## **Team Diversity and Performance in eSports**

Petr Parshakov, Marina Zavertiaeva

Computer and video games are becoming more and more popular nowadays. The development of the Internet and gaming software allows many people to be involved in this industry. Ten years ago, video games competitions were organized mostly between amateurs, but now it is becoming more and more professionalized (Tassi 2012). According to some estimates approximately 71,500,000 people watched eSports tournaments in 2013 (Warr 2014), this number is slightly larger than the population of France (66 million).

The growing popularity of competitive computer gaming (eSports) has caused an increase in the number of gamers and in the size of the prizes. Since the most popular games are team games (e.g. Counter-Strike, Dota 2) the question arise if there is an optimal team structure in terms of diversity. The effect of diversity on team performance is studied from the both theoretical and empirical perspectives. Lazear (1999) make the formal analysis of the costs and benefits of a firm from a cultural diversity among its team members. Kochan et al. (2003) summarizes the results and conclusions of previous studies of the relationships between race and gender diversity and business performance. They conclude that (national) diversity can be beneficial to a team's performance. Regarding the diversity in sport, there is a study of Brandes, Franck, and Theiler (2009). They do not find empirical evidence that national diversity among members in soccer teams significantly influences a team's performance.

eSports unique features allow us to research this well-studied issue of team diversity from the different points of view. First, there are a lot of *online* tournaments. The question is if different kinds of diversity (cultural, gender, geographic) are important for the team which is communicating online. Since the most top tournaments are offline (LAN), the other question is how the same team performs in top (offline) and low (online) tournaments and if the diversity is important for success in both types of tournaments.

To answer these questions, we use a dataset which consists of top-500 gamers prize won in e-sport tournaments for the period of 2004-2014, Geert Hofstede cultural dimensions, World values survey and Global competitiveness report indicators.

## References

- Adamus, Tanja. 2012. "Playing Computer Games as Electronic Sport: In Search of a Theoretical Framework for a New Research Field." In *Computer Games and New Media Cultures*, 477–90. Springer. http://link.springer.com/chapter/10.1007/978-94-007-2777-9\_30.
- Brandes, Leif, Egon P. Franck, and Philipp Theiler. 2009. "The Effect from National Diversity on Team production-Empirical Evidence from the Sports Industry." *Schmalenbach Business Review* 61: 225–46.
- Jonasson, Kalle, and Jesper Thiborg. 2010. "Electronic Sport and Its Impact on Future Sport." *Sport in Society* 13 (2): 287–99. doi:10.1080/17430430903522996.
- Kahn, Lawrence M. 2000. "The Sports Business as a Labor Market Laboratory." *The Journal of Economic Perspectives*, 75–94.
- Kochan, Thomas, Katerina Bezrukova, Robin Ely, Susan Jackson, Aparna Joshi, Karen Jehn, Jonathan Leonard, David Levine, and David Thomas. 2003. "The Effects of Diversity on Business Performance: Report of the Diversity Research Network." *Human Resource Management* 42 (1): 3–21. doi:10.1002/hrm.10061.
- Kuper, G. H., and Elmer Sterken. 2011. "Determinants of Participation and Success at the Earlier Modern Olympic Games." *Journal of Olympic History* 19: 20–29.
- Lazear, Edward P. 1999. "Globalisation and the Market for Team-Mates." *The Economic Journal* 109 (454): C15–C40.
- Pfau, Wade D. 2006. "Predicting the Medal Wins by Country at the 2006 Winter Olympic Games: An Econometrics Approach." *Korean Economic Review* 22 (2): 233–47.
- Tassi, Paul. 2012. "2012: The Year of eSports." Forbes.
  - http://www.forbes.com/sites/insertcoin/2012/12/20/2012-the-year-of-esports/.
- Vagenas, George, and Eleni Vlachokyriakou. 2012. "Olympic Medals and Demo-economic Factors: Novel Predictors, the Ex-host Effect, the Exact Role of Team Size, and the 'population-GDP' Model Revisited." *Sport Management Review* 15 (2): 211–17. doi:10.1016/j.smr.2011.07.001.
- Warr, Date 9 April 2014 Author Philippa. 2014. "eSports in Numbers: Five Mind-blowing Stats." April 9.
  - http://www.redbull.com/en/esports/stories/1331644628389/esports-in-numbers-five-mind-blowing-stats.