PERFORMING MARKET POWER IN U.S. ANTITRUST REGULATION

by

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Abstract

Antitrust regulation was established in the United States in response to growing public concern about the corrosive economic power of monopolies and robber barons in the late 19th century (Rowe, 1983). Underlying these concerns and those of academic commentators dating back to the birth of the modern corporation in the mid-1800s (Barkan, 2013), was the idea that corporations could hold “power” which they could abuse to society’s detriment. But what specifically is meant by this notion of power?

In contemporary antitrust regulation, this form of power is referred to as “market power” and it is conceptualized as a firm’s ability to profitably set and hold prices above those that would prevail in a competitive market. The market power model underlies regulatory decisions with widespread economic impact and it has shaped the scope and form of antitrust regulation. In this thesis I argue that rather than a simple description of an actually-existing state of affairs, the market power model is an active force transforming its environment (MacKenzie, 2006). That is, the market power model rearranges economic truths through the routine standards, procedures, and analytical tools upheld by the US Department of Justice. These performative practices are laid bare in the revisions of the Department’s *Merger Guidelines*, which reveal how the market power model structures the world that antitrust practitioners can feasibly interact with.

Preface

I am responsible for the identification and design of the research program for this thesis. In June of 2016 conducted an interview with an economist at the Economic Analysis Group of the Antitrust Division of the US Department of Justice. This interview was approved by the UBC Behavioral Research Ethics Board (Project Title: Performing Market Power: Antitrust and Economic Restructuring, UBC BREB Number: H16-00574). The work was supervised and advised by Dr. Trevor J. Barnes, Professor and Distinguished University Scholar of the UBC Department of Geogaphy.

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Chapter I

Introduction

Antitrust regulation was established in the United States in response to growing public concern about the corrosive economic power of monopolies and robber barons in the late 19th century (Rowe, 1983). Underlying these concerns and those of academic commentators dating back to the birth of the modern corporation in the mid-1800s (Barkan, 2013), was the idea that corporations could hold "power" which they could abuse to society's detriment. But what specifically is meant by this notion of power? How have antitrust scholars and practitioners conceptualized and responded to what many have called "corporate power"? In contemporary antitrust regulation, this form of power is referred to as "market power" and it is conceptualized as a firm's ability to profitably set and hold prices above those that would prevail in a competitive market. Market power is the "unifying theme" of antitrust enforcement. Its identification and measurement drives regulatory decisions with widespread economic impact (2010 HMG, 1). In this thesis I study the history and the geography of the concept of market power, how it became the driving logic of antitrust theory and practice, and how in describing corporate power it has helped shape contemporary economic organization.

Although the concept of corporate power is widely used it is too imprecise for the purpose of framing an investigation of antitrust and market power. Over the years, corporate power has meant different things to different people and the goal here is not to delve into those semantic discussions. Instead the rest of this thesis uses the term *power in the market* to refer to the many ways some have the capacity to exert their economic influence over others. The term is purposely broad; it encapsulates the many manifestations of corporate power as well as the economic power of entities that are not necessarily corporations (e.g., cartels and public enterprises). At the core of *power in the market* is the notion that certain economic characteristics associated with market based economies (such as size, wealth, ownership over the means of production, ability to lobby politicians, etc…) grant some agents power over others. However, the point is not to define neatly and analyze *power in the market* but rather to use it as a way to frame the concept of *market power*. This thesis argues that *market power* is one of many possible ways to conceptualize *power in the market* but that it is, by no means, the only way to do so.

This thesis argues that contrary to commonly narrated accounts of the development of the concept of market power the contemporary use of the term was in no way inevitable (Byrns, 1989; Shephard, 1970). That the term became ubiquitous in economics and antitrust regulation not because it more adequately described an actually-existing state of affairs but because it was deeply tied to specific historically contingent social and political trends. The historical narrative of this thesis describes how the market power model was adopted by the University Of Chicago School Of Economics, which found it amenable to the objectives of its neoliberal project to devise the legal framework for a free market society (Peck, 2012). The legal and economic scholars of the Chicago School placed the market power model at the core of an antitrust paradigm that they championed in the course of the Chicago Antitrust revolution in the late 1970s. This revolution permeated the deepest levels of antitrust theory and practice, reworking the form and scope of antitrust enforcement and recasting the truths with which antitrust practitioners could feasibly interact. In studying the history and geography of the concept of market power it becomes clear that its central role in contemporary antitrust enforcement must be understood as part of the larger neoliberal turn that swept through the United States in the 1980s.

A crucial aspect of the development of the concept of market power was how the Chicago antitrust paradigm beat out competing approaches to antitrust theory and practice. The historical narrative highlights how by the early 1980s the market power model was the only conceptualization of *power in the market* considered “reasonable” enough to serve as the basis for official regulatory decisions in the U.S. (Davies, 2010). Previous conceptualizations of *power in the market* such as those mobilized during the trust-busting era of the first half of the twentieth century (e.g., in the breakup of Standard Oil in 1911) were delegitimized, rendered false, normative, and “unreasonable.” The transition between these competing conceptualizations is shown to be embedded in social, cultural, and political landscapes that defy the ostensibly scientific objectivity of the market power model.

To illustrate how the battle over the logic of antitrust, the competition between conceptualizations of *power in the market*, manifested in the routine practices of antitrust enforcers this thesis undertakes an analysis of the US Department of Justice’s *Merger Guidelines*. The *Merger Guidelines* and their revisions, issued by US antitrust regulators since the late 1960s, describe the standards and procedures utilized by antitrust practitioners to determine when to block proposed corporate mergers. These documents are considered the preeminent protocols for the identification of and response to market power. The set of analytical tools and definitions presented in these *Guidelines* are widely utilized for educational purposes, by enforcers throughout US economic regulatory agencies, and by foreign legislators seeking to establish antitrust legislation abroad (Schmalensee, 1999).

The analysis of the *Merger Guidelines* and their revisions reveals how the standards and procedures of antitrust enforcement were recast according to the logic of the market power model. I demonstrate how in the course of the Chicago antitrust revolution a set of analytical tools, practices, and assumptions were introduced into the field of antitrust enforcement that allowed market power to be identified and calculated in actually-existing markets. Crucially, it becomes clear that the revision process to the *Merger Guidelines* was largely driven by a constant reference to the framework of the Chicago paradigm rather than some attempt to achieve a truer representation of economic realities. This finding together with the story of the development of the concept of market power undermines the commonly held perspective that market power is a "naturally" occurring economic phenomenon that was scientifically discovered by the economists at the University of Chicago (Byrns, 1989; Shephard, 1970). In other words, the history and geography of the concept of market power reveal that it reached its current paradigmatic position in antitrust economics not because it was the only or ideal way to understand *power in the market* but because it was a fundamental part of the Chicago antitrust paradigm.

In essence, this thesis argues that rather than a simple description of an actually-existing state of affairs, the market power model is an active force transforming its environment (MacKenzie, 2006). That is, the market power model is made to perform through the routine standards, procedures, and analytical tools upheld by Department of Justice antitrust enforcers. These performative practices are laid bare in the revisions of the *Merger Guidelines*, which reveal how the market power model structures the world that antitrust practitioners can feasibly interact with. This is to say that antitrust practitioners produce a in a real economy a particular version of *power in the market* that is then identified, measured, used for business planning purposes, and serve as a “reasonable” basis for regulatory decisions that have shape contemporary economic organization (Christophers, 2016; Davies, 2010). Moreover, these practices produce market power as an actually-existing economic phenomenon. In fact, economic science strives to show that market power affects the lives of millions of people reducing economic welfare and leading to the maldistribution of wealth (Byrns, 1989; Shephard, 1970). Countless empirical economic investigations have demonstrated that corporations price above their marginal cost of production, which, as described in the second chapter, would not occur in a competitive market (see for example Appelbaum, 1982; Azzam, 1997; Bhuyan and Lopez, 1997; and Nevo, 2001). The market power model determines how economists and antitrust practitioners understand actually-existing *power in the market*, specifying how they can interact with it, and subsequently structuring the form and scope of antitrust regulation.

My research draws on five main sources of information to detail the history and geography of the market power model and its performance by antitrust regulators. Using secondary historical sources and the text of several key US Supreme Court decisions I detail the history of both the market power model and of US antitrust regulation. This history illustrates how competing conceptualizations of *power in the market* struggled to assert themselves over the reason of antitrust regulation and over the economy as a whole. As I will describe, it was Chicago economists along with their antitrust paradigm and its dual fixation on market power and cost-saving efficiencies that would become dominant in the by the late 1970s. In turn, this antitrust revolution was the result of another revolution in economics produced in the department of economics at the University of Chicago. The history of this second revolution reveals the crucial role played by the concept of market power in the development of neoliberal economic theory.

The core of this thesis is a textual analysis of the US Department of Justice's *Merger Guidelines* and its five revisions. The documents are used to lay bare how the market power model was made to perform within antitrust regulation. These texts show how the market power model shaped antitrust standards and procedures and overcame competing antitrust approaches. The *Guidelines* served as the stage for a performance that positioned *market power* as the only true manifestation of *power in the market*. Moreover, because of the influence of antitrust enforcement on actually-occurring corporate transactions and on antitrust law itself, the *Guidelines* contributed to making market power real, calculable, an aspect of actual economic relations that could be effectively and specifically targeted for governmental regulation.

Finally, throughout this thesis I draw from my personal professional experience and from an interview conducted with a high ranking economist at the Economic Analysis Group (EAG) of the Antitrust Division of the Department of Justice to corroborate the historical account and the descriptions of the analytical tools routinely used by antitrust practitioners. In

2013 and 2014 I was employed as an economic research analyst at the EAG where I took part in the production of economic analyses for antitrust investigations. Much of my responsibility centered on compiling and organizing data which was used to conduct market structure analyses of markets relevant to proposed mergers. I also produced maps and other visual aids that were used to determine the geographic extent of relevant markets (these analytical tools are described in more detail in the third chapter).

The interviewed economist (cited as “EAG, 2016” in the rest of this thesis) provided details that helped guide the historical narrative presented in the second chapter of this thesis. Their personal experience with different antitrust paradigms also helped ensure a faithful description of the multiple theoretical frameworks that have characterized antitrust regulation in the 20th century. This economist has been employed at the EAG since the height of the Chicago antitrust revolution, and they have an intimate working knowledge of the routine standards and procedures employed in antitrust investigations.

This thesis contributes to literature that investigates the role of economic knowledge in establishing and maintaining contemporary political-economic structures (such as contemporary corporate forms) with the goal of challenging the tired binary between economics and politics. This binary is at play when economics is separated from politics when, for example, *power in the market* is explained in purely economic terms, devoid of any larger sociopolitical context. This literature is exemplified by Joshua Barkan’s recent work on the geography of corporate sovereignty (Barkan, 2011 and 2013). In it he argues that “corporate power [*power in the market*] and sovereign power [the power of the state] are ontologically linked" and that we must step back from the corporate sovereignty *problematic* (the way the problem of corporate sovereignty has become available for thinking) to adequately grapple with the role of corporations in contemporary economic organization (Barkan, 2013). This is explicitly what this thesis does by framing market power as one of many possible ways to conceptualize *power in the market.* Through this framing I imply that there are other ways of thinking of and responding to *power in the market*, some of which do away with the economics/politics binary. The market power model focuses on the technicalities of economic analysis and removes considerations of contemporary political context from the routine practice of antitrust enforcement. This contrasts with other conceptualizations of *power in the market* (for example those that were prominent in antitrust before the 1970s) that are concerned with both the economic and political foundations of unequal power relations in the market.

The driving theoretical framework mobilized in this thesis is the literature of market performativity, which I use to theorize how the concept of market power is able to enact (perform) change in real economic relations. This framework allows an analysis that works both with the assertion that market power is an actually-occurring element of economic markets and the evidence that the model was socially produced, that it was the result of specific historically contingent social and political trends. The market performativity literature is particularly useful for this study due to its attention to the role of economic models and formulas, such as the market power model, in economic performances. The framework explains how an economic model can gain a life of its own, how in its performance it can separate itself from what its authors had originally intended, forging new alliances to shape the world to its logic. Lastly, this literature provides a framework to theorize the competition amongst different descriptions of economic realities, such as the case of the battle over the logic of antitrust and competing conceptualizations of *power in the market*.

Finally, this thesis builds on the work of Brett Christophers, an economic geographer at Uppsala University in Sweden. In his recent work, Christophers has studied market performativity, antitrust law, and their intersection. His work demonstrates the capacity of the market performativity framework to unveil new insights concerning the roles played by academic and institutional actors in economic organization, particularly in the under-analyzed sphere of economic exchange (rather than production) (Christophers, 2014b). In his research he shows how antitrust law has played a crucial role in “mediating and managing” the contradictory forces of capitalism (Christophers, 2016). Additionally, he has shown how the routine antitrust procedure of relevant market definition (described in the third chapter), performs its descriptions of bounded economic competition through antitrust regulation shaping contemporary economic organization (Christophers , 2013 and 2014a).

The rest of this first chapter describes the market performativity framework and how it applies to antitrust regulation. The second chapter then presents the history of conceptualizations of *power in the market* and of US antitrust regulation. This chapter pays special attention to the way the market power model entered the Chicago School’s neoliberal project and how this economic school, motivated by an explicitly political intent, overthrew the existing antitrust paradigm. In the third chapter I analyze the text of the *Merger Guidelines* and its revisions focusing on how the standards and procedures of antitrust regulation were recast in accordance with the logic of the market power model. The thesis finishes with a short conclusion that provides an example of how the market power model manifests in contemporary economic geography. The goal in this conclusion is to highlight the limitations of the market power model and suggest that to grapple with contemporary forms of corporate power economic geographers must formalize new conceptualizations of *power in the market*.

What is market performativity?

The roots of market performativity lie in the work of English philosopher J.L. Austin who coined the term "performative" to refer to a specific kind of speech or statement that produces a new object in the very act of utterance (Austin, 1962). When a priest utters the words "I now pronounce you man and wife" they do not report or describe an already existing state of affairs but rather enact (perform) a new marital status, the words produce a new material reality. Austin's intention was to show that through language we not only represent the world but produce it. This concept was adopted by and developed in the social sciences and humanities, gaining widespread popularity through the conceptualization of "gender performativity" in Judith Butler's *Gender Trouble* (Butler, 1990).

Taking performativity in a different direction, Science and Technology Studies (STS) scholars used the concept to study the performative aspects of scientific claims and practices. They studied how science not only represents the world but produces it. Performativity has been especially important to one of the more well-known strains of thought in STS, Actor Network Theory (ANT). Its founders, Michel Callon and Bruno Latour, studied how science (among other things) was the product of networks of both human and non-human actors (Latour, 2005).

Drawing from his background in ANT, Callon brought together the insights of STS and performativity theory to study the science of economics in what he called “market performativity”. This field of study was first outlined in Callon’s *The Laws of the Market* (1998), which was an edited compilation of essays that investigated the process of “economization.” With this term Callon referred to the ways “through which behaviours, organizations, institutions and, more generally, objects are constituted as being ‘economic’” (Caliskan and Callon, 2010). In essence, Callon was interested in how economic theory becomes the text for performing the economy.

Market performativity theorists seek to study how economic statements not only represent the world but “contribute to the construction of the reality that [they] describe” (Callon, 2007). The scholars argue that rather than some kind of objective description of reality, economic knowledge plays a very active role in the production and maintenance of contemporary economic structures. In his book *An Engine not a Camera,* MacKenzie takes up this argument to show how the economy is performed at the stock exchanges of London, New York, and Chicago. He recounts how the traders and their computers constantly applied economic models to decide when to buy and sell shares, altering financial flows and effectively producing the abstract worlds that economic models had purported to describe. The computers were programmed to perform a neoclassical market, neoclassical market in, neoclassical market out. MacKenzie asserts that, “economics is an active force transforming its environment, not a camera passively recording it” (MacKenzie, 2006).

Since *The Laws of the Market*, market performativity has received a fair amount of well-deserved skepticism. Taken at face-value the claim that economic knowledge produces economic realities can easily be misconstrued as the idea that an economic utterance creates the economy *ex nihilo,* that “economics creates the economy from A to Z” (MacKenzie et al., 2007). Critics such as Emmanuel Didier rightfully argue that “everyday experience teaches us that no matter what we say about an object set before our eyes, even if we yell, whisper, wheedle, or give orders, that object will not change by mere dint of our utterances – that would be pure magic” (Didier, 2007). However, what Callon and other market performativity scholars truly propose is much less controversial than this characterization.

According to Callon an economic utterance, a piece of economic knowledge, and its object, that which it describes, are mutually constituted, each unintelligible without the other. In the case of the economic utterance of the market power model its object is manifestations of *power in the market.* An economic statement is meaningless if its “felicity conditions” have not been met, that is to say, if the statement does not reflect the economic reality it describes. Conversely, the economic reality is meaningless without the economic statement that puts it into action (Callon, 2007). Take for example the simple act of trading a commodity, how is it feasible without the concepts of a private property and of value? Economics does not *create* the economy *ex nihilo* but without economics the economy cannot exist. Similarly, the statement “I do” is a fundamental part of a wedding ceremony as are the witnesses, the officiant, the institution of marriage, and the expression on the individual's face when they make their vow. The statement in of itself cannot perform the wedding, nor can the wedding be concluded without the "I do." Callon acknowledges the risk of Didier's characterization of market performativity but he prefers it to the risk of the under-interpretation favored by other sociologists: "the idea that there are economic practices which exist and existed before economics put words to them" (Callon, 2007). Perhaps there where what we now take to be economic acts before there was the discipline of economics. But we cannot call them economic acts without the discipline being first invented.

Market performativity is particularly useful to this thesis because of its attention to the role of economic models, such as the market power model, in economic performances. The framework's attention to economic models is derived from a relationally constituted conceptualization of agency inherited from ANT. In a report in *Progress in Human Geography*, Bernd and Boeckler explain that for market performativity "human agency is a distributed agency that goes beyond the somatic resources of the individual; agency is the relational effect of the practice of sociotechnical networks" (Berndt and Boeckler, 2009). Market performativity seeks to shed light on how agency is not a pre-given human characteristic but rather that it is enacted through sociotechnical entities such as markets, which permit collective socioeconomic decisions. In plain language, by understanding human agency to be inseparable from and produced by its social and technical realities the framework makes it comparable with the agency of non-human actors such as economic concepts and models. The goal is not to assert that humans are powerless but rather to focus on the importance of studying the non-human elements of sociotechnical networks to better understand economic realities (Callon, 1998; Christopers, 2014b, Muniesa et al., 2007).

To explain how an economic utterance, such as an economic model, can shape the world it purports to describe, Callon introduces the term *agencement.* An *agencement* is a sociotechnical network composed of an economic utterance and that which it describes. Callon explains that for the "performation" of a specific economic *agencement* to be successful, an economic reality must be rearranged such that the economic utterance is rendered true (Callon, 2007). "The success (or failure) of an act of language becomes clear only at the end of the tests to which it is put, through the cooperation it triggers, the opposition and controversies that it generates" (MacKenzie et al., 2007). A performation takes place on the stage of sociotechnical realities and so to succeed it must align agents of various kinds, human and non-human, to its cause. Timothy Mitchell writes that economics "does not work alone. It operates together with other techniques, sets of information, arrangements, and agencies with different strengths and resources […] The performation of markets involves a mixture of technologies, calculative devices, methods of control, and trials of strength" (Mitchell, 2007). For a specific *agencement* to become true in a spatiotemporal context it must form alliances with the people, institutions, theories, models, tools, and material realities that can and are willing to arrange the world in accordance with its economic statements.

In the case of the performance of market power, this thesis argues that the economic model of market power did just that. The performation of market power involved the key institutional support of US antitrust regulators, which was achieved through the model's crucial alliance to the neoliberal tenets of the Chicago antitrust paradigm. Through the course of the Chicago antitrust revolution the model conscripted a host of economists, lawyers, judges, bureaucrats, and politicians that forwarded its logic into the core of antitrust enforcement. Moreover, in the revisions of the *Merger Guidelines*, the market power model tailored the routine practices of antitrust enforcement to make market power identifiable and calculable such that it could serve as the basis for major regulatory decisions. In so doing, the market power model reshaped the scope and form of antitrust enforcement so that it could play an important role in the neoliberal economic restructuring that swept through the United States in the 1980s.

The framework described above allows market performativity scholars to emphasize "the historical dimension" of the process of performation. Callon explains that "with the concept of performation, observable reality is considered as the temporary outcome of confrontations between different competing programs […] the economy and markets are the temporary and fluctuating result of conflicts and the constantly changeable expression of power struggles." This is to say that there is a constant struggle amongst competing *agencements* by which "each statement, each model, battles to exist" (Callon, 2007). This fits well with the historical narrative of this thesis which describes the battle over the logic of antitrust. The competition between conceptualizations of *power in the market* can be understood as the confrontations between battling *agencements.* This struggle is the confrontation of descriptions of the world trying to impose their truths in spite of each other.

This thesis argues that the standards, procedures and analytical tools of routine antitrust enforcement, which have been tailored to the logic of the market power model, structure how economists and antitrust practitioners understand and experience the world. In other words, market power exists because it has been made identifiable and calculable through the practices of antitrust enforcement, it would be unintelligible without the model. Furthermore, this thesis shows that previous antitrust *agencements* mobilized altogether different conceptualizations of *power in the market* and performed them through the standards and procedures that were relevant at the time. In essence, this thesis recounts the performation of the market power *agencement*, the means by which the market power model mobilized human and non-human actors to its cause, doing away with competing descriptions of *power in the market*, and arranging economic realities to render itself true.

Extending this reasoning, it can be implied that the manner in which we conceptualize *power in the market* structures the way we can identify and interact with power in actually-existing markets. However, this leads to a question that immediately follows the description of the process of performation presented above: what determines the outcome of a competition between *agencements*, how does one "win" over another? Is it simply a matter of which statement happens to coincide more with the world or do some *agencements* perform more strongly? Unfortunately, the topic of the underlying dynamics that drive the competition between economic *agencements* is underexplored in the market performativity literature. Responding to this lacuna, Brett Christophers insists economic utterances cannot be understood in "some sort of splendid isolation" they "must be studied and interpreted in context" and, to these ends, market performativity scholars must study the "relations of power to perform," (Christophers, 2014b and 2014c). By this he means to investigate the ways in which power flows though economic models, determining which are allowed to perform on the big stage of the global economy and which are relegated to smaller inconsequential theatres. This move is necessary to reemphasize the political context of economic performances and to situate them in larger socioeconomic trends and historical processes.

This adjustment to the market performativity framework underscores how the performation of the market power *agencement* was successful because it mobilized economic agents and institutions with considerable "power to perform." Though anyone can conceptualize *power in the market* as they see fit, they cannot enact that utterance without first enlisting the Department of Justice or a set of allies imbued with comparable "power to perform." The authority imbued in US antitrust regulators by contemporary political economic structures allows them to have considerable influence over prevailing forms of economic knowledge. By means of the practices outlined in the *Merger Guidelines*, US antitrust regulators shape the way the problem of *power in the market* becomes available for thinking to economists, antitrust practitioners, students of economics, politicians, and corporate strategists. Mobilizing this "power to perform", the market power model enacted itself in actually-existing markets, making itself identifiable, measureable, and worthy of being the basis of major regulatory decisions.

Chapter II

The Origins of Market Power

Since its inception, the discipline of economics has been interested in conceptualizing *power in the market*. Economists seeking to understand successful economic ventures or concerned about the distribution of wealth in society have regularly returned to the question of how to formalize the capacity of some to exert their economic influence over others. Adam Smith, who is often hailed as the father of economics, theorized that individuals acting in their own self-interests unintentionally produced societally optimal outcomes. Yet, in an often quoted excerpt of *The Wealth of Nations,* Adam Smith wrote that when “people of the same trade” meet together “the conversation ends in a conspiracy against the public, or in some contrivance to raise prices” (Smith, 1776). This warning speaks to Smith’s concern about the capacity of powerful economic actors, also acting in their own self-interest, to hinder the realization of what he theorized to be the ideal competitive market system. This concern is apparent in the work of a number of classic economic thinkers who took up both the case of corporate collusion, as referenced by Smith, and of the monopoly to formalize how and why individuals and firms exercise power in the market.

Antoine Cournot developed the first mathematical formalization of monopoly in his 1838 *Researches into the Mathematical Principles of the Theory of Wealth* (Cournot, 1838). Cournot showed how monopolies, that have exclusive control over the supply of a particular commodity, would derive their optimum price. By doing so they could increase their profits and transfer costs of production to consumers. These ideas would be taken up and expanded on by Alfred Marshall in his influential *Principles of Economics* (Marshall, 1920), first published in 1890. Among other concepts, Marshall was interested in how the size of a firm might allow it to produce at a more efficient scale allowing it to sell its products at a lower price than its smaller competitors. He would also pioneer the analysis of *consumers' surplus*, the difference between the total amount consumers are willing to pay for a product and the total amount that they actually do pay, an indicator of the welfare gained from market transactions and a concept that, as described below, would play an important role in the analysis of power in the market.

Smith, Cournot, Marshall, and others first developed the economic concept of the competitive market and positioned it as the ideal mode of economic organization. They argued that only the free flow of the forces of supply and demand through market based competition could ensure an efficient distribution of resources and commodities. This ideal competitive system functions through a market in which there are large numbers of potential buyers and sellers that exchange a homogenous good and have no significant power over each other or over the entry or exit of market participants. The outcome of this market, driven by the interplay of supply and demand (what Adam Smith called the invisible hand), theoretically produces an optimally efficient outcome benefiting all market participants and thus, society as a whole.

The notion of the competitive market is one of the most fundamental concepts of economic science and a driving factor in antitrust analysis. Therefore it is useful to quickly, and hopefully not too painfully, revisit some of the core elements of the model. In perfect competition all participants are price takers, meaning that they are so small relative to the market that they are inconsequential to the derivation of market prices. A profit maximizing producer is forced by market conditions to produce to where their marginal cost of production is equal to that given market price. In other words, a profit maximizing firm will produce each unit of product for which the cost of production is not greater than the revenue received from its sale (this revenue will equal the sale price). In the long run, this system implies that there will be zero economic profits, revenues will not exceed costs of production (including management and risk costs), since above normal profits would attract new market participants, increasing the supply and bringing economic profits back down to zero.

As important as the theoretical construct of the competitive market is to economics it is important to note that it is a simplification of reality and not a reflection of actually-existing economic dynamics. That said, most economists would argue that the model of the competitive market holds important explanatory power. They would argue that the model encapsulates some of the most fundamental elements of economic structures and processes. In their work, economists demonstrate that supply and demand are "real", that they do work and that they impact the lives of people everywhere. In this spirit, many economists have dedicated themselves to theorizing actually-existing market conditions and how they deviate from the ideal competitive market described above.

Writing independently of each other, Edward Chamberlain and Joan Robinson studied the space between a perfectly competitive market and an absolute monopoly, what they respectively called monopolistic and imperfect competition (Byrns, 1989). These authors represented a growing number of economists that, in the years following the great depression, argued that the end of competitive capitalism was nigh (Shepherd, 1970). They saw the inevitable growth of the giant corporation and the widespread relevance of the analysis of *power in the market*. They observed that in actually-existing markets firms differed in size and influence, barriers to entry were significant, and some actors were able to capture economic profits. In these monopolistic/imperfect markets firms hold a certain degree of power and with it they are able to set their prices and compete in ways that do not fit the standard formulation of the perfectly competitive market. Chamberlain and Robinson conceptualized *power in the market* as a deviation from perfect competition and in doing so they were some of the first economist to formalize what today is called *market power.*

Market power is a firm's ability to profitably set and hold prices above those that would prevail in the competitive market. It is a standard component of microeconomics textbooks used in universities and schools across the world and a fundamental element of antitrust theory and practice. For the purposes of this thesis, it is also important to distinguish market power from *power in the market,* which I use as a catchall to signify the many ways some have the capacity to exert their economic influence over others. A firm that has market power can set its prices above its costs of production and in so doing gain economic profits. For this to be possible the firm must net more revenues from its increase in price than the losses it experiences as a result of the associated reduction in quantity demanded (all else equal, an increase in price of a product always results in a reduction in quantity demanded unless demand is perfectly inelastic).

Market power is worrisome to economists because it creates economic inefficiencies that are derived from the maldistribution of wealth among producers and consumers. Neoclassical economic theory explains that by setting prices above marginal cost of production firms in monopolistic competition are able to siphon off consumer surplus increasing their own welfare and reducing the overall efficiency of the market. Figure 1 depicts how this happens in the case of an absolute monopoly, which is when one firm controls all the sales made in a market.

In Figure 1 P is price, Q is quantity, D is demand, S is supply, MC is marginal cost, MR is marginal revenue, and the lettered areas represent the surplus or welfare attributed to the market's total transactions. In the competitive market supply equals demand, the prevailing price is P_{PC}, and the total welfare is divided into consumer surplus (areas D,C', and A) and producer surplus (C and B). In the case of a monopoly the price is increased to P_M, the quantity sold is Q_M, and the total welfare is redistributed into a new consumer surplus (area D) and producer surplus (C and C'). If area C' is larger than B, which is determined by the slope of the demand line (that is, the price elasticity of demand), then the price increase is profitable and the monopolist siphons off surplus from the consumers. The consequence of the price increase is that areas A and B are left out of the total welfare produced by the market. These are called deadweight loss and they represent the inefficiency created by the deviation from the competitive market. In other words, as the monopolist increases its price to capture economic profits it reduces the total welfare produced by the sum of transactions in the market. The monopolist is benefited but the economy as a whole is worse off.

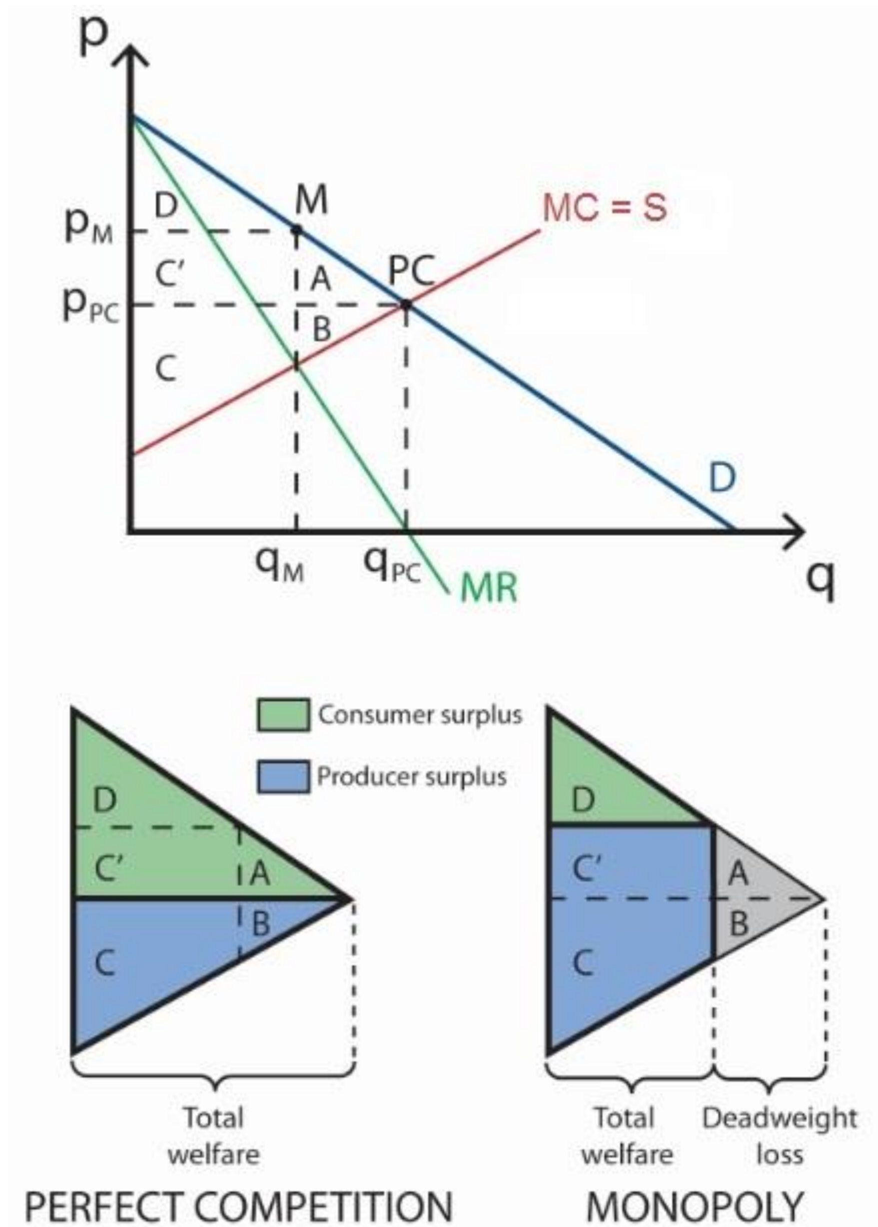

Figure 1.The mechanics of market power.

In the case of imperfect competition, powerful firms try to replicate the effect of the hypothetical monopolist described above by attempting to reduce the pressure they face from their competitors and from potential market entrants. Economics describes a wide variety of strategies available to these firms to undermine their competition and to expand their power into other product markets. For example, powerful firms can establish barriers to entry into a market, such as through predatory pricing strategies that allow them to ward off competition and continue to enjoy economic profits. Firms may also resort to vertical integration strategies to acquire their suppliers and leverage their position to increase production costs for their competitors and reduce production costs for themselves. Economists who studied monopolistic markets conceptualize market power as a durable force that expands and undermines competition if not restrained externally, such as by government intervention. They explain that by keeping competitors at bay, powerful corporations grow stronger, further stifling any future competition.

The work of Chamberlain and Robinson helped establish Industrial Organization (IO) as a field within the discipline of economics. IO examines actually-existing markets by complicating the neoclassical model of perfect competition. It has historically been driven by questions of public policy and regulation. Abba Lerner, who made important advances in the field of IO, was the first to attempt to measure market power. Following the theoretical framework discussed above, Learner noted that the clearest evidence for market power was the case of a firm selling its goods at a price above its marginal cost of production. With this insight, he developed a simple index that showed the proportion of the sale price that deviated from its marginal cost (Lerner, 1934). Though elegant, the Lerner index would require extensive data on a firm's costs of production, data that very few firms at the time would be able (or willing) to reproduce.

Unable to feasibly measure marginal costs of production, antitrust economists resorted to analyzing market structure to determine the potential for market power. Market structure refers to the characteristics of a market such as the methods of production, the mode of distribution, the number of participating firms, their market shares, and other factors that determine the form and force of inter-firm competition. Much of the subsequent discussion in IO economics has revolved around the relationship between market structure and the existence of market power or lack thereof (Shepherd, 1970). Particular attention has been paid to large firms, based on their proportion of total sales in the market, and the concentration of sales in the hands of a relatively small number of competitors. Market concentration ratios based on numerical market shares of participating firms became a common proxy for market dominance (Byrns, 1989; EAG, 2016; Shepherd, 1970). However, the calculation of these ratios requires not only extensive market data but also a clearly defined market, which is *itself* an ephemeral phenomenon open to contestation and interpretation (Christophers, 2013 and 2014).

In summary, theories of monopolistic competition, which sought to understand deviations from perfect competition, gave rise to a formalization of *power in the market* that centered on a firm's capacity to profitably set and hold prices above their competitive levels. A firm with market power is able to produce economic profits by charging prices above their marginal cost of production and reducing the threat of existing or potential competitors. In Chamberlain and Robinson's conceptualization, market power is strong, abiding, pervasive, and it is slowly but surely eroding the competitive system and supplanting it with a system of massive monopolies. However, these latter aspects of the conceptualization of market power were up for debate and they would be taken up and discussed by antitrust regulators in Washington DC as well as by a small group of economists at the University of Chicago. The conceptualization of market power, monopoly, and how to respond to its effects would play a major role in the development of the discipline of economics.

The Origins of Antitrust Regulation

In the same year that Alfred Marshall's *Principles of Economics* was published, signaling the birth of the modern discipline of economics, Senator John Sherman championed what would be known as the Sherman Act of 1890. The act was partially motivated by the insights of classical economists but it was fundamentally a response to growing public concern about the economic hegemony of trusts and robber barons which the legislators characterized as "menace to republican institutions themselves." The goal was to establish an "ageless charter" that would allow the Federal Government to regulate industry by prohibiting collusion and monopolization and defending market-based competition (Rowe, 1983). In 1914 the antitrust charter would be reinforced with the Clayton Act, focusing on anticompetitive behavior, and the Federal Trade Commission act, which established the first of the antitrust institutions (the FTC). These three acts make up the bedrock of antitrust regulation and are the guiding principles of the US Department of Justice's Antitrust Division, which was established in 1933.

The wording of the antitrust statutes demonstrates the legislators' stance on the value of unrestrained commerce. Section 1 of the Sherman Act prohibits "every contract, combination in the form of trust or otherwise, or conspiracy, in restraint of trade or commerce among the several States" (15 USC § 1). Section 2 punishes "every person who shall monopolize, or attempt to monopolize, or combine or conspire with any other person or persons, to monopolize any part of the trade or commerce among the several States" (15 USC § 2). Section 7 of the Clayton Act of 1914 directly targeted mergers and acquisitions by declaring that "no corporation engaged in commerce shall acquire, directly or indirectly, the whole or any part of the stock or other share capital of another corporation engaged also in commerce, where the effect of such acquisition may be to substantially lessen competition […] or to restrain such commerce in any section [of the country] or community, or tend to create a monopoly of any line of commerce" (38 Stat. 730).

Noticeably absent from these passages and from the rest of the antitrust statutes is any mention of market power, of the competitive market model, or of any other economic ideas and concepts described in the section above. The statutes do not state the degree to which the value created in markets must be distributed among competitors, the largest allowable size of any one firm, or any other specific enforcement standard. Commentators have long noted that the Sherman act was written with the goal of creating a regulatory charter that would weather the decades, by using broad terms like "restraint of trade" and "monopolization" the act avoided specifications that might become outdated in the course of time (Rowe, 1983). For this reason, the scope and form of antitrust enforcement has been a matter of controversy since its inception. Herein lies the importance of the struggle to gain dominance over the logic of antitrust. The standards enforced by the antitrust institutions are the product of administrative and legal decisions taken by the antitrust enforcers themselves and vindicated (or not) by the courts of law. Therefore, the logic that controls these decisions controls antitrust enforcement and the influence it has over domestic economic activity.

An illuminating episode in the early history of antitrust regulation is the landmark *Standard Oil Co. v U.S.* case of 1911. In this case the Supreme Court of the United States found Standard Oil Co. of New Jersey guilty of monopolizing the petroleum industry and ordered it to be broken up into 34 separate companies. At the time, the Standard Oil petroleum trust controlled about 90 % of the oil refining industry in the US and it was vertically integrated into crude oil exploration and distribution as well as retail of refined oil products. The decision states that the trust, which was a type of corporate combination similar to today's holding companies, leveraged its size and its control of pipelines to engage in predatory pricing strategies, to gain preferential rates from railroad companies, and to threaten suppliers and distributors who did business with their competitors. By means of these advantages "competitors were forced either to become members of the combination [trust] or were driven out of business." The Standard Oil trust then divided the national petroleum market "into districts and the trade in each district in oil was turned over to a designated corporation within the combination, and all others were excluded" (*Standard Oil Co. v U.S.*, 1911).

The high-profile case lasted several years and at the core of its arguments lay a struggle over the internal logic of antitrust regulation. The crux of the dispute was the interpretation of Section 1 of the Sherman Act, which prohibits "every contract" that leads to a "restraint of trade" (15 USC § 1). Standard Oil's lawyers argued that such a statement was illogical since every business contract by guaranteeing a transaction between two parties and setting out terms and conditions necessarily excludes other parties, holds terms such as price fixed, and leads to a restraint of trade. The attorneys argued that the act was in direct opposition to the rights guaranteed by the US Constitution. This claim led the author of the decision, Chief Justice

Edward White, to a long reflection on the intention of the Sherman Act and the tradition of English Common Law that it was based on. Building on an opinion written by Judge William Taft (later President and Chief Justice) White ruled against Standard Oil and established the *rule of reason*, which would become a core legal doctrine of antitrust enforcement (Fox, 1987; Hovenkamp, 1985; *Standard Oil Co. v U.S.*, 1911).

The *rule of reason* essentially established that the Sherman Act meant to prohibit contracts that lead to *unreasonable* restraints of trade. The legal doctrine interpreted that contracts should be deemed unlawful if they could reasonably be shown to produce "undue" restraints of trade and competition. In the case of *Standard Oil* the reason appealed to was the established English Common Law and its formulation of monopolies and their effects. A few years later the Supreme Court further explained that the *rule of reason* implores courts to "consider the facts peculiar to the business to which the restraint [of trade] is applied; […] the nature of the restraint and its effect, actual or probable. The history of the restraint, the evil believed to exist, the reason for adopting the particular remedy, the purpose or end sought to be attained, are all relevant facts" (*Chicago Bd. of Trade v. U.S,.* 1918). Significantly, the *rule of reason* appealed to *legal* reason. It called for trained attorneys to establish the facts of a particular case and what was entailed by "undue" restraints. Subsequently, for the first 50 years or so of its existence the scope and form of antitrust enforcement was beholden to the logic of *legal* reason (Rowe, 1983).

In the terms of the market performativity framework detailed in the previous chapter, the *rule of reason* was a key performative practice of the antitrust *agencement* that preceded the rise of the market power model. By instituting the appeal to legal reason, Justice White empowered attorneys to perform their conceptualization of *power in the market*. This conceptualization was rooted in English Common Law and in the populist distrust of monopolies and robber barons that dated back to the 19th century (Barkan, 2013; Rowe, 1983). Importantly, a "reasonable" finding of "undue" restraints of trade had no direct relation to a firm's ability to price above their marginal cost of production, the level of market concentration, the value of a firm's market shares, or any other economic concepts or models (many of which were developed and popularized long before they were accepted as rigorous ways to identify *power in the market*).

Formal economic though did not significantly impact the paradigmatic legal reason of antitrust until at least the mid 1940s. In the 1945 case *Aluminum Company of America (Alcoa) vs. United States* the US Court of Appeals for the Second Circuit ruled in favor of US government finding Alcoa guilty of monopolizing the aluminum industry. Alcoa was condemned for dominating the market but what was significant was that the decision was based on numerically measureable market shares as evidence of market power (Rowe, 1983). The influence of theories of monopolistic/imperfect competition on *Alcoa* can be regarded as the beginning of the confluence of law and economics. Nevertheless, the reasoning behind the decision was still rooted the antitrust *agencement* of legal reason that was characteristic to early antitrust enforcement. The decision was based on the perception that the purpose of antitrust was to defend small businesses in the face large corporations, a perception that placed value on small businesses in a manner inconsistent with the tenets of classical economic theory (more on this below).

Donald Turner's Guidelines

Economics may have entered the field of antitrust enforcement in the mid-1940s but it was not until two decades later that it would become a significant part of the routine labor of the antitrust institutions. The publication of the 1968 *Merger Guidelines*, written under the direction of Assistant Attorney General Donald F. Turner, made evident the growing importance of economic analysis to everyday antitrust practice and foreshadowed the impending Chicago antitrust revolution. The *Guidelines* described the economic standards and procedures utilized by antitrust enforcers to evaluate corporate behavior and determine the need for regulatory action. The context of Turner's appointment as well as the procedures and practices outlined in the *Merger Guidelines* demonstrate how changes in antitrust theory and practice were embedded in contemporary sociopolitical landscapes.

Donald F. Turner, the first economist to direct the Antitrust Division, was appointed by President Lyndon B. Johnson in 1965 (Williamson, 2002). His appointment and the changes he would bring to the Antitrust Division were deeply embedded in what was the turbulent political era of the 1960s. Johnson, who took office on the day of the assassination of John F. Kennedy, November 22, 1963, presided over the escalation of the Vietnam War and the intensification of the Civil Rights Movement. To these difficulties he added the ambitions of his "Great Society" electoral platform, a set of social and economic policies meant to "expand programs focused on education, urban renewal, the environment, poverty, health care, and much more" (Lerner, 2011).

Lyndon B. Johnson faced the challenges of his presidential term by relying heavily on his close relationships with the US business community. Johnson was known to be much more sympathetic to these business interests than his predecessor or the dominant sectors of the Democratic Party. One manifestation of this inclination was his choice of the politically savvy Nicholas Katzenbach to replace Attorney General Robert F. Kennedy at the head of the Department of Justice. Unlike Kennedy, who was concerned about concentrations of economic power, Katzenbach was apathetic towards antitrust enforcement and he often refused to file cases recommended by the Antitrust Division (Williamson, 1991). Together, Johnson and Katzenbach saw the appointment of the new Assistant Attorney General of the Antitrust Division as a way to appease the growing concerns of the US business community at a time when the Supreme Court was at the height of its antitrust powers, when there was a record amount of antitrust cases being decided in favor of the regulatory institutions (Christophers, 2016; Williamson, 1991).

Donald Turner was a well-known antitrust scholar who preached the virtues of economics as way to modernize antitrust practice. His academic writing had become popular for speaking out against what economists often referred to as “activist antitrust” (Williamson, 2002). He, and other economists like him, felt that antitrust was often enforced for what they deemed to be irrational political ends. They claimed that cases were often litigated not because they had strong economic rationales but because they could easily be won in court. In his first major public address Turner declared that “It is the duty of the Department of Justice, not to bring a case simply on the basis that it thinks it <u>can</u> win, but to bring only those cases that it thinks it <u>should</u> win. It is our duty to assist the courts in creating a rational body of antitrust law" (Williamson, 1991).With these words, Turner affirmed his conviction that a "rational" standard of antitrust procedures, based on a cohesive economic doctrine, could establish a set of court precedents that would mold antitrust law into an effective institution rooted in and reproducing the expected results of economic theory.

The statement quoted above is quite illuminating in the context of this thesis. In it Turner advocated for a paradigm shift in the field of antitrust, a Kuhnian revolution of sorts, which would establish economic reason as the guiding logic of antitrust regulation. What he deemed irrational political ends were in fact the convictions of the antitrust *agencement* of legal reason. "Activist antitrust" referred to the enforcement standards that sought to mobilize antitrust so as to protect small business and punish big corporations (Williamson, 2002). Enforcement standards that to many antitrust practitioners were the only logical reason for the existence of antitrust in the first place. Here the struggle over the logic of antitrust is clear, Turner sought to delegitimize the rationale of the previous antitrust *agencement* and institute a reasoning based on economic logic.

Judge Learned Hand, who authored the *Alcoa* decision, wrote that the purpose of the antitrust statutes was to "perpetuate and preserve […] an organization of industry in small units which can effectively compete with each other" (*U.S. v. Alcoa,* 1945). This statement is incompatible with economic reason, which values *competition* over *competitors* arguing that competition often leads businesses to fail and to protect them would be a waste of resources. This subtle difference, between protecting small businesses rather than protecting the process of competition itself, became a major point of contention amongst legal and economic scholars.

Turner's statements advocated for a change in what was meant by reason in the *rule of reason*, a shift from a reason based on English Common Law to one based on the tenets of economic theory.

Furthermore, in pointing out that the intellectual framework mobilized by antitrust regulators could shape antitrust law, Turner's statements reveal the importance of the battle over the logic of antitrust. The logic mobilized by antitrust practitioners shapes the outcomes of judicial decisions through practices such as the *rule of reason*. These practices formalize conceptualizations of *power in the market* so that they may serve as the basis for official court procedures. The outcomes of these judicial decisions shape the antitrust case law, establishing court precedent that can be mobilized in future regulatory enforcement. In turn, the scope and form of antitrust regulation, based on established antitrust law, significantly shapes prevailing forms of corporate organization (Christophers, 2016). All this is to point out that the guiding logic mobilized by antitrust practitioners has important and lasting effects on antitrust law and subsequently on actually-existing forms of economic organization.

Donald Turner's economics acumen was well recognized in the field of antitrust. Together with Carl Kaysen, Turner wrote a book called *Antitrust Policy* in 1959 that was on the forefront of the structure-conduct-performance (SCP) approach to IO economics (Kaysen and Turner, 1959). This approach, first formulated by Joe S Bain, drew on the work of Edward Chamberlain and Joan Robinson to argue that market structure and firm conduct directly impact an industry's economic performance (i.e. how well that industry produced and distributed wealth) (Audretsch and Siegfried, 1995; EAG, 2016; Weiss, 1979). SCP economists, such as Turner, tested this relationship through empirical analyses generally finding implications for antitrust and regulation (EAG, 2016). For example, a concentrated market structure could lead to collusive firm conduct which would result in poor economic performance, manifesting in the shape of high prices and poor distribution of produced welfare. Turner was one of the first antitrust scholars to argue that antitrust enforcement should focus specifically on the "limitation of market power" (Kaysen and Turner, 1959). At the time, this perspective was not widely accepted, and it would not be taken up in the 1968 *Merger Guidelines*. Nonetheless, this statement is of crucial importance to this thesis as it demonstrates that the market power *agencement* was at work during the Turner era, long before it would become a core component of the dominant antitrust paradigm that would be established by means of the Chicago antitrust revolution.

Turner's perspectives on antitrust enforcement would have been particularly agreeable to business interests because it contrasted significantly with his predecessors, Lee Loevinger and William Orrick (both Kennedy appointees). In addition to diverging on the topic of the Antitrust Division's enforcement strategy, Turner disagreed with the Division's stance on regulating conglomerate mergers (Turner, 1965; Williamson, 1991; Williamson 2002). The regulation of conglomerate mergers, the merger of firms that operate in different industries, was a contentious topic at the time. The Celler-Kefauver Act of 1950 closed important loopholes in previous antitrust statutes, firmly regulating horizontal and vertical mergers, but made no attempt to prevent conglomerate mergers. In fact, the prevalence of conglomerate mergers had grown from less than 40% of all mergers of firms with a value larger than 10 million US dollars in the late 1940s, to almost 80% by the mid 1960s (FTC report). Conglomerate mergers, which I discuss in the analysis of the *Merger Guidelines*, were thought to increase overall economic concentration (by reducing the number of firms in the national economy) but not necessarily impact the structure of the specific industries in which the merging firms operated (Turner, 1965). Therefore, the regulation of these mergers fit awkwardly into the established legal precedent, and the basis of significant controversy (EAG, 2016; Turner, 1965; Williamson 1991).

Facing the issue of the growing prevalence of conglomerate mergers, Assistant Attorney Generals Loevinger and Orrick lobbied heavily for their regulation. Appearing before the Senate Subcommittee on Antitrust and Monopoly on April 21, 1965, Orrick argued that:

> "Section 7 [of the Clayton Act] defines the mergers it prohibits by reference to anticompetitive effects in any section of the country in any line of commerce. But this should not obscure the fact that some mergers — those referred to as conglomerate — which may have only a slight anticompetitive effect in a specific line of business or geographical location may diminish nationwide competition […] Can we say that such concentration of national economic power is not what Congress intended to prevent?" (Williamson, 1991).

In his wording a "line of commerce" was a specific, delimited market. In essence, Orrick was asking the legislators to envision a broader conceptualization of *power in the market* one that stretched beyond the confines of a specific market and operated at a national level. Orrick wanted the legislators to reformulate the scale on which the antitrust statutes could wrestle with *power in the market*. This sentiment, which grew dominant under the mandate of the

Kennedy brothers, became increasingly worrisome to business interests (Williamson, 1991). However, no precedent setting case on conglomerate mergers was brought forth to the Supreme Court during this time and faced with the obstructive Katzenbach, Orrick resigned from his position in June of 1965. The potential for a new conceptualization of *power in the market* was nipped in the bud and with the appointment of Donald Turner came a wholly different approach to antitrust enforcement.

In direct contrast with Orrick, Turner wrote, "I do not believe Congress has given the courts and the FTC a mandate to campaign against "superconcentration" [a term for economic concentration above the market level]" (Turner, 1965). True to the logic of the market power model, Turner held firmly to a market level analysis of the consequences of conglomerate mergers. He argued that "Conglomerate acquisitions may lead to increased market power in one or another of the conglomerate firm's product lines, and may raise entry barriers; but a firm's ability to bring about these effects can rarely if ever be so obvious or so certain as in some cases of vertical [or horizontal] merger" (Turner, 1965). In effect, he dismissed the need to think of power in the market beyond the scope of a specific delimited market. As the analysis of the 1968 *Merger Guidelines* demonstrates, Turner would encourage antitrust procedures that focused on defining a merger's specific relevant markets. The *Guidelines* acknowledge the concern over conglomerate mergers, putting forward a few circumstances in which they may be regulated, but they do not strive formalize how these mergers impact a firm's *power in the market*.

Donald Turner's tenure as Assistant Attorney General was a watershed moment in the history of antitrust because he made the first steps towards putting economic reason at the center of the logic of antitrust regulation. At the time, the economics section of the division functioned solely as litigation support, helping lawyers craft economic arguments but playing no part in choosing what cases to litigate or in what manner to argue them. Turner not only made steps towards making the economics section a more important part of the division, he sought to institutionalize economic thinking as a core part of antitrust practice. In the course of his tenure, Turner made hiring decisions that strengthened his staff's familiarity with economic theory. He created the position of Special Economic Assistant, which reported directly to him. Additionally, the written record of the Division's staff meetings, of Turner's meetings with external counsel, of his congressional testimonies, and of his public speeches demonstrate the increasing prevalence of economic thinking in the division's routine operations (Williamson, 2002). This economic thinking culminated in the issuing of the 1968 *Merger Guidelines*.

Originally sketched out by Kaysen and Turner in their 1959 book, *Antitrust Policy*, the guidelines were meant to "acquaint the business community, the legal profession, and other interested groups and individuals with the standards […] applied by the Department of Justice in determining whether to challenge corporate acquisitions and mergers under Section 7 of the Clayton Act" (DOJ, 1968). Though the *Guidelines* refer specifically to the analysis of mergers, they formulated a set of conceptualizations, standards, and procedures that served as a framework to analyze all types of anticompetitive corporate behavior. Ultimately, the goal was to reduce uncertainty over the division's enforcement procedures by making them predictable, calculable, and readily transparent (Shapiro, 2010; Williamson, 2002).

Oliver Williamson, Nobel Laureate and former Special Economic Assistant to the Head of the Antitrust Division, recounts how when the first drafts of the 1968 *Guidelines* were circulated in the division in 1967 they were met with cautious and even hostile reactions. Many in the division felt that uncertainty in enforcement was an advantage in the government's favor and that the *Guidelines* "would serve to introduce a floor, below which the burden of bringing a case would have to be borne by the Division. The previous practice of progressively ratcheting down admissible market shares would be brought to a halt" (Williamson, 2002). In essence, "activist" antitrust practitioners argued that uncertainty over enforcement standards served as a deterrent to mergers and corporate collusion and that by setting out procedure guidelines Turner would curtail the government's capacity to impose increasingly stringent antitrust standards.

In the text of the 1968 *Guidelines* it is clear that Turner and his associates rejected the deterrent argument, and set out to issue clear and uncomplicated benchmarks on which corporations could rely in making operational decisions. In fact, the 1968 *Guidelines* are by far the most clear cut guidelines, contrasting with their increasingly complicated revisions. The *Guidelines* reflect the SCP school's concern for structural concentration as a direct path to market power. They also are clearly a product of their economic context. They are not concerned with the dynamics of new economy goods and services, and at a time when differentiated products and advertising were not norms.

The Antitrust Revolution in Chicago

The Chicago School of economics, infamous for developing and promoting radically pro-market neoliberal economic policy, led the Chicago antitrust revolution in the late 1970s. However, before it could recast the foundations of antitrust the Chicago School had to experience a revolutionary process of its own. The story of this revolution, the coming of the second generation of Chicago school economists, reveals how the concepts of market power and monopoly were major intellectual cruxes to the development of neoliberal thought. The story of the antitrust revolution *in Chicago* is crucial to understanding the Chicago antitrust revolution in Washington DC.

The Chicago School's interest in antitrust economics poses an interesting conundrum. Why did a group of economists so well known for their defense of the free market involve themselves with the explicitly interventionist antitrust economics? In his book, *Constructions of Neoliberal Reason,* Jamie Peck explains that neoliberalism "is not the antithesis of regulation, it is a self-contradictory form of regulation-in-denial" (Peck, 2012). Peck describes how the goal of neoliberal intellectuals, including the economists of the Chicago School, was to formulate the legal framework for a market economy. Neoliberals formulated their ideas as a response to the perceived *failure* of the pure *laissez-faire* policies of the 19th century, not as a return to them. As market fundamentalist as it may be, neoliberalism is inseparable from the state; it seeks to capture the state so as to institute the free market system. Thus, it is not surprising to see it involved with antitrust enforcement, which fits into the awkward space between the state and the economy that was in so many ways the driving intellectual problematic of neoliberal theory.

Peck's insights help frame the history of an ideological shift that occurred in the halls of the University of Chicago's economics department in the 1950s and gave rise to the contemporary antitrust paradigm (Van Horn, 2010). This shift pitted early Chicago neoliberals like Jacob Viner, Frank Knight, and Henry Simmons against the economists who would become the face of the department in the second half of the twentieth century. Milton Friedman, George Stigler, and Aaron Director (at the Law and Economics program) would depart from their more classic liberal mentors over both the capacity of economic competition to self-regulate and the framing of monopolies and patents (Van Horn and Klaes, 2009). These departures would constitute a distinctive neoliberal ideology that would become the signature of the Chicago School and would later be heavily influential in the economic policies of the U.S. during the 1980s.

According to Robert Van Horn's historical study of the Chicago School, the political left had framed the public narrative about the state of the economy and the role of monopolies in the first half of the twentieth century (Van Horn, 2009). It was publically accepted that monopolies were powerful political and economic actors that were detrimental to society. Patents granted monopolies and thus were equally distrusted. For their part, the first generation of economists at the University of Chicago agreed with these conceptions. In their view, monopolies and patents were explicit obstacles to the realization of the ideal free market system. The first generation of Chicago School economists blamed much of society's woes on market power. They believed that monopolies undermined competition, and they could not be overcome except by a *positive* program to institute a free market system (Simmons, 1934; Van Horn, 2009).

Henry Simons, for example, was a strong proponent of sweeping corporate reform. Arguing that needed was an unequivocal dismantling of all corporate power, Simons called for the “explicit and unqualified repudiation of the so-called rule of reason,” and prosecution of “restraint of trade” as “a major crime” (Rowe, 1983; Simmons, 1934). In his view, the rule of reason enabled corporations by admitting that some forms of restraint of trade were “reasonable.” In his view, the Federal Trade Commission should have been “perhaps the most powerful of our governmental agencies” (Simons, 1934). This perspective was generally shared by Viner, Knight, and as late as 1947 by Director too (Van Horn, 2009).

In 1946, with the encouragement and support of Frederick von Hayek, Aaron Director initiated the Free Market Study as part of the Law and Economics program at the University of Chicago. This research group, which included Friedman among other scholars, was an explicit effort to work towards theorizing a legal structure for the free market system. Over the course of six years the group published prolifically, especially on the topics of monopoly, market power, and the role of state regulation (Van Horn, 2009). Once the study was completed, Hayek would help secure funds for another research initiative, which Director would call the Antitrust Project (1953-1957). Over the course of these two research projects the economic approach of the second generation of the Chicago School was established, and with it came a new conceptualization of the role of market power in antitrust theory and practice.

Van Horn describes how in a mid-November 1946 meeting Director and his colleagues “tackled the issue of industrial concentration” (Van Horn, 2009). The economists discussed the dominant perception that market concentration and powerful corporations were the largest obstacle to the realization of the ideal competitive market system. Director offered an alternative approach: “Of course we could start from the position that existing concentration has already reached a point which makes it objectional from a political point of view, or again we may start from the position that the existing concentration results in the most efficient use of resources and does not eventuate in significant departures from competitive behavior” (Van Horn, 2009). With this statement Director proposed the possibility of a complete reframing of the understanding of actually-existing industrial organization. Instead of conceptualizing existing levels of concentration as a deviation from the competitive market, he posited that they were the result of competitive forces. Large corporations and concentrated markets developed because they were the most cost effective way to satisfy consumers’ demand. Corporations had the production scale to undercut smaller competitors and thus benefit consumers with lower prices and larger production quantities. Here it is clear how the second generation of Chicago economists saw a way to reposition themselves on a fundamental point. This insight was developed in the course of the Free Market Study and the Antitrust Project into a cohesive economic approach called *price theory*.

The Chicago School’s price theory, also known as Efficient Market Hypothesis in financial economics, is the idea that current market prices are a reflection of all possible measurable and subliminal economic information. These prices are the outcome of the competitive forces of supply and demand, which classical neoliberals had long claimed was the most effective way of aggregating information dispersed throughout society. With this confidence in the power of existing markets, Chicago economists held that markets produced both the most efficient prices and the most desirable outcomes in terms of social welfare (EAG, 2016). The point was not to claim that existing markets were more efficient than the theorized perfectly competitive market, but to argue against economic interference in the form of expansive government regulation. The economists argued that any deviation from the “natural” constitution of these prices by rational profit-maximizing individuals, such as by government intervention, leads to inefficient prices and thus socially sub-optimal outcomes.

Their reasoning was that if markets are concentrated or dominated by a monopolistic firm, and assuming that there is no governmental interference, it must be because that is the most efficient market configuration possible in the current economic context. That is, the firm(s) involved must be able to produce, distribute, and/or sell the relevant product at a lower price, higher quality, and larger quantity than would be possible in a less concentrated market. These efficiencies are derived from the scale at which the firms operate and their capacity to reduce their average production costs and subsequent selling price. The Chicago economists claimed that the force of economic competition would encourage these firms to lower their prices so as to undercut their competitors and stave off potential market entrants.

Following this theoretical insight, the second generation of Chicago economists became convinced that existing economic competition was so powerful that it would eventually deteriorate power in the market (not the other way around). In fact, when considering the rare need for antitrust regulation, the economists claimed that the costs associated with government regulation of market power were, in all likelihood, larger than those fleeting inefficiencies that arose in a firm’s self-interested pursuit of profit maximization (Davies, 2010). In other words, it is probably better to allow monopolistic firms to exist than to regulate them.

The Chicago School extended this perspective to other forms of collusion and to patents arguing that in each case what was necessary was a detailed analysis couched in price theory to measure the effects of monopolistic behavior on market efficiency (Medema, 2011).

It is important to note that Chicago School economists did not reject the dynamics theorized in the market power model (EAG, 2016). In fact, as is made evident in the analysis of the *Merger Guidelines*, the market power model is at the center of the Chicago antitrust paradigm. The ideological shift described above embraced market power because it made *power in the market* directly commensurable with the cost-savings and efficiencies purportedly derived from monopolistic firms. In other words, large corporations and concentrated markets were made calculable in two ways: in their capacity to exercise market power and in their capacity to achieve cost-saving efficiencies. Crucially, the Chicago School made a series of ideological maneuvers that recast the two calculations in question. In the course of the Free Market Study and the Antitrust Project, market power was rendered unstable, transient, and weaker than previously theorized while cost-saving efficiencies were theorized to be much more significant than previously assumed.

Price theory made two additional adjustments to IO economics that would be crucial to the Chicago antitrust paradigm. Whereas previous economic theory allowed for the possibility of market power being produced by barriers such as “[limited] availability of raw resources, […] exclusive dealership, […] predatory activities, bribery, sabotage, [… and] control over credit resources” (Van Horn, 2009), the Chicago School effectively saw government intervention as the only real barrier to entry (Hovenkamp, 1985). The Chicagoans argued that in the market, competition was so pervasive that the increased profits procured by way of these "natural" barriers could only lead to a stronger influx of investment and thus more competition. Following the same logic, Director theorized that maintaining any kind of barrier would cause the firm to incur significant additional costs. He explained that some strategies (for example, bribery and sabotage) would require direct outlays while others (for example, predatory pricing strategies and denying credit to competitors) would reduce a firm's revenue. He concluded that firms "cannot both obtain the advantage of the original power and impose additional coercive restrictions so as to increase their monopoly power" (Director and Levi, 1956). Director's argument, which was backed by the empirical studies of the Free Market Study, implied that the costs of maintaining barriers to entry made them inefficient corporate strategy but more fundamentally this statement is evidence of how market power was defanged. Secondly, Chicago economists argued that market power could not be transferred or projected from one market to another (Van Horn, 2009). Thus, dominating a product market did not lead to power in a labor market or capital market, nor could market power be increased via vertical integration (where a firm acquires its supplier). This is because, by definition, market power functions in specifically defined markets and the model itself has no provision for it to be leveraged from one market to the next.

The power of the Chicago School approach lay not only in its novel ideas, but also in the means of their communication. The Law and Economics program at the University of Chicago, a combined graduate program that trained students to be both economists and lawyers, played an instrumental role. In this program there was an explicit attempt to challenge legal practice with economic theory. In an oft told story, seminars on antitrust law were taught four days a week by Edward Levi and on the fifth day Aaron Director would explain why, according to price theory, everything the students had learned during the previous days was wrong (Van Horn, 2009). The strategy of the program was not to subsume law within economics but to subsume legal expertise within economic expertise. They wanted lawyers to think like economists, to apply Chicago's price theory to legal situations (Davies, 2010; EAG, 2016). In this manner, the ideas of Chicago economists were communicated such that they could inform judges and policy makers in Washington D.C. The ideas were made to travel and the alumni of the program would embody and carry them in the decades to come.

The story of this ideological shift would be incomplete without one additional set of characters: the corporate funders. In the early years of neoliberalism there was an uneasy balance between neoliberal scholars and the conservative business class that funded them. The intellectuals needed funding but were wary of corporate cooptation, whereas business was looking for new ways to spread the free-enterprise gospel but had misgivings about reform-minded libertarians (like Henry Simmons) who were outspoken against corporations. In his role as the messiah of neoliberalism, Hayek trod the ground between these two groups and he was often pressured by funders to ensure the "maximum degree of prevention of attacks on free enterprise" (Phillips-Hein, 2009). Thus, the story of the rise of the second generation of the Chicago School seems to imply that the funders were eventually able to find and support the type of intellectuals they were looking for. They found a group of intellectuals who would argue for the reduction of economic regulation (e.g. antitrust) and for the virtues of large corporations. In fact, the Free Market Study and the Antitrust Project were both funded by the

Volker Fund, a charitable organization based out of Kansas City, with close ties to Hayek and US neoliberals (Van Horn, 2009).

The antitrust revolution in Chicago was a fundamental reframing of the concept of market power. In a profoundly conservative move, price theory reframed the analysis of contemporary economic relations by suggesting that the existing state of the economy was the product of competitive forces. Chicago economists challenged the perception that large corporations were inherently harmful to the economy, putting the blame of market failures on government intervention. They developed a strongly pro-business ideology and did so by analyzing corporate concentration solely in terms of market power and cost-saving efficiencies. Importantly, they emphasized the significance of efficiencies and gutted the concept of market power, molding it into a temporary, fleeting, narrow phenomenon much less pernicious then previously theorized.

The Chicago Antitrust Revolution

The Chicago antitrust revolution came slowly to the banks of the Potomac. The unorthodox legal and economic doctrines emanating from Chicago struggled initially to find a footing where Harvard schooled economists and lawyers had long reigned. The 1950s and 60s were the golden age of antitrust enforcement. The Supreme Court under chief justice Earl Warren, the Warren court as it was called, saw antitrust at the peak of its powers (Christophers, 2016). This was also the time in which neoliberal scholars would breathe life into their ideas, spreading their influence, publishing, training students, and constructing neoliberal reason

(Peck, 2012). By the mid-1970s, decades of careful maneuvering and preparation would be rewarded when changes in international political economic dynamics put dominant economic frameworks into crisis setting the stage for the neoliberal era and with it, the Chicago antitrust revolution.

As Aaron Director's Antitrust Project came to a close in the late 1950s a large cohort of economists and lawyers well versed in Chicago's price theory continued to work on antitrust topics. Ward Bowman, Robert Bork, John McGee, Richard Posner, and George Stigler, all participants of the Free Market study, would publish prolifically on the topic of antitrust regulation (Van Horn, 2009). These perspectives would begin to gain traction in a series of Supreme Court decisions in the mid-70s, and in less than a decade they would completely revolutionize antitrust regulation. This was possible in part because of a sea change in the political composition of the Supreme Court. Between 1969 and 1972, Richard Nixon appointed four conservative justices to the Court, three of which (Blackmun, Burger, and Powell) replaced politically liberal incumbents. Particularly significant were the appointments of Burger, who replaced Earl Warren as Chief Justice, and Powell who hawkishly supported the "free enterprise system" (Powell, 1971). Finally, in 1975 President Ford appointed the moderate Justice John Paul Stevens who made his name practicing and teaching antitrust law in Chicago. The revolution would culminate in the tenure of Chicago-School-convert Assistant Attorney General William Baxter in the early 1980s.

Two Supreme Court decisions, *U.S. v. General Dynamics Co.* (1974) and *National Society of Professional Engineers v. U.S.* (1978), serve to illustrate the changes that swept the field of antitrust enforcement during the Chicago Revolution. In the General Dynamics acquisition case, the Supreme Court ruled that though "the coal industry was concentrated among a small number of large producers [… and] the acquisition here would materially enlarge the acquiring company's market share and thereby contribute to the concentration trend [, the evidence] did not support the Government's contention that the acquisition substantially lessened competition in the production and sale of coal" (*U.S. v. General Dynamics Co.,* 1974) In other words, in a substantial departure from previous rulings, the court found that excessive concentration did not necessarily affect competition, and thus could not be *per se* unlawful. Here the implication is that, as Chicago scholars often claimed, concentrated markets were not something to be overly concerned about, that they were an expected outcome of the competitive process. As the decade went on and Chicago School opinions became more pervasive this tenor of court opinion became more frequent, leading to an increasing amount of antitrust prosecutions overturned on appeal (Davies, 2010).

National Society of Professional Engineers v. U.S. (1978) was a watershed decision in the Chicago antitrust revolution (Wertheimer, 1984). The case centered on the Society's defense of their code of conduct, which among other things prohibited competitive price bidding among professional engineers. The society argued that by reducing competition among engineers they avoided a race to the bottom that could lead to questionable safety standards and probable harm to society. They drew on the *rule of reason* to argue that the code of conduct was *reasonable.* In the opinion, the court bluntly responded that "the *Rule of Reason* does not support a defense based on the assumption that competition itself is unreasonable" (*Professional Engineers v. U.S.*, 1978). In an effort to avoid future misconceptions the court stated that "the inquiry mandated by the *Rule of Reason* is whether the challenged agreement is one that promotes competition or one that suppresses competition" (*Professional Engineers v. U.S.*, 1978). Here it is clear that a shift in the logic of antitrust had taken place, *competition* rather than *competitors* took center stage in antitrust enforcement. From that point onward the *rule of reason* was recast in purely economic terms, amounting to a cost-benefit analysis of the "competitive effects" of the corporate behavior of interest. In essence, the *rule of reason* and subsequently the reason of antitrust itself became a judgment between the two factors described in the previous section: market power and efficiencies. As legal scholars at the time noted, this implied that "No factor other than the [trade] restraint's effect on competition may be considered and only restraints with a net procompetitive effect are permissible" (Wertheimer, 1984). That is to say, restraints of trade that were associated with net increases in cost-saving efficiencies.

This court precedent precipitated the Chicago antitrust revolution and in a few pivotal years the novel approach to corporate regulation was institutionalized at the Department of Justice. In 1981, amid the full force of the Neoliberal turn, Ronald Reagan appointed Stanford Law Professor William Baxter as Assistant Attorney General of the Antitrust Division. Baxter was a convert of the Chicago approach, at Stanford he taught law but he had a long standing interest in economics that would make him amenable to the ideas emanating from the shores of Lake Michigan. In 1969 he was part of a White House task force on antitrust policy that authored what was called the Neal Report. The distinctively not Chicago-inspired report argued that antitrust regulation should target already existing instances of highly concentrated markets, threatening firms with divesture, among other things (Schmalensee, 1999). However, by the late 1970's, he had a drastic change of perspective and his writings began to align themselves with Richard Posner's and other Chicago School scholars. Baxter is credited with putting "economic analysis, and thus economists, at the center of the decision process," and cementing the legacy of the Chicago School's economic perspectives in the 1982 *Merger Guidelines* (EAG, 2016; Schmalensee, 1999).

Baxter's enduring impact on the practice of antitrust regulation lives on in the *Merger Guidelines* that today are jointly issued by the FTC and the U.S. Department of Justice. The *Guidelines* "outline the principal analytical techniques, practices, and the enforcement policy of the Department of Justice and the Federal Trade Commission [...] with respect to mergers and acquisitions involving actual or potential competitors [...] under the federal antitrust laws" (2010 HMG, 1). The *Guidelines* seek to assist "the business community," "antitrust practitioners," and "the courts in developing an appropriate framework for interpreting and applying the antitrust laws" (2010 HMG, 1). The HMG are the preeminent protocols for the identification of and response to market power. They are utilized by several other U.S. regulatory agencies and have significantly influenced laws and policies in several other nations (Schmalensee, 1999). Under Baxter's direction, the *Guidelines* were completely reworked to introduce new analytical tools, economic conceptualizations, and perspectives on the overall goals of antitrust enforcement. This analytical framework, based on the theoretical insights of Chicago's price theory, would remain largely intact even after the *Guidelines* were revised in 1984, 1992, 1997, and most recently in 2010 (Schmalensee, 1999).

The revamped *Guidelines* refocused antitrust goals on "consumer welfare" as had been proposed by Chicago School scholars. This concept, developed in Robert Bork's *The Antitrust Paradox* (1978) and Richard Posner's *Antitrust Law* (1976), reframed antitrust enforcement on "the utilitarian goal of efficiency maximization and the elimination of political and normative dimensions from antitrust policy" (Davies, 2010). These texts had gained a wide audience in the course of the Chicago antitrust revolution and were cited in several Supreme Court decisions (such as *Reiter v. Sonotone Corp, 1979*). Ironically, this goal is quite poorly defined (Orbach, 2011). Ostensibly, a reference to Marshallian consumers' *surplus* as previously described, consumer *welfare* was ambiguous enough to communicate the goal of improving societal welfare while placing its identification squarely in the expertise of economics.

The Chicago School's focus on consumer welfare placed the consumer as the imagined subject of antitrust enforcement contrasting with the previous paradigm that focused on protecting small businesses and punishing large corporations. This orientation required regulators to weigh in the formal economic factors relevant to consumers, not just consumer surplus. Essentially, consumer welfare refers to consumer surplus but with the additional consideration of the way cost-saving efficiencies of firms may also benefit consumers. For example, it may be found that a merger reduces consumer surplus but has the potential to produce significant efficiencies, reducing the price of the relevant product, and leading to a net increase in consumer welfare. Consumer welfare is the manifestation of the Chicago antitrust paradigm, reframing antitrust enforcement to fit the logic of the Chicago School's two calculations of market concentration: market power and cost-saving efficiencies.

The Aftermath of a Revolution

The Chicago antitrust revolution profoundly impacted the scope and form of antitrust regulation. The Chicago antitrust paradigm and its dual fixation on market power and efficiencies permeated all levels of antitrust enforcement. As demonstrated in the analysis of the *Merger Guidelines*, the antitrust institutions reworked the standards and procedures of antitrust enforcement to reflect this novel orientation. The analysis of the adverse effects of mergers was subsumed into the logic of market power and in the course of the revisions of the *Guidelines* antitrust regulators placed a growing emphasis on the potential efficiencies derived from mergers.

The paradigm also impacted the prevailing case law and the antitrust statutes as Judges and lawyers reinterpreted antitrust laws, and established new rules reflecting the price theory approach (for example in *U.S. v. General Dynamics Co.*). In the aftermath of the revolution the courts affirmed most of the ideological maneuvers that had been made by the second generation of Chicago economist; that is, weakening the significance of market power and strengthening the importance of the role of potential cost-saving efficiencies. Daniel Crane, a legal scholar and alumnus of the University of Chicago, writes that in the 1980s and 90s the "Supreme Court also continued its antitrust retrenchment […] the Court jettisoned a wide swath of Warren Court precedents" including "predatory pricing [which] became a disfavored legal theory" (Crane, 2009). Crane describes how a series of age-old legal doctrines used to point out manifestations of power in the market, such as those against vertical resale price maintenance (whereby manufacturers and distributors agree to set retail prices), were rendered invalid and unreasonable by the newly installed logic of antitrust.

The Chicago antitrust revolution was part of the larger neoliberal turn that swept through the United States and England in the decade of the 1980s. Permissive antitrust standards combined with accessible financial resources made for the most spectacular merger and acquisitions wave seen since the turn of the 20th century. The 1980s were highlighted by mergers valued in the tens of billions of US dollars. In the first half of the decade, between 1981 and 1986, there was an average of nearly 3000 mergers per year, up from only about 1300 on average non-wave years. This statistic also hides the fact the mergers themselves were much larger than previously experienced. In the same span of years, the average annual value of mergers and acquisitions in the manufacturing and mining industries (which accounted for roughly 25% of GNP at the time) was $18.38 billion 1972 US dollars, nearly six times the annual value of average non-wave years, $3.34 billion 1972 US dollars (Ravenscraft, 1987). In 1993, the New York Times would report that in the previous 12 years "more than $1 trillion in assets changed hands in more than 31,000 deals. […] Restraint-of-trade cases fell from 225 in 1979 to 77 in 1991, monopoly investigations from 20 to 5, and merger investigations from 152 to 82" (Labaton, 1993).

The Chicago School was not without its critics. Antitrust scholars from former important sites like Harvard saw themselves marginalized both intellectually and politically. Many of these scholars recoiled at the overtly ideological and conservative bent of some of the elements of the Chicago paradigm. Recognizing the leniency of the Chicago-inspired antitrust enforcement these scholars responded by forming what they called the “post-Chicago” school of antitrust economics. The goal of the school was to demonstrate how the narrow perspective of Chicago economists ignored a broad spectrum of anticompetitive effects that antitrust enforcement should scrutinize (Crane, 2009; Hovenkamp 1985; Kobayashi and Muris, 2012; Wertheimer, 1984).

The post-Chicago School gradually came to prominence in the 1990s during the tenure of Assistant Attorney General Anne Bingaman who was appointed by the Clinton administration in 1993 (EAG, 2016). Bingaman, who was widely praised for bringing a new era of stricter enforcement standards to the Antitrust Division, immediately took action to remove some of the most obviously ideologically motivated rules and procedures from the Chicago era. One example was the disavowal of the 1985 *Vertical Restraints Guidelines*. Ostensibly an extension of the *Merger Guidelines*, this document was meant to “set forth the general principles and specific standards used by the Department [of Justice] in analyzing the likely competitive effects of nonprice vertical restraints” (*Vertical Restraints Guidelines*, 1985). In practice, the *Guidelines* “pushed for the explicit strategy of nonenforcement” of vertical restraints, “relationships imposed on buyers by sellers as conditions of sale, such as […] exclusive dealings, resale price maintenance, territorial and customer limitations, tying arrangements, vertical integration, etc...” (Kamerschen, 2000).

Though the impact of the post-Chicago Antitrust School was significant, the analysis of the *Merger Guidelines* presented in the next section demonstrates that it was not a rejection of the underlying principles of the Chicago Revolution (EAG, 2016). The new antitrust school scaled down some of its most ideological elements, but it was not a rejection of the dual fixation on market power and efficiencies. In fact, in the 2000s it would give way to what some call the “neo-Chicago School,” an extension of the post-Chicago school but without the distaste for the achievements of the Chicago antitrust revolution (Crane, 2009). The post-Chicago schools are further described in the last two sections of the next chapter.

Today, the Chicago antitrust revolution is revered in antitrust circles for modernizing the field. The scope and form of antitrust enforcement is firmly tied to the logic of economics and particularly that of the market power model. Market power is considered a characteristic of actually-existing markets, and addressed directly by the procedures of the antitrust division. The Chicago paradigm is understood to have provided the tools to identify scientifically and measure manifestations of *power in the market* as opposed to previous “normative” approaches that relied on “political interests” and “ideology” (Davies, 2010; EAG, 2016). In essence, the performation of the market power *agencement* has been successful.

The historical narrative presented in this chapter makes clear that the battle over the logic of antitrust was a messy affair. The story shows that the economic ideas that competed to guide the practice and reason of antitrust enforcement were always embedded in complex social, cultural, and political landscapes. The transition between these ideas has been equally embedded in such landscapes, defying generic narratives of scientific progress and economic truths. Rather than some movement toward a truer representation of economic realities, it becomes evident that changes in antitrust practice imply a struggle among competing visions of the world vying to enact themselves in actually-existing markets. What emerges is the story of the performation of the market power *agencement*, the manner in which the model formed alliances with the people, institutions, theories, and material realities that were willing to arrange the world in accordance with its economic statements. Moreover, the story shows how what has been considered “real” *power in the market* is revealed in what has been considered “reasonable” means to identify it. Therefore, the story shows that “real” *power in the market* has changed over the years. What it was during the antitrust *agencement* of legal reason is fundamentally different than what it is now, under the logic of the market power *agencement.*

Chapter III

The *Merger Guidelines*

The *Merger Guidelines* and their five revisions are considered the preeminent protocols for the identification of and response to market power (Schmalensee, 1999). The documents represent the "principal analytical techniques, practices, and […] enforcement policy" officially sanctioned by the US Department of Justice and the Federal Trade Commission over the past fifty years (2010 HMG, 1). Though the *Guidelines* are principally utilized to determine when to block proposed corporate mergers, the analytical tools and definitions they described are mobilized more broadly to identify and respond to market power. Since 1968 the *Guidelines* have been written and issued by the staff of the antitrust institutions as directed by the presiding Assistant Attorney General of the Antitrust Division. The antitrust institutions are not legally required to issue and revise these guidelines but, as the previous chapter shows, they have often done so after significant changes in administration. The Assistant Attorney General and their deputies are appointed by the US President and therefore they reflect that administration's interests and goals in corporate regulation.

For the purpose of this thesis, the *Merger Guidelines* serve as an exposition of the performation of the market power *agencement*. The original document and each of its five revisions are evidence of how the principles theorized in the market power model shaped antitrust standards and procedures and overcame competing antitrust *agencements*. The *Guidelines* serve as the stage for a performance that positioned *market power* as the only true manifestation of *power in the market*. Moreover, because of the influence of antitrust enforcement on actually-occurring corporate transactions and on the interpretation of antitrust law itself, the *Guidelines* contributed to making market power "real", calculable, an aspect of actual economic relations that could be effectively and specifically targeted for governmental regulation.

This chapter systematically analyzes the *Merger Guidelines* and its revisions to narrate their role in this performance. I highlight how the changes to the standards and procedures of the antitrust institutions' reflect a constant reference to the logic of the market power model. Much more so than what one would expect if these changes simply reflected attempts to more accurately represent actually-existing economic phenomena. In essence, it becomes clear that what is at work is the performation of the market power *agencement*. I argue that the practices outlined in this chapter are themselves performances that follow the script of the market power model. By means of these practices market power is made real, calculable, and measureable. These practices also render market power a "reasonable" basis on which to make regulatory decisions of widespread economic impact (Davies, 2010). By means of the standards, procedures, and analytical tools described in the following pages, the market power model performs that which it purports to describe.

Furthermore, the *Guidelines* are crucial to this thesis because they are a written expression of the routine labor of antitrust enforcers. The texts describe the evidence and analysis necessary to claim that a certain merger or corporate practice produces undue market power. Though the document is not legally binding it is ubiquitous in the work of the antitrust institutions. As an employee of the Antitrust Division I was handed a copy of the most recent

Guidelines on my first day of work. My coworkers and I (both economists and lawyers) were expected to read and understand the content of the document and to refer to it in the course of ongoing antitrust investigations. The *Guidelines* outline the only authoritative means by which one can dispute a merger or corporate behavior. The only exceptions are *per se* cases, where written internal documentation must demonstrate a firm's explicit intent to monopolize trade or fix prices with their competitors. Any techniques and tools mobilized by antitrust practitioners that are not specifically outlined in the *Guidelines* must ultimately fall in the analytical framework described in the text.

Beyond structuring the work of antitrust practitioners the *Merger Guidelines* are used in a variety of contexts that make the document widely influential. At the antitrust institutions they are mobilized to make higher level administrative decisions on whether or not to invest limited resources on potential antitrust cases. Regulators often have to weigh the costs of expensive and time-consuming court proceedings against the potential societal harm of a proposed merger, as measured by the framework set out in the *Guidelines*. Outside the antitrust institutions the *Guidelines* are used for educational purposes, by enforcers throughout US economic regulatory agencies, and by foreign legislators seeking to establish antitrust legislation abroad (Schmalensee, 1999). Additionally, the document is specifically intended to "assist the business community" and "the courts in developing an appropriate framework for interpreting and applying the antitrust laws" (2010 HMG, 1). Their purpose is to perform the market power model as widely as possible, to convince all kinds of people that market power is real, that it can be identified, and that it must be regulated.

In essence, the *Merger Guidelines* perpetuate the performation of the market power *agencement.* The document seeks to enlist new allies to its cause, rearrange economic truths, and broaden the reach of the validity of the market power model. The document is not the only performer of the market power model; there are other agents, institutions, and tools that have important roles in the performance. Nonetheless, because of its influence in the field of antitrust regulation the *Guidelines* play a central role in the performation of the market power *agencement*.

In this chapter I highlight the structure of the sanctioned analysis and how it has changed in relation to its predecessors. By focusing on the definitions provided, and the assumptions made by the *Guidelines*, I demonstrate how the principles of the market power model are gradually but effectively realized in the course of the issued revisions. Key elements of the *Guidelines* include the general enforcement policy, the exercise of market definition, the market concentration thresholds, the analysis of horizontal mergers, the analysis of non-horizontal mergers, and the discussion of the efficiencies (or lack thereof) resulting from such mergers. Each of these elements was reworked to reflect the logic of the market power model.

The market power model was formally introduced to the analytical framework of antitrust enforcement at the height of the Chicago antitrust revolution, in the early 1980s. The original *Guidelines*, issued in 1968, only mention market power in passing and not as a core element of its analysis. The first two revisions of the *Guidelines* show the results of a paradigmatic shift that focused antitrust thought and practice on the concept of market power as formally defined by the field economics. The subsequent revisions demonstrate the continuation of the performation of the market power *agencement.* The standards, procedures, and analytical tools of antitrust enforcement were reworked with continuous reference to the logic of the market power model, affirming its validity and doing away with vestiges of previous antitrust *agencements*.

1968 *Merger Guidelines*

The 1968 *Merger Guidelines* precede the Chicago antitrust revolution and therefore are not fastened to the later tenets of the market power *agencement*. Though the *Guidelines* utilize the term market power, and undoubtedly the authors knew what it meant, the term is never formally defined in the text. Market power is not identified as the Department's main concern in the 1968 *Guidelines*, and there are no references to the ability of a firm to price above competitive levels. The term market power is used liberally to refer to the ways that firm conduct, outside of standard price competition, can harm competitors and consumers. This includes conducts such as "excessive promotional expenditure," "reciprocal buying arrangements," establishing barriers to entry, and using its size disproportionally to secure the purchase of its products (1968 MG). To hold with this thesis' convention, this is *power in the market* and not *market power* per se.

The 1968 *Guidelines* describe the Department's general antitrust enforcement policy as primarily focused on the analysis of market structures. Specifically, the *Guidelines* interpret the primary role of the antitrust statutes to be the promotion and preservation of "market structures conducive to competition" (1968 MG, 1). The *Guidelines* state that "market structure is the focus of the Department's merger policy chiefly because the conduct of the individual firms in a market tends to be controlled by the structure of that market" (1968 MG, 1). Here the influence of the Structure-Conduct-Performance (SCP) school of IO economics is immediately observable. By arguing that there is a direct connection between market structure and corporate conduct the *Guidelines* give credence to the necessity for regulative intervention. This connection is explained in what they deem to be “fairly permanent”, slow-to-change structural characteristics of markets, such as the number of participating firms, their market shares, and the barriers to entry into the market, determine the form and force of inter-firm competition. The authors argue that concentrated markets discourage “vigorous price competition”, and incentivize “economically undesirable” conduct such as inefficient methods of production and promotional expenditures (1968 MG, 1).

The initial sections of the *Guidelines* assert that an enforcement policy focused on market structures is fully supported by the text of the antitrust statutes and by the practical requirements of regulative practice. Section 7 of the Clayton Act requires enforcers to demonstrate that the effect of a merger or acquisition "may be substantially to lessen competition, or to tend to create a monopoly" (Clayton Act, 15 U.S.C. § 18). Therefore, following SCP theory, the Department’s policy was directed “toward the identification and prevention of those mergers which alter market structure in ways likely now or eventually to encourage or permit non-competitive conduct” (1968 MG, 2). The *Guidelines* also argue that in order to accomplish the tasks set out for the Antitrust Division by the US Congress they necessarily have to pursue “a limited number of structural factors” that can be the foundation for a feasible enforcement policy and simultaneously facilitate “business planning which involves anticipation of the Department's enforcement intent” (1968 MG, 2).

Before continuing to the core of the text, the *Guidelines* describe the process of defining a merger's relevant market. This is a fundamental step of a market structure analysis. It is necessary to measure participating firms' market shares and to calculate the market's degree of concentration. To these ends the relevant market is defined as "any grouping of sales (or other commercial transactions) in which each of the firms whose sales are included enjoys some advantage in competing with those firms whose sales are not included." There may be multiple relevant markets to a merger, and they are conceptualized in terms of a product market (or "line of commerce") and a geographic market (or "section of the country") (1968 MG, 2).

The *Guidelines* explain that "The sales of any product or service which is distinguishable as a matter of commercial practice from other products or services will ordinarily constitute a relevant product market" (1968 MG, 3). Though they do add the qualification that a second product or service may be grouped into the relevant market if it is both "reasonably interchangeable" with the first product and sold to the same group of purchasers as the first product. Similarly, a geographic market is the "total sales of a product or service in any commercially significant section of the country" as long as those sales are a significant portion of the participating firms' said product (1968 MG, 4). The size of the geographic market is determined by the area that includes all market participants that are not hindered by significant economic barriers, such as significant transportations costs.

The rest of the *Guidelines* are organized into three sections addressing horizontal, vertical, and conglomerate mergers respectively. The enforcement policy of horizontal mergers puts significant weight on market concentration and market shares of merging firms as indicators of undesirable market structures. The text argues that the larger the market shares of merging parties the more likely it is that the merger produces or entrenches market power. Table 1 depicts a set of market share standards used to determine when to challenge a horizontal merger. In the case of the highly concentrated market, where the shares of the four largest firms amount to approximately 75% or more of the relevant market, the Division will challenge a merger accounting for 8% or more of the market, 10% or more in the case of less highly concentrated markets. The *Guidelines* set a stricter standard for determining whether to challenge mergers "occurring in any market, not wholly unconcentrated, in which there is a significant trend toward increased concentration" (1968 MG, 6). These standards reflect the Division's ambitious enforcement stance.

Market Highly Concentrated		Market Less Highly Concentrated	
Acquiring Firm	Acquired Firm	Acquiring Firm	Acquired Firm
4%	4% or more	5%	5% or more
10%	2% or more	10%	4% or more
15% or more	1% or more	15%	3% or more
		20%	2% or more
		25% or more	1% or more

Table 1. 1968 Merger standards. Percentages refer to a firm's share of the relevant market. Highly concentrated markets are those in which the shares of the four largest firms amount to approximately 75% or more of the relevant market. Less highly concentrated markets are those in which the shares of the four largest firms amount to less than approximately 75% of the relevant market. Source: 1968 *Merger Guidelines*, page 6.

The rest of the section on horizontal mergers describes additional considerations involved in analyzing a merger of competing firms. The *Guidelines* indicate two special circumstances in which a merger might not be investigated according to the standards described above. The first case is the acquisition of a small but unusually competitive firm whose effect on market competitiveness is understated by its market share. This may be the case if that small firm owns a particularly significant patent, or has previously engaged in a strategy of undercutting the price of its larger competitors. Such an acquisition could lead the department to challenge a merger even if the market shares involved were smaller than the benchmarks described in table 1. The second case is the merger or acquisition of a failing company that has no prospects of remaining viable. In this case, the merger may be permitted even if it surpasses the benchmarks described above. The *Guidelines* make sure to note that this is a rare situation and the standard would only be applied in the "clearest of circumstances" (1968 MG, 8).

The final portion of the "Horizontal Mergers" section states that "Unless there are exceptional circumstances, the Department will not accept as a justification for an acquisition normally subject to challenge under its horizontal merger standards the claim that the merger will produce economies (i.e., improvements in efficiency" (1968 MG, 8) This standard is important because it is characteristic of pre-Chicago School IO economics. The authors argue that an increase in efficiency is severely difficult to prove or measure and that by allowing such a justification they would effectively authorize the merger of all companies that have not yet achieved the elusive magnitude of production that would result in the claimed efficiencies. Moreover, the *Guidelines* explain that the Department would prefer to encourage firms to achieve efficiencies through internal expansion rather than through mergers and acquisitions. These statements are particularly significant to the narrative of this thesis as they will provide a striking contrast to the positions taken in the aftermath of the Chicago antitrust revolution of the late 1970s.

The third section of the text details the Department Of Justice’s enforcement policy in relation to vertical mergers. Vertical mergers occur when a firm acquires either one of the suppliers of its inputs, or one the purchasers of its finished products. Keeping to its market structure approach, the *Guidelines* express concern about vertical mergers that change market structure allowing the merged firm to exert power in the market. The *Guidelines* state that the Department will challenge mergers that create barriers to entry into either market (since the merging firms operate in two separate but related markets), or that allow the new firm advantages unrelated to productive efficiency. Barriers to entry are “relatively stable market conditions which tend to increase the difficulty of potential competitors' entering the market as new sellers” (1968 MG, 9)

The authors of the *Guidelines* are particularly concerned about a vertically integrated firm’s capacity to leverage its position to harm either its “upstream” or “downstream” competitors. For example, by acquiring the supplier of a key “upstream” production input a firm may be able to harm its competitors by refusing to sell that input to them. A “downstream” example would be the case of a merger involving a retail level firm, which would allow the manufacturing firm to harm its competitors through product placement in its retail stores, and through promotional product differentiation. The *Guidelines* argue that large vertical mergers create barriers to entry, and disadvantage competitors to an extent that outweighs the possible creation of production efficiencies in an integrated firm. Again, the Department relies on market shares of the merging firms to determine whether to challenge the vertical merger, and it warns that vertical mergers that create entry barriers to the relevant markets, or have the potential to give the merged firm undue advantage over its competitors, would be challenged by the Department.

The final section of the 1968 *Merger Guidelines* relates to conglomerate mergers. Conglomerate mergers can be understood to be the union between firms that operate in separate markets and are vertically unrelated. It should be noted that firms selling the exact same product, but in different geographic markets, are considered to operate in separate markets, and thus their union is a type of conglomerate merger called a "market extension" (1968 MG, 13). Here the *Guidelines* set the enforcement policies for two particular types of conglomerate mergers: those that involve potential market entrants, and those that create a danger of reciprocal buying. The *Guidelines* is also concerned with conglomerate mergers that entrench or enhance a firm's power in the market.

In the case of conglomerate mergers involving potential entrants, the *Guidelines* is interested in firms whose potential entrance into a market significantly limits the ability of firms in that market to increase their sale price. The *Guidelines* focuses on large firms in already concentrated markets and potential entrants that are able to enter a market on a competitively significant scale. The second type of conglomerate merger refers to situations in which firms seek to make purchases from other firms that are also their customers. In other words, each firm both purchases and sells products to the other so they find it beneficial to favor each other when making purchasing decisions. The Department finds these reciprocal buying arrangements unacceptable, and will challenge any merger that seeks to facilitate their creation. The text explains that reciprocal is an "economically unjustified business practice which confers a competitive advantage on the favored firm unrelated to the merits of its product" (1968 MG, 15). This enforcement standard is significant to this thesis because it does not make reference to the merging firms' capacity to exercise *power in the market*. Instead, this standard seems to imply a different approach to antitrust enforcement, one that enforces a system of competition based on what are deemed to be "justified" comparative advantages.

Finally, the *Guidelines* shortly describes conglomerate mergers which would be challenged because they could potentially entrench a firm's market power. Here it is important to note that though the term market power is used, the text does not concern a firm's capacity to price above competitive levels. Instead, the power referenced seems to relate to a firm's ability to leverage its customers and competitors to act in particular ways. An example of these circumstances occurs when a merger creates a very large disparity in size between the merged firm, and the rest of its competitors in one of its relevant markets. Though it is not specified, one can assume that the authors are concerned about the form of competition or lack thereof that would prevail in such a situation. An additional instance of this type of merger might arise when the transaction could "induce purchasers, concerned about the merged firm's possible use of leverage, to buy products of the merged firm rather than those of competitors" (1968 MG, 16). The *Guidelines* explain that these types of mergers present novel problems to antitrust practitioners and that their effects are not fully understood. Nonetheless, the *Guidelines* assert that the Department will analyze conglomerate mergers on a case-by-case basis rooting out any possible anticompetitive effects.

1982 *Merger Guidelines*

The legacy of the Chicago antitrust revolution and Bill Baxter's administration in the Antitrust Division was cemented by the publication of the 1982 *Merger Guidelines*. This major revision to the original *Guidelines* is evidence of the paradigmatic shift that occurred at the Division, and of the increasing importance of the market power model in antitrust thought and practice. From start-to-finish the text reframes the purpose, the standards, and the procedures of antitrust enforcement according to the logic of the market power *agencement*. This section demonstrates how this performation took form in the shape of two novel analytical techniques: the hypothetical monopolist test; and the Herfindahl-Hirschman index. In so doing, market power was made calculable and measurable while previous conceptualizations of *power in the market* were rendered imprecise and false.

Like the original *Guidelines*, the 1982 *Merger Guidelines* begin by describing their purpose and underlying policy assumptions. They once more assert the goal of clarifying antitrust standards and procedures and reducing any uncertainty associated with the enforcement of antitrust laws. Furthermore, it states that the "unifying theme of the *Guidelines* is that mergers should not be permitted to create or enhance 'market power' or to facilitate its exercise" (1982 MG, 2). In these *Guidelines* market power is explicitly defined as the "ability of one or more firms profitably to maintain prices above competitive levels for a significant period of time" (1982 MG, 2). The *Guidelines* offhandedly mention that market power may manifest in non-price terms but they do not explain this claim, and they state that in either case the result of market power is "is a transfer of wealth […] and a misallocation of resources" (1982 MG, 2).

The influence of the Chicago school is even clearer in the last introductory paragraph of the text. While explaining that mergers can sometimes harm competition, the document's authors also argue that mergers generally play an important role in a "free enterprise economy." It is made clear that the Department of Justice seeks to challenge "competitively harmful mergers" while avoiding "unnecessary interference" with the "larger universe" of mergers which are understood to be beneficial to the economy. Though the *Guidelines* ultimately are about antitrust enforcement the introduction of this new language, seeped in neoliberal terminology, clearly reflects the intellectual sea change that had occurred at the Antitrust Division (1982 MG, 2).

The second section of the *Guidelines* describes the process of market definition and measurement used in antitrust analyses. No major changes were introduced to this section although some of the terminology was elaborated. Here the market is defined somewhat generally as the "group of products and an associated geographic area" that is relevant to the economic analysis of an antitrust investigation (1982 MG, 3). In a footnote, the market is further defined as "a group of products and an associated geographic area such that (in the absence of new entry) a hypothetical, unregulated firm that made all the sales of those products in that area could increase its profits through a small but significant and non-transitory increase in price" (1982 MG, 3). This definition does not imply a conceptual shift from the previous formulation of market definition but it does hint at a novel analytical technique, called the hypothetical monopolist test (HMT), which would become a core element of antitrust practice (EAG, 2016). The specifics of HMT are explained in more detail in the 1984 *Merger Guidelines*; here they are only roughly sketched out.

To find the boundaries of a relevant market, the *Guidelines* describe a process of analyzing potential geographic and product substitutes. Product substitutes are understood to be goods which consumers would switch to in the case of a significant price increase in the initial product. The *Guidelines* explain that the Department will survey buyers to determine if they would likely shift to other products within a year of a "small but significant and non-transitory increase in price," roughly a price increase of five percent (1982 MG, 4). The investigative process would seek to find evidence of buyers' perceptions that the products are substitutes, or that the products demonstrate similarities in physical composition, usage, or price fluctuations. An additional form of substitutes are *production* substitutes, which are two goods that can be produced and sold in the same facilities such that a firm may feasibly switch from producing one good to producing the other in a relatively short period of time. A similar survey process would be conducted to determine how many firms might switch into the production and sale of the relevant product within six months of it experiencing a five percent price increase. In either case, finding that two products are substitutes would require the analysis to include them in the same relevant market.

The process of evaluating geographic substitutability is similar to the process described above. The *Guidelines* explain that the Department would determine whether to expand the initial geographic market based on evidence of consumers operating outside that market without significant economic difficulty. The Department would be particularly interested in evidence of buyers having shifted their purchases outside the initial geographic market in the past, especially in response to a price increase. Transportation costs, costs of local distribution, and evidence of similarities in price fluctuations would all be used to determine the substitutability of two geographic markets. Again, such substitutability would imply that the two regions should be included into a single relevant geographic market.

When defining a merger's relevant product and geographic markets, antitrust practitioners start from the specific products and geographies associated with the merging firms. The markets are then expanded to include all potential product substitutes and significant economic regions that delineate the boundaries of the relevant market. The relevant market can also be understood to be the smallest market in which a hypothetical firm that was the only seller in that market could profitably raise prices or, in other words, exercise market power. This would be the case if such a firm would be able to raise its prices and, because their production has no significant product or geographic substitutes, face relatively small losses resulting from the associated reduction in sales. This rough sketch of the hypothetical monopolist test, further explored in the analysis of the 1984 *Merger Guidelines*, begins to show how the market definition process was reworked in light of the dynamics of market power model.

The rest of the 1982 *Merger Guidelines* is divided into three sections addressing horizontal mergers, the horizontal effects from non-horizontal mergers, and possible defenses to antitrust allegations. These sections introduce a series of new analytical techniques that reflect the effects of the Chicago revolution and the progression of antitrust thought at the US Department of Justice. Importantly, the techniques have significant performative effects, they strive to center the logic of antitrust on market power, making it firmly identifiable and calculable, all while doing away with the vestiges of the *agencement* of legal reason. Paralleling the previous iteration of the *Guidelines*, the next sections are interested in analyzing market shares of merging firms and post-merger market concentration. However, there are marked differences in the framing of this analysis, the market structure framework championed in 1968 takes a much smaller role and, at moments, is even put aside.

The section addressing horizontal mergers describes the process by which the Department analyzes market shares of horizontally merging firms and the post-merger concentration of their relevant market. Horizontal mergers are defined as mergers of firms operating in the same product and associated geographic market. The *Guidelines* explain that market concentration reflects the number of firms operating in a market and their respective market shares, which are the proportions of market activity attributed to each firm. The authors introduce the Herfindahl-Hirschman Index as a systematic tool to measure market concentration.

The Herfindahl-Hirschman Index (HHI) measures market concentration as an indicator of market power. It is obtained by calculating the sum of squared market shares of all firms in a relevant market. The index, which was officially sanctioned in these *Guidelines*, ranges from 0, perfect competition, to 10,000, absolute monopoly. This technique gives greater weight to the largest firms in a market than the simple market share measures utilized to set enforcement standards by the previous *Guidelines*. For example, in the case where 80% of a market is controlled by its four largest firms, those firms could be distributed equally (each firm accounting for 20% the market) or in any combination of ways that add up to 80%. For demonstrative purposes, we can consider a case in which one firm controls 50% of the market, and each of the next three largest firms account for 10% of the remaining market. Using an HHI to compare the two cases we would arrive at two distinct values, 1600 (20^2x20^2x20^2x20^2 =1600) and 2800 (50^2x10^2x10^2x10^2=2800). This demonstrates how an HHI captures variations that a simple market share measure cannot detect. Moreover, an HHI is usually calculated using the market shares of all market participants, rather than just the top few largest firms.

Explaining that market concentration is linked to market power because it facilitates the collusion of firms, the *Guidelines* broadly characterizes the spectrum of market concentration using the benchmarks depicted in table 2. These HHI thresholds are utilized to evaluate both “post-merger market concentration and the increase in concentration resulting from the merger” (1982 MG, 13). In the case of an unconcentrated post-merger market (with an HHI smaller than 1000), the Department would generally not challenge proposed mergers. If a merger occurred in a moderately concentrated market (with an HHI between 1000 and 1800), the Department would likely only challenge a merger if it resulted in an HHI increase of more than 100,and was likely to exhibit other anticompetitive effects as described below. In highly concentrated markets (with an HHI larger than 1800) the Department would be likely to challenge mergers resulting in an HHI increase of more than 100. The Department would also be likely to challenge a merger in a highly concentrated market if it resulted in an HHI increase of between 50 and 100, and it was likely to result in anticompetitive effects.

Critical HHI Thresholds	
> 1800	Highly Concentrated
1000 - 1800	Moderately Concentrated
< 1000	Unconcentrated

Table 2. 1982 Critical HHI thresholds. Source: 1982 *Merger Guidelines*, page 14.

HHI increase of 100		HHI increase of 50	
Acquiring Firm	Acquired Firm	Acquiring Firm	Acquired Firm
10%	5%	5%	5%
12%	4%	6%	4%
16%	3%	8%	3%
25%	2%	12%	2%

Table 3. Market shares and resulting HHIs. The merger of firms with these market shares would lead to indicated HHI change. Source: 1982 *Merger Guidelines*, page 14.

Market Highly Concentrated			Market Less Highly Concentrated		
Acquiring Firm	Acquired Firm	HHI change	Acquiring Firm	Acquired Firm	HHI Change
4%	4% or more	32 or more	5%	5% or more	50 or more
10%	2% or more	40 or more	10%	4% or more	80 or more
15% or more	1% or more	30 or more	15%	3% or more	90 or more
			20%	2% or more	80 or more
			25% or more	1% or more	50 or more

Table 4. 1968 Merger standards in HHI terms. HHI values of market share measures used in the 1968 *Merger Guidelines*. Highly concentrated markets are those in which the shares of the four largest firms amount to approximately 75% or more of the relevant market. Less highly concentrated markets are those in which the shares of the four largest firms amount to less than approximately 75% of the relevant market. Source 1968 *Merger Guidelines*, page 6.

The three tables depicted above help to illustrate the difference between the original *Guidelines* and its first revision. The market share measures used in the 1968 *Guidelines* and depicted in table 3 seem arbitrary when using an HHI based approach. The 75% value used as a market share concentration threshold in 1968 could result in HHI values ranging from about 1400 to roughly 5600, depending on the distribution of market shares among the market's four largest firms. Adding to the confusion, if the four largest firms in a market had shares accounting for 40%, 10%, 10%, and 10% the market would have been considered less highly concentrated in 1968 (their total market share summing to 70%), and highly concentrated in 1982 (with an HHI of 1900). Because of this inconsistency, it is impossible to say which concentration thresholds are stricter. Nevertheless, it is interesting to note that, according to the 1968 standards, the Department would have challenged a merger between two firms each controlling 5% of the market, resulting in an HHI change of 50 and a post-merger market HHI of as little as 100.

Somewhat more amenable to comparison are the two standards for change in market concentration resulting from mergers. In both cases more concentrated markets require less change in concentration resulting from a merger to warrant antitrust scrutiny. However, where in 1968 an HHI increase of 30 in a highly concentrated market was sufficient to begin an antitrust investigation, in 1982 the HHI increase had to be of at least 100 or of more than 50 but attached to additional anticompetitive effects. Also, as demonstrated in the example in the previous paragraph, antitrust enforcers in 1968 were willing to challenge mergers resulting in an HHI change of 50 in an unconcentrated market where, according to the 1982 standards, there was no need for regulative concern.

The revision of the enforcement standards demonstrates how the performation of the market power *agencement* rewrote previous antitrust truths to fit the logic of the market power model. The market power model is particularly concerned with very large corporations, or small groups of large corporations that can effectively and profitably raise market prices. The market share measures espoused by the 1968 *Guidelines* simply have no basis according to that logic, they are arbitrary, archaic. They clearly lack the sophistication of the 1982 standards that with their more advanced analytical tools (e.g. the HHI) are able to target the dynamics that are truly a cause for concern. However, this argument is much too simple and it ignores that Orris Herfindahl and Albert Hirschman had already independently published their versions of what would become known as the Herfindahl-Hirschman index by 1950, almost two decades before the *Guidelines* was issued.

Instead, the historical narrative of this thesis provides evidence that the 1968 *Guidelines* were issued under a fundamentally different antitrust *agencement*. It was an *agencement* underpinned by an utterly distinct understanding of the role of antitrust regulation, and wholly different conceptualization of *power in the market* irreconcilable with the tenets of the Chicago paradigm and its market power model. The 1968 *Guidelines* attempted to introduce formal economic thinking to routine antitrust procedures, but they were issued in a time when antitrust theory and practice was dictated by lawyers and legal thinking. The market share concentration threshold of 75% was not irrational to the antitrust practitioners of the 1960s; it was a product of an approach to antitrust that saw that amount of concentration as unjustifiable no matter how it was distributed. It was part of an enforcement stance that also regulated markets that demonstrated a “significant trend towards concentration” (1968 MG, 6). It was part of a paradigm that was not beholden to the logic of the market power model.

The text of the 1982 *Merger Guidelines* continues by outlining the “leading firm proviso” (1982 MG, 15). According to this section, the Department would scrutinize mergers involving any firm with a market share of at least 1% that merged with the leading firm of the market, as long as the leading firm had a market share of at least 35% and was approximately twice the size of the second largest firm in the market. In this proviso, the *Guidelines* acknowledges that market power may be exercised by one large firm if it faces no significant competition. This proviso contrasts with the rest of the 1982 enforcement policy, which generally focuses on the likelihood that a small group of firms will collude, be it implicitly or explicitly, to raise market prices. In either case the focus is the capacity to set prices above those that would prevail in a competitive market as set forth by the market power model.

Having outlined the major enforcement procedures, the *Guidelines* list other factors that may be included in the analysis of horizontal mergers. These factors include the ease of entry into the relevant market, the degree of product differentiation, the characteristics of specific transactions, and the previous conduct of firms in the market. What these factors have in common is that they reveal the "ease and profitability of collusion" (1982 MG, 15). Antitrust is concerned about collusion between firms because it allows a small group of organized firms to act in collaboration, as if they were a single monopolist, to exercise market power. These factors also indicate an investigative process of gathering information about a market beyond defining and measuring the market shares of firms in the relevant market. If these factors were shown to be present in a proposed merger and likely to have anticompetitive effects, they would be significant in the Department's enforcement decisions. That said, the *Guidelines* do indicate that these factors are secondary and used only in special circumstances.

A final factor considered in the analysis of a horizontal merger is past market performance. If a market was deemed to have been performing non-competitively, the Department was more likely to challenge a proposed merger. However, if there was evidence that the market was performing competitively the Department would apply its ordinary standards of review. This section is intriguing in what it presents as admissible evidence for evaluating the performance of a market. It states that non-competitive performance could be likely when the following factors were found in conjunction: "Stable relative market shares of the leading firms in recent years; Declining combined market share of the leading firms in recent years; and Profitability of the leading firms over substantial periods of time that significantly exceeds that of firms in industries comparable in capital intensity and risk" (1982 MG, 20). The first two factors are explained in that "the exercise of market power often results in a gradual loss of market share" (1982 MG, 20). This is ostensibly because the increase in prices associated with the exercise of market power incentivizes new market entrants that undercut the existing firms and capture a portion of the market.

This enforcement standard directly contradicts the text of the 1968 *Guidelines* concerned with trends towards concentration where there is an *increasing* combined market share of the leading firms in a market. Lacking further explication of the logic behind these statements it can only be assumed that this is an instance of the "defanging" of antitrust enforcement as described in the historical section of this thesis. It is a manifestation of how the Chicago School conceptualized a weak market power, unstable and vulnerable to the unrelenting force of market-based competition. This small section would seem to be of staggering importance, particularly in light of the wave of mergers and increased market concentration that would characterize the 1980s. This line of argument would imply that such a trend towards concentration was not inherently worrisome since it would likely be the result of competitive forces leading firms to efficient scales of production.

The second to last section of the 1982 *Merger Guidelines* addresses the horizontal effects from non-horizontal mergers. The *Guidelines* defines non-horizontal mergers as those that "involve firms that do not operate in the same market" (1982 MG, 20). In contrast with the 1968 *Merger Guidelines*, the authors of this newer version group together vertical and conglomerate mergers stating that such distinction "adds nothing to the analysis" (1982 MG, 21). This is because mergers involving firms from different markets "produce no immediate change in the level of concentration in any relevant market" (1982 MG, 20). Since the *Guidelines* recur to market concentration as the main indicator of market power, non-horizontal mergers, be they vertical or conglomerate, are not considered to have a direct effect on a market's competitiveness. Though vertical and conglomerate mergers may be superficially different, they are only significant to antitrust enforcement insofar as they enhance market power, which is to say that they display "horizontal effects" on a relevant market. These effects, detailed below, occur only in special circumstances and thus, non-horizontal mergers are "less likely than horizontal mergers to create competitive problems" (1982 MG, 20).

One form of "horizontal effect" from a non-horizontal merger is the reduction of "perceived" or "actual" potential competition that could result from a merger between a firm in the relevant market and a potential entrant to that market (1982 MG, 21). A potential entrant is a firm that is not part of the initial relevant market, but has the capacity to change or expand its production to enter feasibly the market in a relatively short period of time. Potential competition is important because it encourages firms not to exercise their market power and to increase prices for fear of market entrants that would undercut them. The enforcement of antitrust statutes in these circumstances follows a similar analysis to the one described above. According to the *Guidelines*, the Department of Justice would probably not challenge any merger involving a potential market entrant unless the relevant market is already highly concentrated as determined by the HHI thresholds of table 2.

Additional "horizontal effects" from non-horizontal mergers are the possible (but improbable) barriers to entry that could result from specific forms of vertical mergers. A vertical merger could produce barriers to entry if post-merger market entrants would need to enter in both primary and secondary markets to be feasible competitors. This would be the case if a market entrant would necessarily have to be vertically integrated producing both a production input and a finished good to be competitive in the relevant market of that finished good. If such entry poses substantial difficulties to potential entrants, the vertical merger could enable the integrated firm to exercise its market power. Again, the crux of the issue lies in the potential competition of market entrants and it is only with convincing evidence of anticompetitive effects in a highly concentrated market (as determined by the HHI thresholds of table 2) that such a merger would be challenged. As a generalization, the *Guidelines* imply that vertical mergers could lead to economic efficiencies and blocking them too often could be "economically perverse" (1982 MG, 27).

The final section of the 1982 *Merger Guidelines* describes two potential defenses that could be used by firms facing antitrust investigations: potential efficiencies, and mergers with failing firms. The failing firm standard, present in the 1968 *Guidelines*, is understood to attempt to balance a merger's anti-competitive concerns with the benefits it may bring to the economy by saving a firm on the brink of bankruptcy. Here competitive concerns are weighed against "income losses to creditors, stockholders, and communities associated with the failure of the firm" (1982 MG, 30). The defense is only valid with clear evidence of the impending and unavoidable failure of the merging firm. In a footnote, however, the authors openly question the logic behind this standard arguing that "the Department views the incorporation of non-competitive concerns into antitrust analysis as inconsistent with the mandate contained in the antitrust laws" (1982 MG, 30). The failing firm standard, as described above, is another instance of a vestige of a previous antitrust *agencement.* Its rationale does not fit the logic of the market power model. It would remain an awkwardly fitting standard in the *Guidelines* until it was reworked in the 1992 revisions to reflect better the logic of the Chicago paradigm.

The description of the potential efficiencies defense underscores the ideological shift that had occurred at the Antitrust Division since the issuing of the 1968 *Merger Guidelines*. Like the 1968 iteration, these guidelines state that "the Department will not consider a claim of specific efficiencies as a mitigating factor for a merger that would otherwise be challenged" (1982 MG, 29). However, the first sentence of the section states that the Department will allow the "overwhelming majority" of mergers to occur without interference so as to allow firms to achieve "available efficiencies" (1982 MG, 29). The section describes specific forms of evidence that could be used to show that a merger will lead to those efficiencies. These include cost savings resulting from "the realization of scale economies, integration of production facilities, or multi-plant operations" that cannot be feasibly achieved "through internal expansion or through a merger that threatened less competitive harm" (1982 MG, 29). Beyond offering clarification of a legal strategy, this section implies that proof of potential efficiencies might preclude the necessity for an antitrust investigation to be conducted at all. The contrast with the 1968 *Guidelines* is striking and it became even stronger as subsequent revisions continued to expand the analysis of potential efficiencies derived from mergers. As argued elsewhere in this thesis, the argument for the potential efficiencies of mergers represents one of the most fundamental ideological aspects of the Chicago paradigm and its neoliberal project.

1984 *Merger Guidelines*

The 1984 *Merger Guidelines* are a relatively minor revision of the previously issued antitrust standards. In general, they match the 1982 *Guidelines* word for word. Major differences lie in the description of the hypothetical monopolist test (HMT), in how the test is used to conceptualize relevant markets, and in the discussion of the efficiencies produced by mergers. In these three cases, the changes seem to reflect the progression of normal economic science as it articulated and tested the prevailing antitrust *agencement*. These *Guidelines* demonstrate how the techniques of antitrust were reworked to fit the logic of the market power model in the years immediately following the Chicago antitrust revolution.

The HMT was only roughly described in the 1982 *Guidelines*, leaving the reader to imagine how the concepts of a hypothetical monopolizing firm and a "small but significant and non-transitory increase in price" (SSNIP) might fit together in an empirical analysis of an actually occurring merger (1984 MG, 5). In contrast, the 1984 *Guidelines* give a detailed explanation of the HMT and position it at the center of the process defining relevant markets in antitrust investigations. The HMT tests for a firm's capacity to profitably raise market prices in the face of sales lost to geographic and product substitutes. Therefore, the *Guidelines* define a "meaningful market" as that which "could be subject to the exercise of market power" (1984 MG, 3). In this way the market definition process that had been outlined in the 1968 *Guidelines* was reworked to fit the logic of the market power model.

The *Guidelines* explain that the HMT seeks to define the smallest group of products and geographic area in which a hypothetical monopolist could profitably impose a SSNIP. Starting from a narrowly defined market composed of the products sold by the merging firms and their area of operation, the test calculates the profitability of a price increase of about 5% lasting for about a year. If the price increase leads a large number of buyers to shift their purchases to alternate products, or geographies, or results in the entry of new firms into the market then it will likely not be profitable. An unprofitable SSNIP indicates a failed HMT and requires the antitrust practitioner to expand the tested market to include the relevant product and geographic substitutes. This process is repeated until a market is selected in which a hypothetical monopolist can profitably impose a SSNIP, passing the HMT and delineating the relevant market.

An important element of the HMT is the different ways firms and purchasers might respond to a SSNIP. Antitrust practitioners seek to evaluate both the “probable demand responses of consumers and the probable supply responses of other firms” to a monopolist’s attempt to raise prices (1984 MG, 3). On the demand side, consumers might switch to other products or travel to buy the same product in a different region. On the supply side, some firms may switch into the market by changing the way they use their facilities while others may enter the market by significantly modifying or constructing the required facilities. Each of these responses determines the profitability of a SSNIP, and therefore the result of a hypothetical monopolist test. The *Guidelines* emphasize the importance of evaluating the likelihood of these potential responses in each merger situation.

Once the relevant market is identified with the help of the HMT it can be analyzed by means of its structural characteristics. The 1984 *Guidelines* resort to the same tools as the 1982 version to determine the likelihood that one or more firms will exercise their market power in the relevant market. Using the total sales or capacity of firms in the relevant market the Department calculates each firm's market share and each market's HHI. In the case of firms that operate in multiple product or geographic markets, their included capacity is that which they could economically shift to the relevant market in response to a SSNIP.

The wording of the section concerning measures of market structure and concentration is almost identical to the corresponding section of the 1982 *Guidelines*. If there is a difference, it is in the level of confidence expressed about the validity of the HHI thresholds set out in table 2. For example, where the 1982 *Guidelines* stated that the Department was unlikely to challenge mergers occurring in unconcentrated markets, the revisions affirmed that the Department would "not challenge mergers falling in this region, except in extraordinary circumstances" (1984 MG, 14). Again, this reflects an ongoing process of putting antitrust theory to work in actually occurring transactions and accruing experience about the Division's capacity and will to litigate specific types of mergers.

The 1984 *Guidelines* continue the neoliberal thrust of making the potential creation of efficiencies a larger part of the overall understanding of the economic significance of a merger. These *Guidelines* assert that "The primary benefit of mergers to the economy is their efficiency-enhancing potential, which can increase the competitiveness of firms and result in lower prices to consumers" (1984 MG, 23). They continue to clarify that the Department will not challenge most mergers because to do so would be economically perverse. Significantly, the *Guidelines* make explicit what was implied from the previous iteration: that "the Department will consider those efficiencies in deciding whether to challenge [a] merger" (1984 MG, 23).   They explain that "some mergers that the Department otherwise might challenge" would go unquestioned because of their potential to create economic efficiencies (1984 MG, 23).   The text then encourages merging firms to provide evidence that could establish these potential efficiencies, listing a series of ways in which mergers could lead to such efficiencies.

The focus on potential efficiencies reveals a process of enacting the Chicago School's antitrust paradigm and reaffirming its underlying tenets. Potential efficiencies are generally attributed to economies of scale, which are cost reductions that arise from producing, distributing, and or selling on a larger scale. The focus on this idea clearly conflicts with alternate antitrust *agencements* that associate largeness directly with a firm's capacity to establish and abuse *power in the market*. However, *market power* does not necessarily arise from largeness. By definition, market power is a direct result of a price decision and its corresponding supply and demand responses. A firm's size may impact those responses or it may not since they are generally driven by other unrelated variables (as described above). Moreover, that impact may be outweighed by a price reduction resulting from the economies of scale that can be achieved by a large firm.

To put it in other terms, concern about the size of a firm like Wal-Mart might be outweighed by the fact that it can cheaply and effectively satisfy consumers' demands. In essence, the equilibrium price levels of a market composed of many small retailers could be higher than the price levels of the actually existing concentrated retail market. Price theory experts would argue that the hypothetical unconcentrated market would exhibit redundant costs in distribution, administration, and advertising and that the current concentration of the retail market is a result of the historical work of the forces of supply and demand. Moreover, they would argue that the persistent pressure of competition and the danger of market entrants forces large corporations to maintain low prices.

The focus on potential efficiencies is an example of how the standards and procedures of antitrust enforcement were recast according to the logic of the Chicago antitrust paradigm. As the market power model was performed the vestiges of competing antitrust *agencements* were systematically undermined. The efficiencies approach helped erode the salience of antitrust theories that centered on the size of firms as an indicator of power in the market. The approach also helped explain antitrust enforcement's diminishing focus on vertical mergers as sources of market power. The *Guidelines* of the 1980s dismissed previous concerns associated with vertical mergers arguing that they could be significant sources of efficiencies, and should only be analyzed in terms of their "horizontal-effects." In keeping with this, the 1984 *Guidelines* state that "the Department will give relatively more weight to expected efficiencies in determining whether to challenge a vertical merger than in determining whether to challenge a horizontal merger" (1984 MG, 32).

The *Guidelines* in the 1990s

During the Clinton presidency the *Merger Guidelines* were revised and reissued twice, in 1992 and five years later in 1997. The 1992 *Guidelines* was the first version of the document to be jointly issued by the Department of Justice and the Federal Trade Commission. The cooperation between the two institutions came after the FTC abandoned its attempts to issue its own set of guidelines in favor of the DOJ's *Merger Guidelines*, which had set the standard for analytical sophistication in antitrust practice. Together the antitrust institutions continued the ongoing process of refinement of antitrust theory and practice, reworking the Chicago School antitrust paradigm for the 21st century

The 1990s are generally considered to be the origins of the post-Chicago School antitrust era (EAG, 2016). However, the *Guidelines* analyzed in this section make evident that the prefix "post" refers to temporal order and not a fundamental change in the dominant *agencement*. The two *Guidelines* reflect new adjustments and alliances forged by the market power *agencement* as it continued to recast antitrust truths to its logic. These are not changes to the fundamental tenets of the existing paradigm, but slight adaptations made to maintain its relevance in a new era. If anything, the text demonstrates a growing confidence in the methodological and theoretical conventions mobilized by the antitrust institutions as well as a firm conviction in the market power model. The revisions reflect the concurrent progress made in the field of economics, but they are also evidence of the durability of the ideas that have characterized antitrust economics since the late 1970s.

Much of the text of the fourth and fifth versions of the *Guidelines* is borrowed from previous iterations of the document. Clear differences lie in specific rewordings and clarifications, in the reworking of the structure of the text, and in what appears to be a softening of its tone. It is also evident that these *Guidelines* continue to do away with the vestiges of previous antitrust *agencements*. The *Guidelines* continue to de-emphasize the significance of non-horizontal mergers, and emphasize the potential efficiencies derived from mergers.

The revisions reaffirm the importance of market power, an unlawful "source of financial gain," to antitrust enforcement, but also seem to soften the stance towards its abatement through regulatory action. The words "challenge" or "challenging," which were used 50 times in the 1984 *Merger Guidelines*, appear only four times in each of the two subsequent revisions (five times in the 2010 version). This contrast seems too large to be coincidental, and it is accompanied by a softening of enforcement standards. Specifically, in restating the concentration thresholds of table 2, the *Guidelines* state that mergers in highly concentrated markets that lead to an increase in the market's HHI by more than 100 are "likely to create or enhance market power", but that that "presumption **may be overcome by** a showing that factors set forth in [the rest] of the *Guidelines* make it unlikely that the merger will create or enhance market power" (1992 MG, 16). This contrasts with the wording of the 1984 *Guidelines*, which stated that "only in **extraordinary cases** will such factors establish that the merger [that satisfies the aforementioned characteristics] is not likely substantially to lessen competition" (1984 MG, 15). Further evidence of the softening of tone of the *Guidelines* lies in the reworked "Efficiencies" section discussed below.

The *Guidelines* of the 1990s culminated the trend towards de-emphasizing the importance of non-horizontal mergers. In the introduction of the 1992 *Guidelines* a clarification states that "mergers" refer to "*horizontal* acquisitions and mergers" (1992 MG, 1). In fact, in the entirety of the text there is no mention of vertical or conglomerate mergers. The authors of the

1997 *Guidelines*, which are identical to its predecessor in all but one section of the text, took an additional step by renaming the document, calling it the “Horizontal Merger Guidelines.” These factors point to the final erasure of a set of ideas that had sat in awkward tension with the logic of the market power *agencement*.

The concern for the effects of vertical and conglomerate mergers was always at odds with the market power *agencement* because it could not be fully explained by the logic of the market power model. According to the model, the power afforded to vertically integrated or conglomerate firms matters only in so far as it allows them to raise prices and absorb resulting losses of sales. In other words, the model is only interested in the “horizontal effects” of non-horizontal mergers, the effects of exercising market power on specific relevant markets. The concerns expressed about vertical and conglomerate mergers in the 1968 *Guidelines* point towards an altogether different approach to analyzing power in the market. This approach was interested in factors such as how a firm’s size might distort the decisions taken by smaller competitors, harming them “in ways unrelated to economic efficiency” (1968 MG, 9). The tension between the two approaches produced an inconsistency in the subsequent *Guidelines*, which seemed to be concerned with factors other than those strictly associated with what they asserted to be their “unifying theme,” that “mergers should not be permitted to create or enhance ‘market power’” (1982 MG, 2). The manner in which this inconsistency was resolved in the revisions of 1990s demonstrates how antitrust practitioners resorted to the logic of the market power model to rewrite and enforce antitrust standards and procedures.

The removal of sections referring to non-horizontal mergers came with a significant reorganization of the document’s structure. As in previous *Guidelines* the new revisions began with an introduction and a section on market definition and measurement. However, instead of organizing the core of the document into sections assessing horizontal mergers and the "horizontal effects of non-horizontal mergers", the authors divided the text into: "The Potential Adverse Competitive Effects of Mergers"; "Entry Analysis"; "Efficiencies"; and "Failure and Exiting Assets." This restructuring is part of a clarification of the steps taken by the institutions in analyzing proposed mergers and their likelihood to "create or enhance market power or facilitate its exercise." Referring to the antitrust institutions as "the Agency," the steps taken in the analysis are outlined in the following passage:

> "First, the Agency assesses whether the merger would significantly increase concentration and result in a concentrated market, properly defined and measured. Second, the Agency assesses whether the merger, in light of market concentration and other factors that characterize the market, raises concern about potential adverse competitive effects. Third, the Agency assesses whether entry would be timely, likely and sufficient either to deter or to counteract the competitive effects of concern. Fourth, the Agency assesses any efficiency gains that reasonably cannot be achieved by the parties through other means. Finally the Agency assesses whether, but for the merger, either party to the transaction would be likely to fail, causing its assets to exit the market" (1992 MG, 3).

The restructuring of the text emphasizes the steps outlined above and distinguishes between potentially adverse and potentially beneficial factors related to a proposed merger. The final three steps generally explore factors that might outweigh the adverse effects analyzed in the second step. The factors referred to in the second and fifth steps are the generally the same as those described in this thesis with reference to the previous versions of the *Guidelines*.

The third step described in the passage above refers to the section of the text called "Entry Analysis." In contrast with its previous iterations, these *Guidelines* separate the discussion of potential entrants into a market from the process of market definition. The relevant product and geographic market is defined in terms of demand substitution factors, while supply substitution factors are considered separately as elements that might reduce the adverse effects of a merger. It is interesting to note that though they might seem to be relevant, barriers to entry, as previously described, are not mentioned in the *Guidelines*. This section explains how the antitrust institutions rely on the standard of "timely, likely, and sufficient" entry to determine the significance of potential entry into the market (1992 MG, 24). That is, the analysis will seek to determine whether potential entrants are likely (because it is profitable for them to do so) to respond to a merger by entering the market in a timely manner (generally within two years), and with sufficient capacity to cause prices to fall to their premerger levels. The *Guidelines* explain that, "In markets where entry is that easy (i.e., where entry passes these tests of timeliness, likelihood, and sufficiency), the merger raises no antitrust concern and ordinarily requires no further analysis" (1992 MG, 24).

An additional clarification made in the *Guidelines* of the 1990s is the distinction between a merger's unilateral and coordinated competitive effects. This distinction, which was implied but not explained in previous guidelines, reflects the characteristics of the post-Chicago antitrust school. Here unilateral effects refer to the elements of a merger that may "permit a single firm, not a monopolist, to exercise market power through unilateral or non-coordinated conduct" (1992 MG, 2) This contrasts with the coordinated effects of mergers, which increase the profitability of coordination among market participants and strengthen the ability to detect and punish deviations from the coordinated interaction. This distinction is significant in that it reaffirms the capacity of a single firm to exercise market power and in that it takes the place of what in the 1982 *Guidelines* was referred to as the "leading firm proviso." That said the distinction is consistent with the market power model and it does not fundamentally change the analysis of proposed mergers.

A final revision of note was made to the "Efficiencies" section of the 1997 Horizontal *Merger Guidelines*. The authors of the 1992 *Guidelines* continued the trend of emphasizing the potential economic efficiencies of mergers by making the analysis of efficiencies a distinct section of the text. Following the same trend, the 1997 *Guidelines* reworded and expanded this section underscoring how mergers have the potential to produce significant economic efficiencies. Though the authors make clear that efficiencies do not always outweigh the adverse effects of a merger, in this revised section they provide the tools to make an argument to the contrary.

Giving several examples, the *Guidelines* explain that, "efficiencies generated through merger can enhance the merged firm's ability and incentive to compete, which may result in lower prices, improved quality, enhanced services, or new products" (1997 HMG, 31). This can occur when a merger leads to a reduction in a firm's cost of production thereby increasing their incentive to lower prices and undercut competitors. In the context of this thesis it is interesting to note the reference towards non-price related efficiencies such as “enhanced services” and “new products.” The *Guidelines* claim that “efficiencies may result in benefits even when price is not immediately and directly affected” (1997 HMG, 31). However, this would seem to contradict the fixation on price dynamics that is evident in the analysis of the adverse effects of mergers. As this thesis has shown, the revisions of the *Guidelines* gradually did away with arguments against mergers that were not contained in the price dynamics of the market power model. And yet, here there is reference to benefits gained from mergers that seemingly cannot be explained through the *market model* itself. These statements broaden the possible efficiencies available to merging parties, contributing to what seems to be a softened stance on enforcement.

Throughout this section, the authors explain the means by which efficiencies can be achieved and the evidence that is necessary to substantiate their significance. The *Guidelines* explain that "merging firms must substantiate efficiency claims so that the Agency can verify by reasonable means the likelihood and magnitude of each asserted efficiency, how and when each would be achieved […], how each would enhance the merged firm's ability and incentive to compete, and why each would be merger-specific” (1997 HMG, 32). The stipulation that the efficiencies must be “merger-specific” requires that firms demonstrate that those efficiencies cannot be achieved through means other than the proposed merger. However, the *Guidelines* then explain that only practical alternatives will be considered as means to achieve those efficiencies; that “the Agency will not insist upon [an] alternative that is merely theoretical” (1997 HMG, 32). Since it is not clear what distinguishes a practical alternative from a theoretical one in an exercise of determining the hypothetical means of achieving potential efficiencies this passage seems to continue to soften the enforcement stance that had characterized the previous four iterations of the *Guidelines*.

In a final, somewhat perplexing statement the *Guidelines* state that "efficiencies almost never justify a merger to monopoly or near-monopoly" (1997 HMG, 32). This sentence is confusing because it opens the possibility that sometimes, although admittedly “almost never,” efficiencies justify monopolies and near-monopolies. Clearly, this goes a step further than the claim that some mergers may create efficiencies. The statement stands in stark contrast to what is generally understood to be the theory of the competitive market, the tradition of antitrust enforcement, and the very language of the 1980 Sherman act which forbids any “attempt to monopolize […] any part of the trade or commerce” of the United States (15 USC § 2). Perhaps this was a carelessly written statement, yet it does seem to confirm the ideological bent of the antitrust paradigm that has dominated antitrust theory and practice since the Chicago antitrust revolution.

The last section of the *Guidelines* of the 1990s briefly describes the failing firm standard. Unlike the corresponding sections of the previous two revisions of the *Guidelines*, this section is written in a confident unquestioning tone. The *Guidelines* explain that a “merger is not likely to create or enhance market power or to facilitate its exercise, if imminent failure […] of one of the merging firms would cause the assets of that firm to exit the relevant market” (1992 MG, 29). The merger does not raise competitive concerns because the acquisition of failing assets would not give the purchasing firm the capacity profitably to raise market prices. Following this rationale the failing firm standard was reworked to fit the logic of the market power model, erasing the approach that had sat so awkwardly in the 1982 to *Guidelines.*

2010 *Horizontal Merger Guidelines*

The 2010 *Horizontal Merger Guidelines* represents the "principal analytical techniques, practices, and […] enforcement policy" *currently* sanctioned by US antitrust institutions (2010 HMG, 1). As the most recent revision of the *Guidelines*, they are utilized by the staff of the antitrust institutions on a routine basis and are widely distributed for business planning and educational purposes. These *Guidelines* significantly revised the previously issued *Merger Guidelines*, demonstrating the approach of the post-Chicago antitrust school, reworking the standards of enforcement, and introducing new analytical techniques to the antitrust toolkit. However, they do not make significant changes to the guiding logic of antitrust enforcement and, in fact, they deepen the performation of the market power *agencement.*

These *Guidelines*, like those that preceded them, assert that their unifying theme is that "mergers should not be permitted to create, enhance, or entrench market power or to facilitate its exercise" (2010 HMG, 2). Surprisingly, this version of the *Guidelines* does not directly define the term market power. Instead, the authors explain that "a merger enhances market power if it is likely to encourage one or more firms to raise price, reduce output, diminish innovation, or otherwise harm customers as a result of diminished competitive constraints or incentives" (2010 HMG, 2). Further down the text states that "market power may also make it more likely that the merged entity can profitably and effectively engage in exclusionary conduct" (2010

HMG, 2). These “non-price terms and conditions,” which seem to contrast with the previously discussed increasing focus on price dynamics, are a manifestation of the sensitivities of the post-Chicago approach to antitrust. Nevertheless, the *Guidelines* overwhelmingly focus the analysis on the “price effects” of market power, and effects that can easily be conceptualized in price terms. For example, a decrease in quality of a product can be conceptualized as receiving less for the same price, or, in other words, having to pay more for the same purchase. Similarly, “reduced output” means that the product is scarcer and therefore, supposing the demand for the product is unchanged, more expensive to acquire.

The 2010 *Guidelines* de-emphasizes the importance of the market definition exercise. Though the exercise still figures prominently in the analysis of market structures, the *Guidelines* acknowledge the contested nature of market definitions. They explain that “where analysis suggests alternative and reasonably plausible candidate markets, and where the resulting market shares lead to very different inferences regarding competitive effects, it is particularly valuable to examine more direct forms of evidence concerning those effects” (2010 HMG, 7). In this manner the *Guidelines* emphasize the analysis of merger-specific competitive effects as demonstrated by the relevant evidence. This approach to the market definition exercise allows the introduction of merger simulations as described below, and seeks to avoid tedious legal confrontations that occur when competing litigating parties disagree on the relevant market. In essence, this deepens the focus on the dynamics of the market power model rather than the indirect techniques that have been used to indicate the likelihood of market power.

A core element of the routine labor of antitrust enforcers is the collection and organization of evidence pertaining to antitrust investigations. In order to define relevant markets, calculate market shares, measure concentration, determine market participants, and predict the effects of specific economic transactions, antitrust staff undertake an extensive survey of quantitative and qualitative market descriptors. This evidence is commonly provided by, and sometimes subpoenaed from, “the merging parties, customers, other industry participants, and industry observers” (2010 HMG, 4). According to the *Guidelines*, the type and quality of data procured often determines the types of economic arguments than can be made about an antitrust investigation. For example, when investigating a merger and its potential effects antitrust enforcers may make direct comparisons based on the previously experienced “effects of analogous events in similar markets” if they are available and relevant (2010 HMG, 3).

When sufficient data about a merger investigation are available, the 2010 *Guidelines* explain that “the Agencies may construct economic models designed to quantify the unilateral price effects resulting from the merger” (2010 HMG, 21). Merger simulation is a novel analytical technique that was made possible by technological innovation in computing capacity. A merger simulation is able to do away with some of the cumbersome elements of a traditional merger analysis, such as the process of market definition, and estimate the possibility and magnitude of a post-merger price increase. A core element of a merger simulation is the calculation of diversion ratios, the fraction of unit sales lost by a firm due to its price increase that are diverted to a second firm. A diversion ratio estimates the significance of the existing competition between two or more firms, which serves to calculate the impact of a merger between them. The *Guidelines* describe that the results of merger simulations, and the values of diversion ratios may serve as important evidence in the analysis of the unilateral effects of a merger.

Diversion ratios and merger simulations are significant to this thesis because they directly apply the logic of the market power model to actually occurring economic transactions. Where structural analyses rely on proxies such as market concentration to estimate market power these novel analytical techniques focus specifically on the dynamics theorized in the market power model. Diversion ratios are often calculated using historical data on previously observed consumer behavior, which is only possible because of modern computing capacity. For example, in mergers involving cellular service providers, porting data, which records when consumers transfer their specific cell phone numbers from one provider to another (for example from Roberts to Wind mobile), can be used to calculate diversion ratios. The ratio between two merging parties can then be used to estimate the profitability of a post-merger price increase. The sales that would have been diverted to the second firm as a result of a firm's pre-merger price increase would instead be absorbed by the merged firm in the post-merger context. Thus, the larger the diversion ratio, the less sales lost in response to a post-merger price increase, and the more concerns raised for antitrust practitioners.

One of the most immediately apparent changes in the 2010 *Guidelines* is the revision of the concentration thresholds that had been established in 1982. As demonstrated in table 5, the newly defined critical HHI thresholds are significantly higher than those that had been employed for the previous three decades. An HHI of 2500 would occur in a situation where one firm holds 50% of the market or four firms each hold 25% of the market. The previous standard of an HHI of 1800 would have been measured in a situation where one firm controlled about 42.5% of the market or four firms each held about 21% of the market. In contrast, the 1968 *Guidelines*, which considered a market highly concentrated if its four largest firms controlled 75% of its value, would have found significant reason for concern in a market with an HHI of as low as 1400.

Critical HHI Thresholds	
> 2500	Highly Concentrated
1500-2500	Moderately Concentrated
< 1500	Unconcentrated

Table 5. 2010 Critical HHI thresholds. Source: 2010 *Horizontal Merger Guidelines*, page 19.

In addition to the higher concentration thresholds, the new *Guidelines* revise what counts as an acceptable amount of change in HHI levels. Where the previous *Guidelines* were concerned with mergers in highly concentrated markets that led to a change in HHI of more than 50, the 2010 *Guidelines* recommend no further analysis of mergers leading to an HHI change of less than 100. Similarly, mergers are only "presumed to be likely to enhance market power" in highly concentrated markets if they lead to an increase in HHI of more than 200, twice the corresponding amount in the previous *Guidelines*. This with the caveat that the "presumption may be rebutted by persuasive evidence showing that the merger is unlikely to enhance market power" (2010 HMG, 19).

The 2010 *Horizontal Merger Guidelines* concludes the textual analysis of this thesis. The document is the latest chapter in the story of the performation of the market power *agencement* in the *Guidelines* of the US antitrust institutions. In the text, it is clear how antitrust truths have been continuously rewritten to perform the market power model and to do away with the vestiges of previous antitrust *agencements.* An example of this, is the process of rewriting concentration thresholds, which are in many ways an antiquated indicator *power in the market* according to the logic of the market power model. Concentration levels do not directly indicate a leading firm's capacity to price above marginal cost of production, therefore they do not directly imply anti-competitive situation. As such the process of increasing concentration thresholds demonstrates how antitrust regulators have abandoned a conceptualization of *power in the market* based on concentration. Instead, regulators have turned to analytical tools such as the merger simulation which focuses specifically on the capacity of a firm to profitably raise prices. In essence, what is revealed is how antitrust practices have been shaped by a constant reference to the logic of the market power model. The concern for market concentration is delegitimized because concentration does not produce market power but there is no discussion about the many ways a concentration of wealth may lead to a host of social and political inequalities.

This pattern repeats itself throughout the *Guidelines* written in the aftermath of the Chicago antitrust revolution. Analytical tools, standards, and procedures were recast to fit in the logic of the market power model, not in some attempt to understand the many ways *power in the market* may be detrimental to people. The analysis demonstrates how the goal of the revisions is always to reaffirm the logical cohesiveness of the market power model and to make market power "real", calculable, an aspect of actual economic relations that can be effectively and specifically targeted for governmental regulation.

Chapter IV

Conclusion

As a form of conclusion, it could be useful to take a step back from the argument presented in this thesis and search for conceptualizations of *power in the market* at work in contemporary economic geography. Brett Christophers' new book, *The Great Leveler*, is driven by an age old question: how is capitalism kept stable in the face of crisis and change? As a response he describes the role of economic law and regulation in "managing the relationship between the forces of competition and monopoly" (Christophers, 2016, p. 6). He focuses specifically on theorizing the role of antitrust and intellectual property (IP) law in the US and UK during the past century and a half. He posits that competition and monopoly are in a constant dialectical relationship, that they are both always present and necessary to the stability of capitalism (Christophers, 2016).

Starting in the late nineteenth century, Christophers gives a broad strokes economic history of the US and UK explaining how different periods were characterized by fluctuating levels of economic competitiveness. He describes how in times of crisis, where either monopoly or competition became too strong, the legal system was invoked, producing new legislation or new interpretations of old legislation, which then righted the imbalance, restoring the stability of capitalist economic relations. Christophers explains that economic law serves as "a pincer of sorts [...] Antitrust (competition) law, meaningfully enforced, serves to constrain monopoly power where it coheres too readily, thus boosting competition; IP law acts from the other side, allowing a degree of monopoly power where none 'naturally' coheres, and limiting competition in the process" (Christophers, 2016, p. 9).

Surprisingly, on the last pages of the book, Christophers seems to negate his own analysis. After showing how the law necessarily steps in to stabilize the forces of monopoly and competition when they are in crisis; he argues that it is unlikely that antitrust law could step in to deal with the current state of heightened "monopoly power." He writes that IP law is just too important to some of the strongest industries in the global north for it to be weakened and that the international body of antitrust law that would be needed to deal with contemporary multinational corporations is nowhere in sight. Christophers writes, "The ongoing proliferation of international monopoly powers makes the notion of a fresh round of legal leveling, along the lines of the historic rounds depicted in this book, ever harder to envision" (Christophers, 2016, p. 281). He ends the book with an ominous statement: "Those who wrote forcefully in the twentieth century about the dawn of a monopoly stage of capitalism […] were arguably right after all, albeit significantly premature in their prognosis" (Christophers, 2016, p. 282).

Though Christophers does not seem to think that this conclusion fundamentally challenges his argument, the fact that his core insights cannot explain the present state of economic affairs leads to serious questions about their validity. I do not presume to contribute to the larger discussion about the regulation of capitalist crises. However, the observations presented in this thesis could help explain the apparent paradox of Christophers' self-contradictory conclusion. Missing in Christophers' work is an analysis of his own conceptualization of *power in the market* as well as that of the economic law that he studies.

Throughout his book, Christophers conceptualizes *power in the market* as if it was only market power. This becomes apparent when he defines monopoly power as the "influence, or control over key market outcomes such as the level of output or, most especially of all, price. A firm with monopoly power may be able, for instance, to raise prices" (Christophers, 2016, p. 7). In this manner, Christophers neglects the opportunity to analyze the interplay between *power in the market* and legal process and guidelines. Frustratingly, there are several instances over the course of his book where Christophers demonstrates that drivers of change (or lack thereof) in law are related (endogenous) to power *in the market.* For example, he claims that contemporary IP law is so strong because it was pushed forward by IP heavy sectors of industry, and that it is these same industries that fight to keep it in place even as increasing "monopoly power" drives capitalism towards instability. Is this not a direct result of the *power* of those corporations? It seems that by relying on market power to explain *power in the market,* Christophers neglects to formalize significant driving factors in the dialectical relationship between monopoly and competition. Specifically, he neglects to formally recognize that legal interpretation and implementation may be influenced by *power in the market.* Without a counterbalancing force the law will bias the scales towards monopoly. The point is to argue that a broader conceptualization of *power in the market* than the one developed in Christophers' book would have strengthened his argument, more persuasively reaching the same conclusions as he did.

Moreover, the research presented in this thesis demonstrates that what is at play in the rise of massive multinational corporations is not a lack of "meaningful" antitrust enforcement, but rather the success of antitrust enforcement based on the logic of the market power model.

The concerns that Christophers and his interlocutors express about multinational corporations are insubstantial according to that logic. The size of a corporation and its global reach has no direct relationship with that firm's ability to profitably price above its marginal cost of production in any specific relevant market. Moreover, if that firm is able to price above its marginal cost of production then it is probably a fleeting result to be ultimately quashed by the force of market based competition. The *power* supposedly exhibited by multinational corporations is fictitious, tenuous at best, according to the logic of the market power model. This is not to say that Christophers and his interlocutors should not be concerned with the regulation (or lack thereof) of multinational corporations, all the contrary. The goal is to argue that to adequately grapple with the role of antitrust regulation in the construction and maintenance of contemporary corporate forms we must understand its conceptualization of *power in the market.* By doing so, it becomes apparent that what is at work is not a lack of antitrust enforcement, but rather an antitrust enforcement that is only able to identify and interact with *power in the market* according to the logic of the market power model. The characteristics of multinational corporations that are so problematic to critical economic geographers do not fit in the logic of the market power model and thus are not targeted by its regulatory enforcement. These observations would have helped Christophers give a fuller explanation of what he calls the "defanging" of antitrust enforcement (Christophers, 2016, p. 221).

The example of Christopher's recent book illustrates the importance of understanding the history and geography of the concept of market power. With such an understanding one can see market power at play, shaping how even economic geographers can conceive of *power* *in the market*. The goal of this thesis was not simply uncritically to recount the enactment of the market power model but to open possibilities of thinking beyond market power. Or, in Joshua Barkan's words, to overcome "corporate sovereignty *problematic,*" the way the problem of *power in the market* has become available for thinking (Barkan, 2013). Through this framing I imply that there are other ways of thinking of and responding to *power in the market*, some of which do away with the economics/politics binary. By appealing to the market performativity framework I suggest that these ways of thinking of *power in the market* can be performed. Though admittedly, they too must be embedded in the social and political landscapes of the "power to perform" (Christophers, 2014b).

This thesis has shown that what can feasibly be considered "real" *power in the market* in contemporary economic thought is profoundly tied to the performance of the market power model in antitrust enforcement. I have shown that rather than a simple description of an actually-existing state of affairs the market power model is an active force transforming its environment (MacKenzie, 2006). The analysis of the *Merger Guidelines* and their revisions reveals how the standards, procedures, and analytical tools of antitrust enforcement, shaped by the logic of the market power model, allowed market power to be identified and calculated in actually-existing markets. The analysis shows that the *Guidelines* served as the stage for the performance of the market power model enacting its truths and shaping how antitrust practitioners could feasibly understand and interact with economic phenomena.

Additionally, this thesis shows that the pervasiveness of the concept of market power is tied to a historically contingent process inextricably embedded in social, cultural, and political landscapes. That market power is real because it has been made so by the performation of the market power *agencement*, which was successful because of a series of disreputable alliances. The market power *agencement* is deeply tied to the neoliberal tenets of the Chicago antitrust paradigm. As such, it is crucial that it be understood as part of the larger neoliberal turn that swept through the United States in the 1980s. The performation of the market power *agencement* should be considered part of the Chicago School's project to enact the legal framework for a free market (neoliberal) society (Peck, 2012).

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