

Applying RBV Analysis to MLB: Investigating the Impact of Non-Human Resources on Performance

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Over the past 20 years, some of the most influential writings in the domain of strategic management have been based upon the resource-based view (RBV) of the firm (Conner, 1991; Ramos-Rodríguez & Ruíz-Navarro, 2004). Originally conceptualized by Penrose (1959), and subsequently popularized by the works of Wernerfelt (1984) and Barney (1991), the RBV deems competitive advantage to be a function of the individual resources of the organization. The RBV maintains that certain organizational resources can yield sustainable competitive advantages for firms when they are bundled and deployed in particular combinations (Barney, 1991). Although RBV researchers have found numerous types of resources from which superior firm performance can be realized (e.g., Hitt & Ireland, 1986; Mahoney & Pandian, 1992; Thompson & Strickland, 1987), their underlying features have enabled them to be classified into four broad categories: physical capital resources, human capital resources, organizational capital resources, and financial capital resources (Barney, 1995).

In the limited RBV research that has been conducted within the realm of Major League baseball (MLB), human capital resources have proven to be a significant source of competitive advantage. Smart and Wolfe (2003) studied the relative contribution that player resources and coaching leadership had on the performances of MLB clubs between 1991 and 2000. Based on their analysis, the authors concluded that player resources (operationalized by offensive and defensive capabilities) were responsible for explaining 66.33% of the variance in the winning percentage of MLB clubs. In contrast, coaching leadership explained very little (1.21%) of the remaining variance.

In a follow-up study, Smart, Winfree, and Wolfe (2008) expanded Smart and Wolfe's (2003) operationalization of the coaching leadership construct in an attempt to explain more variance in the winning percentage of MLB clubs.

Using an expanded sample (1991-2005), the authors revealed that player resources accounted for 72.01% of the variance, with the new operationalization of coaching leadership contributing even less variance than in the previous study (0.31%). Taken together, the results of these studies confirmed that human capital resources (particularly player resources) are significant predictors of performance in MLB. This should not come as any surprise, as it is the players themselves who are physically responsible for the actions that take place on the field of play. However, as noted by Barney (1991; 1995), human capital resources represent only one category of resource from which competitive advantage may be derived. The current study builds upon and extends previous literature by providing insights into what other types of strategic resources contribute to the competitive advantage of MLB clubs.

Using similar regression modeling techniques to those employed by Smart et al. (2008), the researchers tested to see what impact various physical, organizational, and financial capital resources had on the winning percentage of MLB clubs between 1990 and 2007, over and above player resources. Principal components factor analysis yielded four principle components with eigenvalues greater than 1.0, explaining more than 81% of the variance: financial capital resources (operating revenue, franchise valuation, regular-season gate attendance, player payroll), organizational capital resources (number of playoff appearances, number of League pennants, number of World Series championships, age of the club), and physical capital resources (stadium capacity, CMA population, age of the stadium, private stadium ownership status).

Preliminary results indicated that these financial, organizational, and physical resources accounted for an additional 1.9% of the variance in the winning percentage of MLB clubs. This represented a significant increase ($p < .001$) over the 67.0% of the variance accounted for by the human capital resources and the fixed effects alone during this timeframe. Although the effect size of this change in variance may seem marginal by conventional standards ($f^2 = .058$; Cohen, 1988), this seemingly small difference in explained variance could still have a meaningful impact upon the on-field performance and playoff eligibility of MLB clubs.

Of these additional variables, only financial capital resources were found to be a significant positive ($p < .05$) predictor of winning percentage. The significant impact of financial capital resources on winning percentage is consistent with findings in the sport economics literature and the implementation of the competitive balance tax by MLB in 1997 (Basic Agreement, 1997). Although significant findings were not found for either the organizational or physical capital resources, one must recognize that some of the variance attributable to these factors may have been captured by the fixed effects of the individual clubs. In

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summary, the results from this analysis indicate that human capital resources, while critically important in professional baseball, are not the only type of strategic resource that contributes to the competitive advantage of MLB clubs.