(SP) PERFORMANCE AND INDIVIDUAL CHARACTERISTICS AS PREDICTORS OF PAY LEVELS: NEW PERSPECTIVES TO MANAGE SALARY DYNAMICS

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Introduction

In recent years we observe both an increasing literature and managerial practices about compensation measurement and management both unexpected salary dynamics that seem to escape from any managerial control. Many contingent phenomena seem to influence often the managerial ability to control pay level. This paper aims to analyse the determinants of Italian soccer player's salaries in order to suggest new perspectives to manage salary dynamics.

Sport organizations represents an ideal and interesting context to test economic and managerial theories (Berman, Down e Hill, 2002; Fonti e Castellucci, 2003): they are labour intensive environments where human capital makes competitive difference (Wright et al., 1995). According to previous researches (Talmor e Wallace, 1998) human capital theory suggests that pay level differences reflect different human capital endowments, strictly connected with individual characteristics such us education (Becker, 1975), experience (Nass, 1994), reputation (Shenkar e Yuchtman-Yaar, 1997) or individual performance (Vafeas, 2000) and team performance.

Focusing on previous literature assumptions we define an analytical model in order to test a set of four different hypothesis:

- HP1: higher experienced player will be more likely to receive higher salary
- HP2: higher reputation player will be more likely to receive higher salary
- HP3: better performer player will be more likely to receive higher salary
- HP4: player enrolled in higher performance team player will be more likely to receive higher salary

Method and Measures

In order to test our hypothesis, our analysis considers seasons 2001-2002 and 2002-2003 of the Italian Serie A Soccer League. We collected data from official statistical publications (*Almanacco del calcio Panini* and the *Annuario del calcio mondiale*) and from national newspapers (in particular, data regarding payers salaries). We obtained a final dataset of 109 observations.

Dependent variable: *players individual remuneration* in season 2002-2003. Considering that soccer players pay can be influenced by the so-called "superstar effect" (Lucifera e Simmons, 2002; Rosen e Sanderson, 2001), we decided to perform a linear transformation of the variable in order to account for this effect.

Independent variables. *Player experience* has been measured through three different indicators (Cronbach Alpha =0,75): player's age, number of seasons played in Serie A (career seniority) and number of matches played in Serie A. *Player reputation* has been calculated analyzing the number of prestigious teams in which a player has played. *Individual performance*: this variable has been calculated using IVG standard, an official statistical index used in Italy to measure player performance. *Team performance*: this variables is represented by points that each team has gained in season 2001-2002 of Serie A Italian Soccer League.

Control variables. Financial Budget: Italian League hasn't any form of salary cap has not and any limit for buyers. These variables is the result of the addition of all the acquisition

made by a team during 2002 summer soccer Italian market. Team change: this variable controls whether a player has changed team or not (dummy variable 0/1).

Results

Results of our regression model are presented in Table 1. Model 1 presents results considering control variables only. Model 2 tests our regression adding player experience's variables, model number 3 introduces reputation effects and, finally, models 4 and 5 test respectively individual performance and team performance. R^2 is constantly increasing, shifting from R^2 =0,503 to R^2 =0,681. All models show the same statistical significance ($p < 0.01$).

First of all, it is interesting to underline that control variables are not significant in model 5. Our first hypothesis is partially verified: specifically, a number of presences in major league and age are significant ($p<0,05$), affecting pay level respectively in a positive and negative way. Career seniority does not show any statistical evidence. The second hypothesis is fully validated showing that player's reputation positively affects his pay level (p=0,000). In the same way, hypothesis three and four are fully validated (p=0,000), confirming that both individual performance and team performance positively affect individual pay level.

Table 1 Results of the regression model.

Variables	Model1	Model 2	Model 3	Model 4	Model 5
Financial budget	,672 ***	,594 ***	,313**	,246*	,180
Team change	-,101	-,118	-,127	-,135*	-,040
Career seniority		,017	,013	,008	-,005
Age		-,220**	-,184*	-,156*	-,148*
Matches played in Serie A		,254 **	,201*	,214*	,193*
Reputation			,369***	,363***	,315***
Individual performance				,237***	,221***
Team performance					,257***
R^2	,503	,548	,595	,646	,681
Adj R^2	,494	,526	,571	,618	,652
N	109	109	109	109	109

REGRESSION COEFFICIENT ARE STANDARDIZED. * = P < .05, ** = P < .01, *** = P < .001

Discussion

First of all, it is interesting to underline how financial budget does not affect pay level when we consider performance variables. Secondary, team changing strategies are not relevant in order to increase salary and this evidence could present noticeable effects on player's career mobility strategies. Confirmation of hypothesis regarding individual and team performance is consistent with a large part of strategic human resource management literature. Moreover, the role of team performance suggest the opportunity to defined and shape a more transparent rewarding system in order to maximize the positive effect of goals alignment. From a research point of view, it could be interesting to investigate the relationship between justice perceived by players and procedural justice in compensation rules defined by teams. In a more managerial perspective, we can assume that if soccer teams define clearly stated rules for their compensation systems based on both performance and individual characteristics of players, they could probably better manage global salary dynamics.

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