ABSTRACT: This paper empirically analyses if and how the salary distribution among players impacts on seasonal performances of teams in the Italian top soccer league, namely the Serie A, searching for validation of cohesion or tournament theory. We explore the payroll of 35 professional football teams in the Italian Serie A from season 2007/08 to season 2017/18, computing four measures of diversity and concentration in wage levels: the coefficient of variation (CV), the Gini, the Shannon and the Simpson indexes. While the first two are traditionally used in statistics to measure the variability/concentration of a variable, the Simpson and Shannon indexes are used in biology to evaluate diversity among species. We use the percentage of points achieved by teams as dependent variable; moreover we employ panel data techniques estimating random and fixed effect models, and find that only the Simpson index is significantly associated with sport performance. In particular, it appears that sport performance improves as diversity in payroll decreases, contrasting previous empirical research on that topic so validating the cohesion theory against the tournament theory.

JEL CODE: Z20, Z22, Z21, L83, J49.

Keywords: Variability, concentration, diversity, sport performance, panel analysis, cohesion theory, tournament theory.