

The Success of National Football Teams: Superstars or Team Effects?

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Abstract

This paper analyses the performances of national football teams (for the US: soccer) regarding to the composition of the team members at Football World Cups. In particular, we analyze whether the success of national football teams is more shaped by team or superstar effects. As an example, the German national football team is composed by "blocs", player from one national soccer club like Bayern München. In contrast, in the Dutch football team most of the players are "superstars" and are playing in different clubs outside the Netherlands (legionnaires), like Italy, Spain or France. Thus, team composition is a strategic choice variable by the coach or team manager.

Both, building "blocs" or selecting "superstars" are associated with costs and benefits. While superstars might be players with superior individual performance parameters (see Lehmann/Schulze, 2008), the coordination and motivation costs might also be higher.

In this vein, this study also explains why the so called "underdogs" are surprisingly successful at Football World Cups and "football nations" sometimes drop out of the competition after the group matches despite having superstars in their team. Previous papers are limited to national competitions and observable playing statistics. Thus the analysis of the performance of national football teams forms a research deficit. The paper pioneers to explain the productivity of national football teams in relation to objective team and superstar attributes.

This study is based on two major economic theories: The theory of team success (Holmström, 1982) and the theory of superstars (Rosen, 1981, Adler, 1985). Thus, we discriminate among the two theories by analyzing whether the superior individual performance of superstars (or star players) is contradicted by the higher motivation and coordination costs by forming blocs of players which does not play together in one club.

The hypotheses were analysed with facts of the last seven World Cups (1982-2006). We collected a unique dataset from over 30 national football teams and their players from five confederations in the period from 1982-2006. As variables we used the proportion of legionnaires of a national team (playing in a club in a foreign country), the bloc formation (number of players playing in the same club), the average age of the team and a lot of other control variables. The influence of superstars is measured with the superior experience of national matches (number of matches for the national

team) or the number of football players who play in very successful football clubs (in one of the TOP 25 clubs worldwide).

We used different regression techniques, like Panel regressions, Quantile regressions, as well as Tobit- and Probit regressions to test the hypotheses. The results clearly show the influence of superstars as a positive and important factor for the success of national football teams. Also team attributes (legionnaires, bloc formation and average age) significantly shape the success of football teams.

However, combining both theoretical models in one regression, the results show that team effects would significantly overlie the superstar effects. Furthermore, and surprisingly, the success of a national football team is negatively shaped by the proportion of legionnaire – players who are employed in foreign countries.

Thus, the generated equation of success, based on team and superstar attributes, is a significant tool to predict the success of national football teams and helps to support managers and coaches with the choice of football players for the next international competition.

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