Market Value Formation of Professional Soccer Players: An Analysis Based on Long-Term Ability and Short-Term Performance

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This project investigates how player market value in professional soccer is shaped by long-term ability and short-term seasonal performance. Transfer markets often show inconsistencies between a player's true contribution and his listed value, creating challenges for recruitment and financial decision-making. To address this issue, this project analyzes the statistical relationships among player-ability attributes, match-performance indicators, and observed market values. Two ability-based reference baselines were constructed: expected performance and expected market value. From these baselines, two deviation measures were defined. The first, state, represents how a player's actual seasonal performance differs from the level implied by his underlying ability. The second, premium, represents how the observed market value differs from the value predicted by ability. These measures were combined to build a four-quadrant framework that characterizes players along both performance and valuation dimensions. A regression model using match-performance data alone achieved an R^2 of 0.2923. A model using only ability features reached an R^2 of 0.8377. When both were combined, the R^2 increased to 0.9488. These findings show that player ability accounts for most of the variation in market value, while seasonal performance provides additional but smaller explanatory power. The framework developed in this project separates on-field contribution from market pricing and may support more informed decisions in player recruitment, transfers, and contract evaluations.

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