guaranteed Purses in Professional Boxing

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Aim

Since professional boxers essentially work as independent contractors who must “hustle business” to flourish (Lane, 1995. p. 109), research suggests that their overall marketability is generally the most significant determinant of their pay (Stewart, 2008; Klimes, 2009; Rotella, 2009; Chaplin, 2012). This study will focus on professional boxers’ use of a particular form of self-promotion, Twitter, and its correlation with their guaranteed purses for fights taking place over the period 2011-2013.

Theoretical Background and Literature Review

This study is situated within the broad context of pay determinants for professional athletes. Within that framework, we narrow our scope of analysis to the sport of professional boxing and evaluate the impact factors such as the number of Twitter Followers a boxer has, whether or not they have earned an Olympic boxing Medal, their knockout percentage and if they are involved in a title bout have on their guaranteed purse for a particular contest.

A study on the economics of boxing regulation in California during the 1970s (Balbien, Noll, & Quirk, 1981) found a statistically-significant (at the 5% level) relationship between the number of inches of advertising in local newspapers promoting boxing matches and both bout attendance and bout revenue, and an international study spanning 1908-2007 on the determinants of pay in world championship boxing by Chaplin (ibid) demonstrated the limitations of a regression model which excludes measures of marketing, per se. In the Chaplin (ibid) study, boxers’ winning percentage, knockout percentage, race, status as champion and possession of an Olympic Gold Medal were all regressed on their guaranteed purse. While knockout percentage, status as champion, and possession of an Olympic Gold Medal were all statistically significant at the 10% level or better, the adjusted R-Squared of only 0.34 suggests some measure of boxers’ marketability would have been beneficial to the overall explanatory power of the model. To develop the research identified above, the present study strives to contribute to the field by exploring the role of recent social media within the domain of boxing economics by looking at the role of Twitter in relation to boxers’ pay. Building on the few studies using real-world data in estimating the determinants of pay for professional boxers (Balbien et al., ibid; Chaplin, ibid) and contributing to the nascent field of the economics of social media usage in sports, this study expands a field seldom studied and provides a foundation for future studies to analyze the economic impact of social media usage on professional athletes or other public figures.

Research Design and Data Analysis

Data were collected on the guaranteed purses professional boxers received (for a bout's initially scheduled date) and their number of "Twitter Followers" (hereon TF). For inclusion in the sample, boxers had to meet all of the following criteria: 1). Have an active Twitter account; 2). Have boxed or be contractually-obligated to box over the period 2011-2013 and 3). Have (guaranteed) purse data available.

The regression model utilized is a variation of the examples provided by Berri (2006) and Chaplin (ibid) to estimate wage discrimination based on race in the National Basketball Association and professional boxing, respectively. The model takes the form: $\ln(\text{BP}) = \alpha + \beta_0 \ln(\text{TF}) + \beta_1 \text{KP} + \beta_2 \text{TB} + \beta_3 \text{OM} + \varepsilon$, where $\ln(\text{BP})$ = the natural logarithm of the boxer's guaranteed purse (in current dollars), α is a constant term, $\ln(\text{TF})$ = the natural logarithm of Twitter followers, KP is career knockout percentage, TB is a dichotomous variable where 1 = title bout and 0 = non-title bout, OM is a dichotomous variable where 1 = Olympic medalist in boxing and 0 = non-medalist, and ε is an error term.

Results and Discussion

The model demonstrates impressive overall goodness-of-fit, with 72% of the variation in boxers' purses explained by the independent variables and an F-Statistic significant at the 1% level. The model is in log-log form with respect to the relationship between TF and boxers' pay; thus, the coefficient of TF (significant at the 1% level) may be viewed as a "Twitter elasticity" measure. That is, the coefficient demonstrates the expected value (in percentage terms) of a one percent change in the number of TF. In this case, the coefficient of 0.68 indicates that, ceteris paribus, a one percent increase in TF corresponds with a 0.68 percent increase in a boxer's purse. The Title Bout (TB) and Olympic Medalist (OM) dichotomous variables were each significant at the 10% level.

Conclusion and Implications

This study contributes to an underdeveloped segment (that of the economics of professional boxing) of the rapidly-expanding sports economics field and analyzes the link between social media popularity and sport-specific pay in a way heretofore unexplored. Our analysis provides valuable insight into how professional boxers' (and their entourages) may "hustle business."

References

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