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# EREN BILEN

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#### Research Interests

Applied Microeconomics, Tournaments, Health Economics

#### Education

Ph.D. Economics, University of South Carolina

Committee: Alexander Matros (chair), Philip Brookins, Lindsey Woodworth,
Edsel Pena

M.A. Economics, University of South Carolina

C.A.S. Applied Statistics, University of South Carolina

B.A. Economics, Izmir University of Economics

May 2016

### Job Market Paper

"The Queen's Gambit: Explaining the Superstar Effect Using Evidence from Chess", with A. Matros

Abstract. "Superstars" exist in many places – in classrooms, or in workplaces, there is a small number of people who show extraordinary talent and ability. The impact they have on their peers, however, is an ongoing research topic. In competition, they might intimidate others; causing their peers to show less effort. On the other hand, superstars might encourage higher effort, as their existence in a competition encourages them to "step up" their game. In this study, we analyze the impact of a superstar on their peers using evidence from chess. The existence of a contemporary superstar (and the current World Chess Champion) Magnus Carlsen, as well as, past world champions such as Garry Kasparov, Anatoly Karpov, or Bobby Fischer enables us to identify whether the existence of a superstar in a chess tournament has a positive or an adverse effect on other chess players' performance. We identify errors committed by players using computer evaluation that we run on our sample with 35,000 games and 2.8 million moves with observations from 1962 to 2019, and estimate position complexity via an Artificial Neural Network (ANN) algorithm that learns from an independent sample with 25,000 games and 2 million moves. The results indicate that the effect depends on the intensity of the superstar. If the skill gap between the superstar and the rest of the competitors is large enough, an adverse effect exists. However, when the skill gap is small, there may be slight positive peer effects. In terms of head-to-head competition, the evidence shows that players commit more mistakes against superstars in similarly-complex games. Understanding the effect of superstars on peer performance is crucial for firms and managers considering to introduce a superstar associate for their team.

### **Publications**

1. "Online Cheating Amid COVID-19", Journal of Economic Behavior & Organization, 182, February 2021, pp. 196-211, with Alexander Matros.

News coverage on Forbes: https://www.forbes.com/sites/dereknewton/2020/09/30/research-students-may-opt-out-of-online-test-monitoring-with-big-catch/#6f8e0e9055c4

San Fransisco Chronicle: https://www.sfchronicle.com/education/article/Online-cheating-surgesduring-the-pandemic-15696066.php

# **Working Papers**

- 1. "Peer Effects and Motivation in High Level Performers", with Robert Pettis.
- 2. "When Trader Joe's Comes to Town: The Effects of Trader Joe's Store Openings on Adult Obesity".
- 3. "To Drive or Bike?: The Effects of Transportation Method Choice on Obesity".

# Work in Progress

- 1. "Optimal Size of Groups in a Group Contest: Evidence from Kaggle", with Philip Brookins and Andrew Smyth.
- 2. "Disaster Preparedness and Experience: Evidence from Sales of Emergency Supplies Before and After Hurricanes", with Tamara Sheldon and Crystal Zhan.
- 3. "Search Less for a Better Price", with Chun-Hui Miao.
- 4. "Smoking and COVID-19: A Spatial Investigation Using Nielsen Homescan Data", with SiQing Xu.
- 5. "Returns to Higher Education: Evidence from the 1997 Headscarf Ban in Turkey."

# Seminar/Conference Presentations

Southern Economic Association Meetings (scheduled), Houston TX	November 2021
American Society of Health Economists (ASHEcon) (scheduled), Washington D.C.	June 2021
Dickinson College (speaker), Carlisle PA	March 2021
Southern Illinois University Edwardsville (speaker), Edwardsville IL	February 2021
Sabanci University (speaker), Istanbul, Turkey	January 2021
University of Nebraska at Omaha (speaker), Omaha NE	January 2021
Murray State University, (speaker), Murray KY	January 2021
Southern Economic Association Meetings (speaker), New Orleans LA	November 2020
Lancaster University (speaker), Lancaster, UK	October 2020
Laboratory Innovation Science at Harvard (speaker), Boston MA	September 2020
Economics Brownbag (speaker), University of South Carolina, Columbia SC	September 2020
Contests: Theory and Evidence (speaker), Norwich, UK	June 2020
American Society of Health Economists (ASHEcon) (poster), St. Louis MI	June $2020^*$
Evidence-Based Economics Summer Meeting 2020 (speaker), Munich, Germany	June $2020^*$
Economics Brownbag (speaker), University of South Carolina, Columbia SC	February 2020
Southern Economic Association Meetings (speaker/discussant), Fort Lauderdale FL	November 2019
$\label{eq:american Society of Health Economists (ASHEcon) (discussant/poster), Washington} American Society of Health Economists (ASHEcon) (discussant/poster), Washington (discussant/poste$	D.C. June 2019

# Teaching Experience

Instructor, Department of Economics, University of South Carolina	2018-present
Introduction to Economics	Spring 2019-2021, Fall 2018-2020

Fall 2020 Evaluation:  $4.3/5.0^{\dagger}$  Spring 2020 Evaluation:  $3.9/5.0^{\dagger}$  Fall 2019 Evaluation: 4.0/5.0 Spring 2019 Evaluation: 4.3/5.0 Fall 2018 Evaluation: 4.4/5.0

Teaching Assistant, Department of Economics,	University of South Carolina 2015-present
Math Camp (Ph.D. level)	Summer 2020, Summer 2019
Negotiations (Ph.D. level)	Spring 2020
Applied Microeconomics (Masters level)	Fall 2018, Fall 2017
Applied Macroeconomics (Masters level)	Spring 2017
Game Theory	Spring 2021, Fall 2018, Spring 2017
Introductory Econometrics	Fall 2016
Labor Economics	Fall 2016
Development Economics	Fall 2017
Environmental Economics	Fall 2019
Economics of Sustainable Development	Fall 2016
International Monetary Economics	Spring 2019, Spring 2017

<sup>\*</sup>Cancelled due to COVID-19.

<sup>&</sup>lt;sup>†</sup>Course switched online due to COVID-19.

Intermediate Microeconomics

Intermediate Macroeconomics

Principles of Macroeconomics

Introduction to Economics (Honors College)

Introduction to Economics

Spring 2021, Spring 2020, Spring 2018

Spring 2018, Summer 2017, Fall 2016

Fall 2015

Fall 2019

Summer 2016, Spring 2016, Fall 2015

#### Professional Service and Activities

Maintaining websites for two seminar series: ehealthecon.org and tobaccopolicy.org

Preparing for Future Faculty, Center of Teaching Excellence, University of South Carolina

Reviewer, American Society of Health Economists (ASHEcon)

Referee, Discover USC Day, University of South Carolina, Columbia SC

International Student Ambassador, University of South Carolina, Columbia SC

Spring 2019

#### **Professional Societies and Affiliations**

American Economic Association, American Society of Health Economists, Southern Economic Association

#### Awards

Moore School Research Grant \$5,000; \$3,0002020, 2019Ph.D. Fellowship, Darla Moore School of Business2016-presentMAEC Financial Award, Darla Moore School of Business2015-2016High Honor Student Award, Izmir University of Economics2015Full Undergraduate Scholarship, Izmir University of Economics2011-2015Project Development and Entrepreneurship Award, Turkish Industry and Business Association2013

# Computer Skills

Programming: Python, C Web: HTML

Math/Stat: R, Stata, Matlab, SAS

Data-science: ML, text mining, scraping

Database: SQL Typography: LATEX

# **Personal Information**

South Carolina Chess Champion, 2019 (U1400)

Citizenship: Turkey

### References

# Alexander Matros

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# Orgul D. Ozturk

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