



Moneyball as a Resource for Teaching Economics

The Teaching Economics with Moneyball website (<https://www.moneyballsimulator.info/>) includes material we have identified, created, and collated over the years and includes updates to a simulator that can be used to teach marginal revenue product. All material posted on the site is freely available to educators and submissions are encouraged.

Dustin R. White[†] Jadrian Wooten[‡]

[†] University of Nebraska at Omaha [‡]Penn State University

1. Introduction

Michael Lewis wrote *Moneyball: The Art of Winning an Unfair Game* in 2004 about the success of the Oakland A's approach to identifying overlooked but talented baseball players. The book was popular enough to be adapted into a feature film starring Brad Pitt as Billy Beane, Oakland's innovative General Manager. The movie and its concepts have extended their popular culture reach, appearing in television episodes of *The Simpsons*, *Numb3rs*, and *Brooklyn 99*. Economic educators consider the film to be one of the best movies for teaching economics (Mateer, O'Roark, & Holder, 2016), and baseball has been used to teach topics in statistics (Wang, 2007), management (McHugh, 2009), and economics (Wooten & White, 2018). The Teaching Economics with *Moneyball* website (<http://moneyballsimulator.info>) compiles a variety of resources for faculty interested in using scenes and references from *Moneyball* in their classroom. Given the increasing focus on using classroom activities to teach (Asarta, Chambers, & Harter, 2020), we believe the site offers a variety of resources to fit various teaching preferences. We highlight some of these resources below.

2. Film Clips

We have identified nine different clips from the film that can be used to teach concepts covered in multiple economics courses. These particular scenes show the most obvious application of their linked concepts so that they can be of most use to educators looking to include media in the classroom. Concepts covered in the scenes include thinking like an economist, gains from trade, income inequality, marginal revenue product, classifying unemployment, opportunity costs, sunk costs, comparative advantage, derived demand, statistical discrimination, principal-agent problems, loss aversion, and constrained optimization. Geerling (2012) examines the pedagogical benefits of using media in the undergraduate classroom while Wooten (2020) demonstrates how to interweave discussion with media clips.

3. Lesson Plans

The website includes a variety of teaching guides that cover a wide range of topics from thinking like an economist to linear regressions. Some of the guides have been developed by the authors and have been used in their own classrooms, while others have been developed by economics educators around the world. While Mateer et al. (2016) noted *Moneyball* was a popular movie for teaching economics, there have been relatively few published resources that detail exactly how to teach with the film. Our list of resources is an effort to make teaching with *Moneyball* less burdensome for instructors. We invite educators to submit material for inclusion in this section of the website if they also use *Moneyball*, or related concepts, in their classrooms.

4. Updates to MRP Simulator

The most substantial portion of the site is dedicated to an online simulator that can be used to teach marginal revenue product. Wooten and White (2018) outline how *Moneyball* can be used as the basis of a substantial written project covering marginal revenue product. In the original paper, an end-of-project simulator was recommended to encourage students to apply the concepts learned in the project. The original simulator was an application that had to be downloaded by the instructor. The website now includes an updated web application version of the simulator that is more user-friendly, never needs to be reinstalled to remain up-to-date, and works wherever educators have access to a modern web browser. The updated web application adheres closely to the goals of *Moneyball* by including stringent salary cap requirements that, while not truly representative of professional baseball, encourage students to think within the constraints of a small-market team and emphasize evaluation of marginal

talents. The updated web application is also supported by an updated user guide to help instructors learn their way around the simulator as well as a form through which instructors can request the complete free agent list with all relevant data filled in.

References

- Asarta, C., Chambers, R., & Harter, C. (2020). Teaching Methods in Undergraduate Introductory Economics Courses: Results From a Sixth National Quinquennial Survey. *The American Economist*, 1-11.
- Geerling, W. (2012). Bringing the 'Dismal Science' to Life: Teaching Economics Through Multimedia. *International Review of Economics Education*, 11(2), 81-90.
- Mateer, G., O'Roark, B., & Holder, K. (2016). The 10 Greatest Films for Teaching Economics. *The American Economist*, 61(2), 204-216.
- McHugh, P. P. (2009). "Batter Up, Student On Deck": The Utility of Moneyball in Management Education. *Journal of Management Education*, 33(2), 219-238.
- Wang, S. C. (2007). Teaching Statistical Thinking Using the Baseball Hall of Fame. *CHANCE*, 20(1), 25-31.
- Wooten, J. (2020). Integrating Discussion and Digital Media to Increase Classroom Interaction. *International Review of Economics Education*, 33, 100174.
- Wooten, J., & White, D. R. (2018). An In-Class Experiment to Teach Marginal Revenue Product Using the Baseball Labor Market and Moneyball. *Journal of Economics Teaching*, 3(1), 115-133.