

A hand in the top right corner holds two orange rods that control a wireframe energy tower. The tower is composed of a complex network of orange lines forming a lattice structure. The background is a solid magenta color.

MODERN ENERGY MARKET MANIPULATION

ANDREW N. KLEIT

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BY

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INVESTOR IN PEOPLE

To Stuart Kleit, the best friend a son could have

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Preface

The idea for this book came to me in April 2016 when I was a visiting scholar at the Federal Energy Regulatory Commission (FERC). FERC has an enviable record in the area of restructuring electricity and natural gas markets. It also has a large number of intelligent and motivated staff dedicated to serving the public interest. Unfortunately, I gained the strong impression that FERC's mission had become so broad and complicated that it was hard for the agency to do anything other than follow previous precedent. In some ways, it appeared that the agency was largely on autopilot, despite the best intentions of all concerned. I also had the opportunity to review some manipulation cases from the inside, an experience I found fascinating.

The motivation for the book came from a large number of sources. The books by [Bork \(1976\)](#) and [Posner \(1976\)](#), using individual cases for motivation, had a large impact on antitrust policy. My own work (e.g., [Butz & Kleit, 2001](#)) comes from an interest in exploring important cases and showing what "everyone knows to be true" is not, in fact, true. This applies in particular to the analysis of the Hunt Brothers silver episode in Chapter 3.

I shaped this work based on two other important books. The very successful book edited by Kwoka and White, *The Antitrust Revolution*, now in its sixth edition, has been published for over a quarter of a century. These volumes show how to present antitrust case studies from scholars and consultants in a book format. I wish to add to this genre by writing case studies that are in one voice, where the author is in a position to critique both sides of a legal matter.

A recent work by [Taylor, Ledgerwood, Broehm, and Fox-Penner \(2015\)](#) was crucial for this book. Taylor and his colleagues lay out many important theoretical concepts in market manipulation, which I am able to build upon in the introductory chapters here.

This book starts by describing the relevant financial issues and offering a definition of "manipulation." Chapter 2 introduces the basic economics of manipulation, while Chapter 3 describes historical cases in this area. Chapter 4 presents the relatively simple *DiPlacido* matter, which was badly argued and decided. Chapter 5 examines the basic structure of restructured electricity markets, whose understanding is critical for understanding the electricity market cases examined in the book. Chapters 6 through 12 examine particular energy manipulation cases in depth, while Chapter 13 contains some conclusions.

I note that in several places the book is critical of FERC. That does not mean, however, that I hold FERC in disrespect. Indeed, my hope is that FERC responds positively to at least some of my critiques. Every government agency needs to have its actions examined closely. This is my attempt to do so with respect to energy market manipulation.

Andrew Kleit
University Park, Pennsylvania
April 2018

References

- Bork, R. (1976). *The antitrust paradox: A policy at war with itself*. New York, NY: Basic Books.
- Butz, D. A., & Kleit, A. N. (2001, April). Are vertical restraints anti- or pro-competitive? Lessons from *interstate circuit*. *Journal of Law and Economics*, 44(1), 131–160.
- Kwoka, J. E., & White, L. J. (2014). *The antitrust revolution: Economics, competition, and policy* (6th ed.). New York, NY: Oxford Press.
- Posner, R. A. (1976). *Antitrust law: An economic perspective*. Chicago, IL: University of Chicago Press.
- Taylor, G., Ledgerwood, S., Broehm, R., & Fox-Penner, P. (2015). *Market power and market manipulation in energy market: From the California crisis to the present*. Reston, VA: Public Utility Reports.