Copyright 2019, Carlos Delvasto Perdomo

HOW ARE PRICE FIXING AGREEMENTS UNFAIR?

BY

CARLOS DELVASTO PERDOMO

DISSERTATION

Submitted in partial fulfillment of the requirements
for the degree of Doctor of the Science of Law in Law
in the Graduate College of the
University of Illinois at Urbana-Champaign, 2019

Urbana, Illinois

Doctoral Committee:

Professor Robert Lawless, Chair
Professor Kenworthey Bilz
Professor Jennifer K. Robbennolt
Professor Thomas S. Ulen

ABSTRACT

Antitrust law is trapped in a labyrinth of its own making. The assumption that consumer welfare and efficiency is the sole concern of antitrust law conflicts with what people view as unfair about antitrust law. The present thesis advances the understanding of antitrust law by providing some theoretical considerations and empirical results of what people view as unfair regarding price-fixing agreements. People's attitudes towards price fixing were obtained through experimental surveys on Amazon Mechanical Turk in the United States. The empirical results suggest that people view it as unfair when they feel that businesses rip them off through unequal transactions, such as price fixing and other forms of collusive behavior. But there is more to it than that. The evidence also suggests that people's price-fixing attitudes vary depending on the circumstances. The empirical results suggest that people judge price fixing as a moral violation influenced by the dual entitlement principle and the double effect theory. Moreover, results suggest that people's intuitions about price fixing are not static and move whenever the social and moral context changes.

This thesis is dedicated to my parents Silvio and Neyla, my wife Maria and my beloved daughter and my son Maria Paula and Juan Diego for their love, endless support and encouragement.

ACKNOWLEDGEMENTS

First, I would like to thank my principal advisor Professor Robert Lawless. I am very indebted for his guidance and constant advice, a mentor in my academic career. His patience and willingness to listen to my ideas and debate the theoretical and empirical points made this project reach a safe port. For his wisdom and guidance, I am deeply grateful. I would also like to express my gratitude to Professors Kenworthey Bilz, Jennifer K. Robbennolt and Thomas S. Ulen.

Many faculty members have enriched this research from their advice and ideas. I thank professor Margareth Etienne, Monica McDermott, Leon Dash, Nicola Sharpe and Lesley Wexler. All my J.S.D. colleagues including Runhua Wang, Xiaoren Wang, Chuanzi Cai, Xiaowei Yu and the Faculty of Law, Economics and Finance doctoral students Fatima Chaouche, Johannes Fahner and Carsten Ullrich of the University of Luxembourg have provided valued support and feedback. I also would like to thank the support of Lina Restrepo at University Valle and John Palencia at University Javeriana Cali.

I was very fortunate to have the support of the international student office in the College of Law. To Christine Renshaw and Sally Cook thank you.

TABLE OF CONTENTS

CHAPTER 1: INTRODUCTION 1
CHAPTER 2: BACKGROUND AND LITERATURE REVIEW 6
2.1. THE BIRTH OF THE ANTITRUST SENTIMENT 7
2.2. THE DEBATES OF THE SHERMAN ACT 15
2.3. THE CHICAGO SCHOOL OF ANTITRUST ANALYSIS 24
2.4. VERY FEW SCHOLARS HAVE EXPLORED THE RELATION BETWEEN ANTITRUST LAW AND MORALITY 30
2.5. THE IMPORTANCE OF SOCIAL VALUES AND MORAL ATTITUDES ABOUT PRICE FIXING BEHAVIOR 34
2.6. CONCLUSION 36
CHAPTER 3: A THEORETICAL FRAMEWORK OF THE MORALITY BEHIND PRICE FIXING 37
3.1. INTRODUCTION 37
3.2. THE NATURE OF MORAL JUDGMENT 38
3.3. FUNDAMENTS OF MORAL JUDGMENTS & PRICE FIXING 40
3.4. JUDGMENT ABOUT THE TYPE OF PRODUCT OR SERVICE 61
CHAPTER 4: PRICE-FIXING ATTITUDES IN THE LAB 71
4.1. INTRODUCTION 71
4.2. A THEORY ABOUT MORAL JUDGMENTS & PRICE FIXING IN THE LAB 71
4.3. PARTICIPANTS 71
4.4. THEORY OF COMMUTATIVE JUSTICE & DUAL ENTITLEMENT PRINCIPLE 72
4.5. THEORY OF DOUBLE EFFECT PRINCIPLE 77
4.6. JUDGMENT ABOUT THE TYPE OF PRODUCT OR SERVICE 88
4.7. PRELIMINARY CONCLUSIONS 98
4.8. MEASURES AND SCALES 103
4.9. REGRESSION ANALYSIS 110
4.10. SUMMARY 119
4.11. CONCLUSIONS 119
CHAPTER 5: CONCLUSION 121
REFERENCES 126
APPENDIX A: LOGISTIC REGRESSION PFAS FIRST/EXPERIMENTS FIRST 133
APPENDIX B: PFAS & CORRELATION COEFFICIENT 142
APPENDIX C: IRB NOTICE OF APPROVAL 147

CHAPTER 1: INTRODUCTION

Antitrust law is trapped in a labyrinth of its own making. This is due to the fact that consumer welfare and efficiency is the sole concern of antitrust law, thus establishing a conflict with the underlying social values and attitudes that support its moral dimension. The source of the conflict lies in people's ambivalence towards the virtues of competition. Most notably, on the one hand, there exists a broad view of free and unrestricted competition corresponding to a Darwinian idea of competition: an evolutionary process that selects efficient firms based on lower price criterion offered to consumers. However, on the other hand, there also exists a skeptical view of competition which exhibits a particular fear of abuse by "big business"; bringing about, among other abuses, the ruin of small businesses through either cut-throat competition or through the development of private leviathans. Thus, this skeptical view advocates for fair competition, understood as fair prices for consumers and fair profits for businesses.

Throughout the history of antitrust law, both views of competition have helped to shape the antitrust landscape. This was not due to self-interest, but because people were more disposed to view the social context as fair; people's attitudes towards price-fixing were more prone to follow that lead. Take for example, the early years of the antitrust movement when the laissez-faire view was gradually transformed by the influence of journalists such as Henry Demarest Lloyd[1], Henry George and Ida Minerva Tarbell[2], as well as cartoonist, such as, Frank Bellew, Joseph Keppler and G. Frederick Keller, which exposed the business behavior of big tycoons and combinations as an abuse of "big business" against local merchants and businessmen who suffered the vicissitude of a cut-throat competition and other types of business practices viewed as unfair. (Phillips 2018)

Similarly, in the speeches of Louis Brandeis a skeptical view of competition is contentious with a literalist approach of the Supreme Court in its early decisions on price fixing. Louis Brandeis was a founder of the American Fair Trade League. This movement contested the landscape of

[1] "Wealth against Commonwealth" (1894).

[2] "The History of the Standard Oil Company" (1904).

competition though lobbying and litigation for achievement of fair competition. (Phillips 2018)

Remarkably, the antitrust landscape shifted to the other edge with the revolution of the Chicago School of antitrust law in the 1970s. This was a revised version of the laissez-faire view of market competition, which currently dominates antitrust policy with its sole goal of consumer welfare as a shorthand term for allocative efficiency. This has been the predominant view in U.S. antitrust policy during the last 40 years and has reshaped the antitrust landscape towards a broad view of the competition of more unrestricted markets with more narrow government intervention. It should be stressed that the Chicago School of antitrust analysis reshaped antitrust law by introducing the price theory with its main behavioral assumption of self-interest. The self-interest model assumes that businessmen seek to maximize their benefits. It was all about consumer welfare and allocative efficiency.

The rise of consumer welfare as a single concern of antitrust law was advocated by Robert Bork, one of the most influential scholars in antitrust law from the Chicago School, as a way to change the direction of antitrust policy and "save the free market" from opponents with a skeptical view of competition. Bork argued that competition was an "evolutionary process…[which]…requires the extinction of some species as well as the survival of others." (Bork and Bowman 1965) Evidently, Bork viewed competition in the light of laissez-faire. A view, in which competition is something that should not be curbed unless it doesn't satisfy consumer welfare and efficiency.

But there is more to it than that, the assumptions upon which the theory is erected are incomplete because they do not value important considerations that influence people's behavior. To illustrate this, I will use the central theme of this dissertation as an example. From the side of the Chicago School's antitrust analysis, the rule against price-fixing among competitors preserves competition. This is a prohibitive rule that benefits free markets. It's an efficient rule that does not allow for any legal justification. That is why Robert Bork, argues that that is "one of the greatest accomplishments of antitrust law". (Bork and Bowman 1965) It had nothing to do with fairness or what is viewed as acceptable behavior. Simply stated, the rule preserves competition. Competition from this view refers to a process that "provides society with the maximum output that can be achieved at any given

time with the resources at its command."[3] Therefore, "price fixing is antisocial because it lessens the total output of society." (Bork and Bowman 1965) The approach understands that the rule against price fixing benefits free markets, thus making it efficient and appropriate for antitrust law.

That being said, why should businessmen obey the rule against price fixing, particularly when they act in rational self-interest in order to maximize profits? The answer would be the carrot and stick approach, to use the metaphor in Oliver Wendell Holmes' terms of the "bad man". (Holmes 1897) If the prediction is that price fixing occurs because businessmen seek to increase personal benefits, then society through government must raise the threshold in order to make it more expensive for the "bad man" to behave in this way. It is possible that punishment may deter price-fixing behavior. In other words, according to the Chicago School of antitrust law, the only reason people who agree on prices are punished is because such behavior is inefficient.

The deterrence model is incomplete because it does not deal with other desires that influence business behavior. Not everyone is prone to observe "consumer welfare" as a unique antitrust goal. Legislative history suggests that other social values, such as fairness in competition for small businesses seems to influence people's judgment on price fixing. If the only legitimate concern of antitrust law is to maximize consumer welfare and efficiency; then why, at the turn of the nineteenth century, was the antitrust movement grounded on a moral dimension? Moreover, why, during the debates of the Sherman Act, was the importance of avoiding cutthroat competition for small merchants and businesses raised? And, to such an extent that later, many of the small business and pharmaceutical retailers organized a fair-trade movement that lobbied for fair competition against the abuse of big business on the state and local level. This then, is a contradiction.

---

[3] The complete argument of Bork, about how the price fixing rule guarantees free markets and competition, says: "Under a competitive regime, productive resources are combined and separated, shuffled and reshuffled in search for greater profits through greater efficiency. Each productive resource moves to that employment where the value if its marginal product, and hence the return paid to it, is greatest. Output is maximized because there is no possible rearrangement of resources that could increase the value to consumers of total output. Competition is desirable, therefore, because it assists in achieving a prosperous society and permits individual consumers to determine by their actions what goods and services they want most." (Bork and Bowman 1965)

The Chicago school of antitrust analysis narrowed the scope of antitrust law to that of consumer welfare; understood as allocative efficiency because it excludes other social values and moral concerns that influence people's views on competition. In other words, the model upon which this was built, showed a total lack of understanding of what people judge is wrong with price fixing. The omission to examine a moral dimension means that antitrust law is not built on solid ground, not because economics is not important but because it itself is incomplete. When the law deviates from moral intuition, the legitimacy of the law suffers because people will not comply with the law voluntarily. This examination of antitrust law from a moral dimension will provide for a better understanding of the assumptions upon which the theory is built, providing for a better public antitrust policy.

The present thesis contributes to filling the gap that exists between antitrust law and morality by studying what is wrong about price fixing. Currently, limited empirical research has studied the relationship which exists between morality and price fixing. This dissertation attempts to originate a new empirical field by focusing the object of study on the moral dimensions which exist behind price fixing.

The first chapter explores the rule against price fixing through its legislative history reflects two conflicting views about the virtues of competition. These views were present in the early years of the antitrust movement, in the Sherman Act debates, in the Fair-Trade Movement, in the revolution of the Chicago School of antitrust law and currently its visible in what has been called as the New Brandeis movement.

The second chapter introduces the theoretical framework of the morality behind price fixing. This part discusses three theories and its implications with the moral dimension of price-fixing behavior.

The first theory derives from two theories: commutative justice or dual entitlement. It has been widely studied the idea that people observe rules of fairness as a constraint of profit-seeking. This dissertation extends this theory of pricing to price fixing. This theory proposes that people's judgment of price fixing derives from a comparison between two starting points that serve as a reference: a) the pre-existing terms on the consumer transaction; and b), the pre-existing profit

earned by the business on the transaction. Two hypotheses were proposed: H1: Consumers will judge price fixing as more unfair when the new price increases the businesses' profits. And, H2: Consumers will judge price fixing as less unfair when a cost-increasing event occurs beyond the business's control and the new price only maintains the previous profit.

The second theory is the doctrine of double effect, the theory claims a tendency to judge price fixing according to its collateral effects. This theory has been extensively tested by moral psychologists in studying what drives people moral judgment. Broadly speaking, it's a theoretical framework that captures a tendency in people moral judgment to accept harmful actions whenever the action that poses the opposite effects is directly intended to obtain a good effect. In extrapolating the double effect theory to moral judgment of price fixing it was taken in consideration the role of directness and intention. Three hypotheses were observed: H3: Consumers will judge price fixing less harshly when a third-party benefit from the new price increase of the businesses' profits. H4: Consumers will judge price fixing as more unfair when the firm's involvement is direct. H5: Consumers will judge price fixing as more unfair when the firm intends to harm consumers. And, H6: There is an interaction such that consumers will judge price fixing as more unfair when the firm's involvement is direct, and the firm intends to harm consumers.

The third theory is the judgment about type of product or service of the transaction. This theory considers that goods provide information about the harmful economic effects of the price fixing and about the moral character of people involved in the transaction. Four hypotheses were observed: H7. People will judge price fixing more harshly the more expensive the good or service. H8. People will judge price fixing more harshly the more inelastic the demand is for the good or service. H9. People will judge price fixing more harshly if they identify with the buyer. And, H11. People will judge price fixing less harshly if they perceive the buyer as a bad person.

The fourth chapter explains the methodology used in the empirical research of law. It describes the methodology used, the survey experimental vignettes and reports the results and analysis of the research.

CHAPTER 2: BACKGROUND AND LITERATURE REVIEW

The rule against price fixing in its initial legislative history, reflected the conflicting views regarding the virtues of competition.[4] One starting point is to examine the origin of the sentiment that grounded the antitrust movement. In the late nineteenth century, the old form of competition which was characterized by numerous small businesses vying for position, switched to a new form of competition in which big corporations joined forces in order to corner the market. Farmers, small merchants, and private businessmen became financially distressed; vulnerable against the new form of competition. In big cities, the outcry by wealthy merchants and businessmen was echoed by journalists who believed corporate power was out of control. In New York, Chicago and San Francisco, distinguished journalists such as Henry Demarest Lloyd[5], Henry George and Ida Minerva Tarbell[6], and cartoonists such as Frank Bellew, Joseph Keppler, and G. Frederick Keller, expressed their disapproval of the business practices of trusts and the big tycoons, labeling them immoral and unethical. (John 2017)

The next section presents evidence of how the moral condemnation of journalists help shape views about the big business problem and its harmful effects on business and consumers. But not only that, it also changed the context in which the laissez-faire view of competition was widely accepted. It suggested that big businesses were imposing a tax on consumers and that the problem was not being corrected by market forces, inviting a request for governmental intervention at the federal level.

[4] This argument is supported by a number of scholars of American Law History. Laura Phillips Sawyer argues that competition policy has shifted between a view "open market competition and efforts to manage competitive practices." (Phillips 2018) Similarly, Rudolph J. Peritz claims that "antitrust history as a series of attempts to balance the normative implications of competition policy…a structured analysis of competition policy based on these impulses toward liberty and equality can help us begin to make sense of antitrust law and policy, including the historical relationship between competition policy and efficiency logics." (R. J. Peritz 1990)

[5] "Wealth against Commonwealth" (1894).

[6] "The History of the Standard Oil Company" (1904).

2.1. THE BIRTH OF THE ANTITRUST SENTIMENT

Journalists echoed public views against the abuse of big business; being much more likely to disapprove of the business behavior of big tycoons and combinations, such as Henry Demarest Lloyd against Standard Oil Company, because they were sensitive to the outcry of small merchants and businesses that were suffocated by business practices that they viewed as unfair. In the early days of the antitrust movement, journalists, standing on a moral and ethical ground, echoed this outcry as they appealed for an answer. The next subsection deals with one of the most influential pieces of journalistic work in the support of the antitrust sentiment. It recognizes the abuse and wrongful behavior of big business as a menace to democracy.

2.1.1. A GREAT MONOPOLY IN THE GILDED ERA

To start with, in 1881, Henry Demarest Lloyd, one of the best-known journalists of the Chicago Tribune in the Gilded Age, published the "Story of a Great Monopoly" in the Atlantic Magazine. Henry Demarest Lloyd fervently denounced the tactics Standard Oil Company employed in order to obtain a monopoly as something unfair. The combined efforts of the Standard Oil Company and railroads created a business Goliath that financially devastated, whether through legal or unlawful methods, its competitors. The word "robbing" appears in the article, only once; Lloyd, while explaining the abusive business strategies employed, explicitly states that "Standard was robbing" its ["oil producers and refiners"] competitors. The word "robbing" is loaded with semantics of morality, influencing the reader. While the connection between Standard's robbing its competitors is clear enough to understand, it's quite a different story when it comes to understanding how Standard robs consumers. However, Lloyd clarifies the point by unceasingly reminding his readers how railroads and Standard Oil Company tax (rob) the people through higher fares and prices. If the connection lacks clarity, he states it directly: "people who burn kerosene are paying the Standard Oil Company a tax on every gallon, amounting to several times its original cost to that concern...this tax is transmitted by the middle-men, jobbers and retailers to the consumer." Lloyd was aware of the importance of public attitudes and social values needed in order to resolve the monopoly problem effectively. He understood quite clearly the basic principle that the public, in order to care, needed

to be informed. Thus, he viewed himself as a crusader that revealed the hand of Standard Oil in the ignominy suffered by small businesses and consumers. His last words were a call for action by the federal government: "The states have failed. The United States must succeed, or the people will perish." (Lloyd 1881)

Despite the fact that some journalists and cartoonists such as Henry Demarest Lloyd, Henry George and Ida Minerva Tarbell, Frank Bellew, Joseph Keppler, and G. Frederick Keller condemned the abuse by big business as immoral and unethical; there were people who viewed the behavior of big business, such as price-fixing, as something acceptable under a laissez-faire approach to competition. Not surprisingly, some businessmen advocated this view in order to avoid the harmful effects of competition. The next section presents the view on competition and trusts which was held by the architect of the Standard Oil Trust, Samuel C.T. Dodd; one of the most fervent defenders of the trust at the turn of the nineteenth century. His views supported the price-fixing activity done by combinations as a legitimate way to curb competition.

2.1.2. THE ARCHITECT OF THE STANDARD OIL TRUST AND THE LAISSEZ-FAIRE VIEW OF COMPETITION

In 1882, the attorney general of Standard Oil Company, Samuel C.T. Dodd, used common law in order to create the Standard Oil Trust as a way to combine different corporations and limited partnerships into one single entity. (Letwin 1956) Dodd defined trust as "a peculiar form of business association" in which trustees control the stocks of different corporations, providing a trustee certificate in exchange; purporting that a legal entity is necessary to achieve economic gains, such as economies of scale in order to increase production at a lower price for consumers. (Dodd 1893)

Samuel C.T. Dodd viewed competition, when businesses competed to undersell each other, as harmful. Unrestricted competition without unrestricted combination was the ideal competition model for savages and the uncivilized, ruining and bankrupting businesses. Unquestionably, he saw nothing wrong with price-fixing between members of a combination. In fact, he saw this as a reasonable way to obtain "fair profits for all dealers"; especially so because consumers would obtain benefits due to the improvement of competition based on non-price conditions. Moreover, he

recognized that combinations limited competition: "in the sense of striving to undersell each other." (Dodd 1888)

The architect of trusts viewed competition as a double-edged sword. On the one hand, he saw that a broad and unrestricted view could ruin and bankrupt businesses through cutthroat competition. On the other hand, he understood that price agreements were a way to conduct business and focus competition on non-pricing conditions. The solution, quite obvious to him, was an appeal for "unrestricted competition" and "unrestricted combination." (Dodd 1888)

Dodd viewed competition from a laissez-faire approach. The implications were that it was reasonable to price-fix whenever its purpose was to avoid the ruin or bankruptcy of businesses. This would be approved in a laissez-faire approach to competition. Indeed, the practical side was that government would not be able to regulate competition. As the popularity of trusts grew as a business practice which bypassed competition, the public attention grew along with it.

However, the laissez-faire effects on market competition were not viewed solely by businessmen; in fact, some academics and writers viewed trusts as a phenomenon that would perish on its own. In The Forum, one of the most respected magazines in America at the end of nineteen century, Henry Wood published an article entitled: "The Bugbear of Trusts". In this article, he approved combinations as a way to "obtain mutual advantage". This article provided a personal opinion which suggested that there was no need to be alarmed about trusts because laissez-faire law would work. The argument goes this way: Competition may be limited by combination, however that will not harm consumers. If the combination increases and cheapens the production process, it will benefit the public. On the other hand, if the exclusive purpose of the combination is to regulate prices, they will break by themselves. In Wood's own words, "though in no way dangerous, is unwarranted and of temporary harmfulness…need not excite public alarm, and are not worthy of legislative attention." (Wood 1888)

A reader wrote a response to this article for the New York Times entitled: "Are Trusts A Mere Bugbear?" This article contested Wood's laissez-faire principles on moral grounds; challenging Wood point by point, noting that higher prices, no matter if they lasted or not because of laws of

supply and demand, required legislative attention and justice because they harmed consumers by imposing a tribute over a fair profit. (The New York Times 1888)

The reader's reaction suggests that in the days previous to the Sherman Act debates, people's views on laissez-faire competition were gradually changing and it suggests that people held business behavior accountable, not because of what economics predicted, but because of what they viewed as fair and just.

The next section presents the ambivalent meaning that the word "trust" acquired in newspapers after the formation of the Standard Oil Trust. The fact that newspapers such as The New York Times, The Chicago Tribune, the Detroit Free Press and others were all attentive to the "trusts" issue in news and editorials, suggests, as William L. Letwin suggests, that readers were not indifferent to the "trusts" problem. (Letwin 1956) It should not be surprising that some news reports used the word "trusts" to denote immoral and wrongful business. But what was unexpected, was the contrary, the name of "trust" was also used in a positive way to save businesses from ruinous competition. That suggests that in some contexts, trusts were viewed without enmity, at least by some reporters and editorial staff.

2.1.3. THE AMBIVALENT MEANING OF TRUSTS IN NEWSPAPERS AND MAGAZINES

It is widely accepted that the antitrust movement was based on the sentiment against abuse by big business. Legal historians have pointed out that the 51st Congress responded to public outcry against the trust movement with the passage of the Sherman Act, particularly from farmers and small businesses in rural areas. (Friedman 2001) (Letwin 1956) In this section, I will present evidence that news reports and editorials address "trusts" ambivalently. On some occasions, the word "trust" is used to denote wrongful business practices; however, although less frequently, on other occasions it is used positively.

The New York Times's most active month on the "trusts" issue was in February 1888 (Letwin 1956). The 62 news reports and editorials were briefly analyzed regarding the use of the word "trust". The evidence suggests that in most cases the connotations were negative and immoral. However, although

less frequently, it was also used in a positive way.

Here we can observe two examples where the Times uses the word greedy:

a) On February 20th, The Times published an article titled: “The Foes of Competition - Trusts and Other Combinations - the Growth of Monopolies and Pools - Graduates of the Standard Oil School of Political Economy - Operations of the Sugar Trust - The Steel Rail Ring - Tribute Exacted from the Farmers”. In this extensive news report, the relationships between trusts and other combinations of competition were presented. The article started by declaring: “Some months ago The Times began to direct attention to the formation of new conspiracies to throttle competition in many branches of the industry...the schemes by which greed was building the house of monopoly on the grave of competition.” (The New York Times 1888)

The article understood "trusts" as a form of combination to bypass competition (as a way to deal with competition ... to overcome competition) and by using the word greed, the article denoted a selfish behavior dedicated to the accumulation in excess to that which was needed. The use of word greed denoted what was wrong with this type of business behavior.

However, this was not the only article. Observe how other editorials of the day referred to companies behind the sugar trust.

b) On February 20th, The Times published: “The Trust Problem”. This editorial presented the sugar trusts as “a combination of a few greedy refiners” with the power to “collect a tax from the people of a great Nation.” (The New York Times 1888)

An increase in prices tends to happen in the aftermath of a trust formation. Observe the editorial of the Times on January 31st, the editorial explicitly connected trusts and tariffs, arguing that tariffs provided trusts with the “power to rob the people by killing competition.” (The New York Times 1888) This became more explicit when the market value of corporations that participated in trusts increased their product prices. For instance, the New York Times in a note in 1888 said that the

market value of corporations that were part of copper trusts advanced as the prices of copper increased 70%, thus questioning the tariff bill. (The New York Times 1888)

Journalists, such as Lloyd did previously with the Standard Oil Company in the "Story of a Great Monopoly¨, denounced higher prices as a form of imposing a tax among all the people. Indeed, the sole use of ¨greedy¨ signals immoral behavior, and with the use of the word ¨tax¨ it elevates trusts' immorality to a Leviathan proportions.

It may be thought that the antagonism which exists against trusts is evident. However, some reporting suggests otherwise; publishing some sympathetic or at least neutral inferences. Two examples illustrate this point:

c) On Feb. 4th, the Times published an article titled: "The Stove Manufacturers: Overproduction Compels Them to Form a Trust". Here, the Times gives the reasons why stove manufacturers were planning to create a trust among themselves. (The New York Times 1888) The justification was that the overproduction of stoves (by 40%) was threatening a destruction of the business. (The New York Times 1888)

d) On February 26th, the Times published an article titled: "Only for Fair Profit"; describing how manufacturers of "clothes wringers" had formed a trust for: "mutual protection". The article states that "The trusts will at once raise the price, curtail manufacture, and reduce agents' commissions. It expects to make a fair commercial profit and give housekeepers and laundrymen a durable wringer." (The New York Times 1888)

Both articles suggest that journalists were not indifferent to the claims made by businesses which stated that trusts were a needed tool in order to stabilize markets; thus, obtaining protection against cutthroat competition. In previous news reports, the use of words loaded with moral condemnation, such as greed, robbery, or taxation were not used. The intensity of the hostility is evident towards sugar refineries; thus with small manufacturers was remarkably different. It seems like journalists were not against trusts per se, but against something quite different. Other news reports suggest that

newspapers resonated against the financial suffocation of small businesses which was triggered by the trusts. This may be observed in the following example:

e) On February 1st, the Times published an article titled: “the Sugar Trusts’ Grip”, in which the sugar trusts established financial benefits for wholesale dealers who bought a certain amount of products, providing economic incentives; more meant lower prices and less meant higher prices. However, the small dealers saw the trusts rule as unfair but were unable to do anything about it. As the report of the Times says: “there is much growling among the smaller wholesale dealers over the ruling of the trusts. They look upon the action as an outrage; but, being totally at the mercy of the Trust, they can do nothing to help themselves.” (The New York Times 1888)

This would suggest that journalists were not indifferent to the abuse committed by big business; especially as the sugar trusts used their market power in order to limit small businesses in benefit of big companies. An unseen consequence due to the concentration of market power, was the suffocation of small businesses, reminding us of the confrontation which took place between David and Goliath. That said, it was not only the Times, which echoed these views. The dichotomy between those who judged “trusts” sympathetically and those who judged “trusts” to be “evil” may be found in other sources of media. For instance, Charles F. Beach Jr., a well-known New York City lawyer, expressed the same concerns in The Forum in 1889. His argument was that if trusts helped avoid the ruin of businesses during economic downturns, then the trust practices would be welcome. This was the same reasoning presented by the trust that combined businesses of “stove manufacturers” and “clothes wringers”. It was the same argument had been expressed previously by Samuel C.T. Dodd. In his words:

> “The manufacturers of straw board were in the same position. Prices had run down, and they were doing or were likely to do an unprofitable business. They have developed an extensive and useful industry and were possessed of a costly plant. They could not stop, and they could not, as things were tending, safely go on. Their trust is, therefore, essentially self-protective.” (Beach 1889)

The news and editorials of the Times, the Chicago Tribune and other national and/or local

newspapers, shaped moral views concerning the unfairness of trusts. (Ann Arbor Argus 1894) The abstractness regarding the harmful effects due to price-fixing behavior by trusts was full of loaded words. The content of the news emphasized the manner in which trusts had broken the law, how trusts had reached out their tentacles in order to obtain privileges. The papers reported how big businesses were stifling competition and taxing consumers with higher prices. It is likely that people's attitudes towards trusts changed, even if that meant going against their own personal interest.

2.1.4. WHY HE LEFT SUGAR TRUST? JOHN CRAIG HAVEMEYER RESIGNATION

To use one example, during a night service at the Westminster Presbyterian Church in Milwaukee on December 14th, 1902, John Craig Havemeyer, member of the family which owned the American Sugar Refining Company and controlled the Sugar Trust, explained why he had left the Sugar Trust:

> "When the sugar manufacturers combined together to form a trust, I could not see my way clear to live a Christian life while at the same time robbing the poor by raising the price of their coffee sweetening." (The New York Times 1902)

Havemeyer's resignation worked against his own material benefit. He was quitting his job and he was resigning his social role in the family business. The news report suggests that he saw something wrong with price-fixing; his Christian values went against the harm his family business did to poor people. It is likely that his behavior was influenced by the aura against the abuse by big business that historians have called: "the antitrust movement".

The previous brief view of newspapers and magazines shows how journalists echoed moral concerns about trusts and combinations; gradually changing people's view of laissez-faire principles (if they were there in the first place). Newspapers were not alone, magazines caricaturists also portrayed trusts as evil. They were represented as gigantic business monsters that squeezed higher prices of the pockets of ordinary people; destroying small business competition and undermining the political system. (John 2017)

The evidence suggests that journalists, in some circumstances, condemned trusts as a wrongful

business behavior. This is manifested by the way they expressed the harmful effect of trusts; for example, they exposed the manner in which trusts robbed and taxed people through the fixing of higher prices. They were also concerned by the way in which trusts and combinations, through their use of power, crushed the freedom and liberty of small businesses. But, the sentiment against trusts was not all negative. Even though the evidence is not powerful, it showed a tendency, by the public, to view trusts as a way to protect businesses from the menaces of competition. The importance of the ambivalent view in public opinion against trusts is revealed by the manner in which the political debate on the Sherman Act was covered.

The next section explores the moral concerns that grounded the debates surrounding the trusts problem during the sessions of the 51st Congress. William L. Letwin expressed it in the following manner: "the true importance of the monopoly problem in public opinion is more nearly revealed by how much it pervaded the discussion of the leading political questions of those years." (Letwin 1956)

2.2. THE DEBATES OF THE SHERMAN ACT

As moral concerns against trusts took form and force in the media and public debates, social disruption seemed inevitable. And, politicians believed that they were required to answer the public claim. The 51st Congress answered the outcry with an experimental law that reflected different views on the trust problem and how to respond to it. On the one hand, a blank check on the principle of "full and free competition" was grounded on the idea of a broad principle of competition beyond the reach of business agreements. On the other hand, there existed a skeptical view of a broad principle of competition with a particular fear of how big corporations ruin small businesses through cut-throat competition. The practical result, businesses were entitled to a "right, a legal and moral…to combine for the purpose of raising prices until they shall be fair and remunerative." (21 Cong. Rec. 2730 (1890) (statement of Sen. Orville Platt (R.Conn.)) (Sherman 1890)

The next section presents the debates between Senator Sherman from Ohio, and Senator Orville H. Platt, from Connecticut. The core of the debate was about the appropriate answer that the 51st Congress should provide in response to the trust problem. (Barber, et al. 1889) Senators seem to agree that trusts were a menace; but, they differed on the degree of competition that the bill against

trusts would endorse.

2.2.1. THE "FULL AND FREE COMPETITION" VS. "UNRESTRICTED COMPETITION IS BRUTAL WARFARE"

Senator Sherman noted the existing urgency to resolve the trust problem. The bill demanded manifest action; otherwise, the public outcry could threaten social order and democracy. The unrestricted liberty of big business with its tendency to produce evil effects was the problem. Though Sherman believed that agreements that did not trespass competition lines (e.g. partnerships or corporations) were lawful, he noted a tendency of big businesses to corner the market (e.g. when businesses combined with the purpose of increasing prices and amassing profits at the expense of consumers). This needed to stop, and by permitting United States courts to apply a principle of "full and free competition" against business agreements the public outcry would end.

Rudolph J.R. Peritz, argues that Senator Sherman understood the principle of competition as a way to obtain fair prices. (Peritz 1996) This view seemed reasonable according to the language of the original bill proposed by Senator Sherman during the 51st Congress. The bill emphasized that, in "all arrangements, contracts, agreements, trusts, or combinations...made with a view, or which tend to prevent full and free competition...][...or tend to advance the cost of the consumer...][...are hereby declared to be against public policy, unlawful, and void." Moreover, "When corporations unite merely to extend their businesses, as connecting lines of railway without interfering with competing lines, they are proper lawful", Sherman said in support of the bill. Recognizing that this was the competition needed as the way to prevent businesses from combining in order to "prevent competition, or for the restraint of trade, or to increase the profits of the producer at the cost of the consumer." (21 Cong. Rec. 2457 (1890) (statement of Sen. Sherman (D. Ohio.))

The "full and free competition" contrasted with the skepticism of accepting a broad principle of competition of other senators. The main detractor was Orville H. Platt, Senator from Connecticut; he viewed a broad general principle of competition as a form of "brutal warfare." His main concern was with ruinous competition, whenever businesses were unable to acquire a fair price that would provide them a fair profit they were morally and legally entitled to fix prices until they were "fair and

remunerative." (21 Cong. Rec. 2729-30 (1890) (statement of Sen. Orville Platt (R.Conn.))

In his words:

> "I am entirely sick of this idea that the lower the prices are the better for the country, and that any effort to advance prices, no matter how low they may be, is a wrong and ought to be repressed and punished. The true theory of this matter is that prices should be just and reasonable and fair."

The context in which the combination took form was important, if businesses were unprofitable, they were right to combine as a way to ensure businesses against financial turmoil. They therefore opposed the language of the bill; particularly, given the circumstances of the State of Connecticut where small businesses and manufacturers seemed to engage in agreements in order to prevent the "ruin and bankruptcy" caused by the "deadly brutal warfare which is called competition." (21 Cong. Rec. 2730 (1890) (statement of Sen. Orville Platt (R.Conn.))

In the end, the Senator Sherman bill was challenged on constitutional aspects. Therefore, the bill was referred to the Committee on the Judiciary. The Committee, after striking out all of the enacting clause, elaborated a new bill with a language familiar with the common law language. The practical issue and its importance is that the change in the bill did not adopt the proposed Sherman Bill of "full and free competition" and "tended to advance the cost of consumers". The Committee on the Judiciary changed the bill with the language "contract....in restraint of trade" and "monopolize, or attempt to monopolize." In spite of these differences, Sherman supported the bill as the best result which would respond to the "trusts" problem. The first antitrust legislation was passed as a "bill to protect trade and commerce against unlawful restraints and monopolies." (21 Cong. Rec. 2731 (1890)

The Sherman Act was experimental legislation that reflected different views on the trust problem and how to respond to it. It was clear that for some groups of senators, trusts, and more precisely what they represented, were evil because it was agitating the public mind to the point that could jeopardize the American democratic project. It is clear that they were worried about how

combinations and trusts were creating asymmetrical competition, characterized by take-it or leave-it offers to crush farmers, small merchants, and businesses. The solution was to endorse a broad competition principle as a free market principle. But the view was not uniform. Other senators, also viewing the trusts as a menace, seemed to have doubts about how a "full and free competition" principle would resolve the problem. Their view was skeptical of the idea of competition as the panacea. They argued that this was because competition in and of itself was a menace to businesses. Under this optic, it didn't matter if prices were low or not, the point was that prices should be fair. The implication is that low does not mean fair, fair means that businesses are capable to compensate costs with fair prices for all the chain involved. This view subordinate's competition to fair prices for businesses at reasonable prices for consumers.

The legislative debates of the Sherman Act showed that the reason Congress enacted the bill, was to answer the public outcry against the trusts problem. It was clear that Congress wanted to forestall trusts, great monopolies, evil combinations and big greedy associations (among other names used to address the abuse of big business). Indeed, competition was the solution. But the degree of competition was not defined and was debatable. The courts were called upon to draw the lines of competition and to balance the competing goals when they had to address the issue of competition.

2.2.2. THE RULE AGAINST PRICE FIXING

In the beginning, the Sherman Act (1890) was abstract and shapeless until it was developed by the United States courts. Through its development, the rule against price fixing reveals the tension between a broad view of competition of unrestricted competition and a more restricted view where private agreements are accepted, curbing competition to guarantee other goals (e.g. avoiding the ruin of small businesses as well as benefiting consumers).[7]

[7] The building blocks of the rule have been developed through the Supreme Court Decisions, such as, *United States v. Trans-Missouri Freight Association*, 166 U.S. 290, 328 (1897)*, United States v. Joint Traffic Association, 171 U.S. 505 (1898), Addyston Pipe and Steel Co. v. United States, 175 U.S. 211 (1899), Standard Oil Co. of New Jersey v. United States, 221 U.S. 1 (1911), United States v. Trenton Potteries Co., 273 U.S. 392 (1927)* and *United States v. Socony-Vacuum Oil Co., Inc.*, 310 U.S. 150 (1940).

The first Supreme Court decision that reviewed a price fixing case was United States vs Trans-Missouri Freight Association, 166 U.S. 290, 328 (1897). In this case, a group of railroad firms price-fixed freights through an association, and the government sued them for violating the Sherman Act. The carriers argued that the agreement was reasonable because fixed prices avoided cutthroat competition and that the public would not be prejudicated because the rates were reasonable. (Patterson 1897)

On the one side, although Justice Peckham and the majority understood the argument made by defendants; they didn't accept the argument that price fixing agreements could be reasonable. The railroad argued that price-fixing was a reasonable restraint of competition if it prevented ruinous competition and its negative social effects. In other words, if there were reasonable rates, public interest would not be harmed. Justice Peckham and the majority viewed differently. First of all, they alleged that no unanimity existed which permitted reasonable price-fixing in order to avoid businesses from ruinous competition. Secondly, they argued that public attitudes and social values didn't coincide with the position of carriers, stating: "We recognize the argument upon the part of the defendants that restraint upon the business of railroads will not be prejudicial to the public interest so long as such restraint provides for reasonable rates for transportation...it must be remembered that these results are by no means admitted with unanimity; on the contrary, they are earnestly and warmly denied on the part of the public...Competition...is a necessity for the purpose of securing in the end just and proper rates."[8] This might illustrate the importance of the perception of social values and public attitudes against the evil of trusts. In the end, the majority understood competition as the answer to obtaining just prices.

Justice White, along with the judges of the circuit and appellate courts viewed price-fixing, as a reasonable standard. Price-fixing agreements are not seen as something illegal per-se, but rather something to be observed according to its context. For instance, if the agreement among carriers didn't exist, unrestricted competition would "injuriously discriminate" among consumers. This was an evil that would actually be stopped by permitting for the curbing of competition through "liberty of contract and freedom of trade." Thus, a reasonable agreement would not be voided by the

[8] *United States v. Trans-Missouri Freight Association*, 166 U.S. 290, 328 (1897).

Sherman Act.

Throughout its development, the rule against price-fixing revealed the tension between a broad view vs a restricted view of competition. In the broad view, private agreements restricting competition are forbidden. In the restricted view, agreements may curb competition in order to achieve other goals such as: the protection of small businesses; avoidance of the ruin of businesses; and the benefits to consumers. Notice that both sides are argued on what was perceived as social values and public attitudes against the evil of trusts.

2.2.3. THE RULE OF REASON AND THE PER SE ILLEGALITY

The "per se rule" and "rule of reason" were legal doctrines developed in order to approach each vision of competition in a consistent manner. Each rule was the product of the different views on what was admissible in order to curb competition. The distinction allowed for the identification of when a business behavior should be observed as reasonable and when it should be considered plainly illegal.

The rule against price-fixing differentiates between horizontal and vertical competition. Horizontal price-fixing on most occasions had been regarded as a hard-core violation and inherently an illegal per se conduct. It cannot be legally justified. The Supreme Court in the Socony-Vacuum Oil Co. (1940) decision established that a "combination formed for the purpose and with the effect of raising, depressing, fixing, pegging or stabilizing the price of a commodity in interstate or foreign commerce is illegal per se."[9] To the contrary, the rule of reason applies to vertical price fixing. This rule was elaborated by Justice Brandeis in the Supreme Court decision Chicago Board of Trade Association[10] (1918), which, said: "The true test of legality is whether the restraint imposed is such as merely regulates and perhaps thereby promotes competition or whether it is such as may suppress or even destroy competition."

---

[9] *United States v. Socony-Vacuum Oil Co.,* 310 U.S. 150 (1940).

[10] *Chicago Board of Trade v. United States*, 246 U.S. 231 (1918).

The boundaries between what ought to be reviewed as a rule of reason and a per se illegality in price-fixing, change as the values and attitudes against competition change. For example, until recently vertical price-fixing agreements were judged as per se illegal. A change occurred when the Supreme Court in Leegin Creative Leather Products, Inc.[11] (2007) overruled the prohibition that was established in Dr. Miles Medical Co. [12] (1911) during the early years of the antitrust law, for a rule of reason. Dr. Miles was a company that produced "tonic medicine" and sold it mostly in drug stores. It argued that price-fixing was necessary because its demand for "tonic medicine" relied on retail druggists, and in order to maintain a fair profit, the retail druggist was necessary. This was especially true when retail drug stores had to face cutthroat competition from department stores; believing they could not obtain sufficient profits and therefore stopped stocking the product.

In Dr. Miles Co., the Supreme Court argued that "agreement or combinations between dealers, having for their sole purpose the destruction of competition and the fixing of prices, are injurious to the public and void. They are not saved by the advantages which the participants expect to derive from the enhanced price to the consumer." [13]

This was a clear and simple rule because it considered price-fixing's minimum resale products as per se illegal. The ruling may be regarded as a "bright-line rule" of antitrust law.[14] But it generated reactions on a broad sector of the public which viewed cutthroat competition by big business as a menace against small merchants and businesses.

Moreover, the strategy of Dr. Miles' company was not an isolated case, it represented a desire of industry to stabilize prices, avoiding the ruinous competition of department stores. There is some evidence that small merchants, businessmen and even lawyers, such as Louis Brandeis reacted to the literalist interpretation of the Sherman Act (1890) advocated a different view of competition by forming the American Fair Trade League. For example, Laura Phillips Sawyer argues that "Brandeis and proponents of fair trade…were concerned with more than economic efficiency." (Phillips 2016)

---

[11] *Leegin Creative Leather Products, Inc. v. PSKS, Inc., 551 U.S. 877* (2007).

[12] *Dr. Miles Medical Co. v. John D. Park & Sons Co., 220 U.S. 373* (1911).

[13] *Dr. Miles Medical Co. v. John D. Park & Sons Co., 220 U.S. 373* (1911).

[14] See Justice Steven G. Breyer dissent in *Leegin Creative Leather Products, Inc. v. PSKS, Inc., 551 U.S. 877* (2007).

The movement litigated and lobbied the interests of small merchants, businesses and trade associations; settling prices as a way to preserve small businesses from the menace of ruinous competition of big businesses. And, although the achievements of the movement were limited in court decisions, its propositions were more receptive by at the state and federal level with fair trade legislation and the Miller Tydings Fair Trade Act of 1937[15]. (Phillips 2018)

It appears that the shift in people attitudes of competition from a "free and unrestricted" to a more skeptical view of competition which exhibits particular fear of the abuse by "big business". The next section presents the small business fairness concern, which underlies a particular fear in the abuse of big business brining about the ruin of small businesses.

2.2.4. THE SMALL BUSINESS FAIRNESS CONCERN

In 1913, Louis Brandeis published "Competition that Kills", in the Harper's Weekly magazine. (Brandeis 1913) The article criticizes the Supreme Court rule established in Dr. Miles (1911) arguing in favor of the dissent of Justice Holmes.

The article starts with the observation that Justice Holmes dissenting opinion expressed a concern for how unscrupulous businesses would be able to cut reasonable prices destroying business competition.[16] Brandeis shared this view and praised a competition system with the liberty of industry and trade for small businesses. This was possible because it permitted businesses to curb competition by vertical price-fixing agreements; though, to be fair, his views were different. He differentiated between price-fixing done by trusts with monopoly power, and the independent producer who price-fixed its product down in trade. The harmful effects were different. If a customer bought from a trust with monopoly power, he did not have anywhere else to go, he either had to take it or leave it. On the contrary, if the independent producer fixed prices over what should be reasonable, the consumer

---

[15] The act created an exemption of Section 1 of the Sherman Act (1890) for resale price fixing at the retail level in interstate commerce.

[16] Justice Holmes in the dissenting opinion in *Dr. Miles* (1911) expressed "I cannot believe...that in the long run the public will profit by this course, permitting knaves to cut reasonable prices for mere ulterior purposes of their own, and thus to impair, if not destroy, the production and the sale of articles which it is assumed to be desirable the people should be able to get." *Dr. Miles Medical Co. v. John D. Park & Sons Co., 220 U.S. 373* (1911).

would go elsewhere or not even buy. Either the case, he believed that higher prices will attract more competition.

The interesting fact is that Brandeis didn't view high prices as something wrong as long as they provided fair profits for the preservation of small independent firms. He pointed out that low prices did not necessarily benefit the consumer, nor were low prices necessarily a reflection of efficiency. To the contrary, he viewed them as the result of trusts having the power to corner the market.

Brandeis' main concern with competition was the need to obtain equality and protect democracy by maintaining small independent businesses. Observe his words:

> "Already the displacement of the small independent business man by the huge corporation with its myriad of employees, its absentee ownership and its financier control presents a grave danger to our democracy. The social loss is great; and there is no economic gain. But the process of capitalizing free Americans is not an inevitable one. It is not even in accord with the natural law of business. It is largely the result of unwise, man-made, privilege-creating law, which has stimulated existing tendencies to inequality instead of discouraging them."

But more than this, he praised a fair view of competition where independent businesses had the chance to level the market conditions by cooperating with other small businesses. Without the possibility of cooperation through price agreement on resale price maintenance, independent firms were at the mercy of cutthroat competition of retailers.

To sum up, Brandeis allowed for competition to be curbed if that permitted independent firms to stay afloat in order to protect democracy and achieve equality. Not permitting small businesses to participate in resale price maintenance agreements would exterminate small businesses and consolidate big businesses, thus creating more inequality and threatening democracy. However, people attitudes shifted again towards a "free and unrestricted" view of competition with the Chicago School of antitrust law in the 1970s. The next section presents how the narrative behind the rule of price fixing change since the rise of Chicago School.

2.3. THE CHICAGO SCHOOL OF ANTITRUST ANALYSIS

The Chicago School of antitrust analysis marked the reign of consumer welfare and efficiency as the exclusive goal of antitrust. The exclusive goal allowed for competition to be curbed in a consistent and predictable way in accordance with the sole goal of consumer welfare; this being understood as allocative efficiency and measured through low prices for consumers.

Antitrust was no longer at war with itself, because the maze of goals no longer existed due to consumer welfare and efficiency as the exclusive goal. Price-fixing behavior was analyzed exclusively through the lenses of price-theory with its main behavioral assumption of self-interest. The rational-choice or deterrence approach understood price-fixing as a decision built on a cost and benefit analysis plus the probability of being captured and sanctioned.

The Chicago revolution of antitrust analysis changed the narrative of price-fixing. Today, the rule against horizontal price-fixing agreements is built on the idea that any type of price agreement among competitors would harm consumer welfare and be socially inefficient. Besides horizontal price-fixing agreements, there are other agreements among competitors that are considered to be hard-core cartel agreements. This is due to their notable anticompetitive effect on the market, such as: market sharing or division; output restriction and bid rigging. Richard Posner explains the economic concept of the rule on horizontal price-fixing by saying that it is "a seller (or a group of sellers acting like a single seller) who can change the price at which his product will sell in the market by changing the quantity that he sells." (Posner 1976) The rule against price-fixing is supported by the idea that in the presence of horizontal market collusion there is a failure of competition. If a group of firms with some degree of market power were to engage in price-fixing they would be acting as a cartel, and the effect would be similar to a monopoly: setting prices and determining the production of quantities at a point where profits would be maximized.

2.3.1. WHAT HAPPENED WITH THE SMALL BUSINESS FAIRNESS CONCERN?

The small business fairness-concern today has been erased from the antitrust lexicon. The Chicago School revolution of antitrust analysis is responsible. Its approach uses price-theory as a method to

analyze antitrust law with one assumption: that businessmen behave according to a "rational profit-maximizer" model. (Posner 1979) That said, any non-economic concern of antitrust law, such as social values on cutthroat competition on small businesses was simply outdated and contrary to the nature of the "rational profit-maximizer." In fact, the supremacy of consumer welfare and efficiency as an antitrust exclusive goal started in the late 60s when Robert Bork argued that the congressional intent of the Sherman Act promoted consumer welfare as a unique policy goal. (Bork 1978)

Another implication of the "rational profit-maximizer" behavioral model, is that businessmen engage in price-fixing because they are maximizing profits. That said, businessmen will deter price-fixing whenever the expected benefit of the conduct is higher than the cost of the sanction divided by the probability of being detected and convicted by the enforcement authority. (Connor and Lande 2012) Although, the "rational profit-maximizer" behavior explains business people's behavior, it obscures the fact that people might be following other desires when engaging in price-fixing.

This section argues that a) the small business fairness-concern was obscured from antitrust analysis after Bork declared that "consumer welfare is the only legitimate goal of antitrust, not because antitrust is economics, but because it's the law." (Bork 1967) And, b) the deterrence model is incomplete because it leaves behind other desires that had played a key role in curbing competition in the past.

2.3.2. THE EXCLUSIVE GOAL OF ANTITRUST LAW: THE RISE OF CONSUMER WELFARE

The rise of consumer welfare as the unique goal of antitrust law gained preponderance among legal scholars after Robert Bork's narrative transformed antitrust law goals. The transformation erased social concerns, such as cutthroat competition against small business; declaring that "consumer welfare is the only legitimate goal of antitrust, not because antitrust is economics, but because it's the law." Particularly, Bork's thesis sustained that the Sherman Act could only be interpreted through the lenses of consumer welfare. This was due to the fact that antitrust legal rules were shaped by the Supreme Court and as an unrepresentative institution of the people it was the only legitimate ground that could consistently be interpreted. (Bork 1978)

Bork critically observed that antitrust law was at war with itself, because the mere of fact of considering other goals – grounded on fair or ethical concerns of competition - besides consumer welfare placed antitrust law in danger of self-destruction. The best way to obtain the consumer welfare was through efficiency of market transactions.[17]

Consider, as an example, Bork's contention to the Supreme Court decision in the Von's Grocery case (1966).[18] In this case the Supreme Court ordered a divestiture of a merger between two leading competitors which formed the second biggest chain in the retail grocery business in Los Angeles. The Court's argument reflected the concern regarding big business abuse. The expansion was being done in a market whose tendency was to have fewer owner-competitors. The merger, a cut-throat competition that affected small businesses, allowed "big business" to put more pressure on the big Mom and Pop stores. Bork viewed the case as an example of war with itself, because, he viewed different antitrust goals in play. On the one hand, he noted Mom and Pop stores with obsolete facilities and poor infrastructure. On the other hand, he noted a merger that not only reduced costs, but was of the belief that concentrated markets provided economies of scale and benefitted consumers with low prices. Two goals in conflict: "small business welfare" versus "consumer welfare". In Bork's view, "consumer welfare is the only legitimate goal of antitrust law, not because antitrust is economics, but because it is law." (Bork 1967)

By the end of the '70s, consumer welfare dominated antitrust law thinking as the unique goal of the Sherman Act. That was when the Supreme Court adopted the consumer welfare approach as a unique goal.[19] Since then each attempt to bring into focus other social values, such as small business

[17] In Bork work consumer welfare must be understood as allocative efficiency. Professor Thomas Ulen and Robert Cooter define "allocative efficiency, concerns the satisfaction of individual preferences. A particular situation is said to be Pareto or allocatively efficient if it is impossible to change it so as to make at least one person better off (in his own estimation) without making another person worse off (again, in his own estimation)." (Cooter and Ulen 2007).

[18] United States v. Von's Grocery Co., 384 U.S. 270 (1966).

[19] In 1979, the Supreme Court in Reiter v. Sonotone Corp., 442 U.S. 330, 343 (1979) declared "Congress designed the Sherman Act as a 'consumer welfare prescription". In 1984, the Supreme Court cites this decision in NCAA v. Board of Regents, 468 U.S. 85 (1984).

fairness, has been repealed under the motto of populism.

2.3.3. THE INSTRUMENTAL APPROACH

The rule against horizontal price fixing agreements was built on the assumption that any type of price agreement among competitors would affect consumer welfare and efficiency. If a group of competing firms with some degree of market power participated in price-fixing they acted as a cartel, to all intents and purposes as a monopoly, setting prices and determining the production of quantities to the point where profits are maximized. (Posner 1976).[20]

The assumption that businessmen are rational profit-maximizers is not a trivial matter. If the assumption behind price-fixing behavior were that, by lessening competition, businessmen expected to increase profits, this would imply a cost benefit decision. Whenever the price-fixers expected that a benefit would be higher than the benefit they would obtain by competing against each other, they would most likely collude. The Chicago School analysis may be observed in Gary Becker's approach to criminal behavior. (Becker 1968) According to Becker criminal behavior is likely to happen if:

> "the expected utility to him exceeds the utility he could get by using his time and other resources at other activities. Some persons become "criminals," therefore, not because their basic motivation differs from that of other persons, but because their benefits and costs differ."

Narrowing the observation to the price-fixing behavior of businessmen, the expected benefits of price-fixing must outweigh the benefits of competition. Participating in the price-fixing agreement is accompanied by the loss of opportunity regarding the benefits of competition. Moreover, the "expected utility" of crime must outweigh the "expected costs", which includes the odds of being

---

[20] The economic rationale may be appreciated in the definition of Richard Posner, a leading scholar in the Law and Economics movement, "a seller (or a group of sellers acting like a single seller) who can change the price at which his product will sell in the market by changing the quantity that he sells." (Posner 1976)

discovered, processed and convicted, as well as the damage the crime causes society. If it is price-fixing, it ought to be punished with a system of fines; if it is murder it ought to be sanctioned with criminal sanctions, such as imprisonment. The material harm in the first one could be compensated, but in the second one, no amount of money would be able to repair the harm. (Becker 1968)

Price-fixing behavior cannot be entirely abolished. It would be too expensive to achieve this type of political goal. That said, a certain amount of price-fixing must be tolerated. Let's observe the following example: Imagine a city with four hair salons located around the city. Every month the four owners of the salons meet and agree on the prices of haircuts that they will charge in each store. Let's say, they might decide the price of haircuts will be $30 for the next month. Suppose each hair salon obtains an extra benefit of $500 and the odds of being discovered and punished are 1 in 10; the expected punishment being 0.1(500) = $50. (Cooter and Ulen 2007) Thus, the hair salons might be tempted to price-fix according to the postulates of the price theory. The cost of eliminating all types of price-fixing behavior seems to outweigh the financial resources that government would need in order to achieve this goal. That said, a system where price-fixers caught are harshly punished by having to pay high fines, seems superior to a system of criminal punishment for price-fixing behavior.

In the United States, treble damages in civil actions and criminal charges are the mechanism to enforce antitrust legislation. (G. Werden 2009) For instance, from 2005 to 2015, the number of fines and penalties obtained by the Justice Department went from $338 million dollars to $3.6 billion dollars; on average there were more than 51 investigations initiated for restraint of trade or Section 1 violations of the Sherman Act. (Justice 2015) However, it was only after the introduction of leniency programs that antitrust enforcers seemed to effectively begin to break up hard-core cartels. (Hammond 2000)

Needless to say, the Chicago antitrust revolution made an important contribution by permitting courts to draw lines in antitrust law in a consistent and predictable way. Take as an example, resale price maintenance (RPM). Until recently the per se rule against price fixing in vertical agreements

changed when the Supreme Court in Leegin case[21] (2007) overruled the prohibition that was established in Dr. Miles case[22] for a rule of reason. The RPM business practice before the Chicago antitrust revolution was judged as an illegal per se conduct.

Today, the RPM view seems broadly accepted in antitrust law. Lester G. Telser (G. T. Lester 1960) and T.H. Silcock (Silcock 1938), among other economists, have argued that vertical restraint agreements have important social gains. First, and most important, RPM does not affect competition; if the supplier or producer has a market power, it will be exercised on the "wholesale price" for it is not in the interest of the supplier to limit the retailer's competitive power. Second, RPM disincentives tend to discourage consumer free-riding on the retail level, and to avoid a race to the bottom in the channel of distribution (Mankiw 2014).

In summary, price-fixing behavior was analyzed exclusively through the lenses of price theory, with its main behavioral assumption of self-interest. The rational-choice, or deterrence approach, understands price fixing as a decision built on a cost-benefit analysis, plus the probability of being captured and sanctioned. However, the deterrence model is incomplete, because it leaves out other interests that had curbed competition in the past. First of all, not all people are prone to observe "consumer welfare" as a unique antitrust goal. Legislative history suggests that other social values, such as the value of fairness in competition, which Bork calls "small business welfare", is a legitimate concern of antitrust law.

The rule against price-fixing commands market actors to set prices individually and forbids other competitive term agreements. Antitrust law obtains compliance of this rule by using a traditional instrumental approach where a threat or reward is used to induce behavior (e.g. the carrot and stick approach of leniency programs). The instrumental path seems to have simplified the analysis of antitrust offenses by recognizing only the "rational profit-maximizer" matrix. The problem is that the policymaker overlooks any normative motivation of what the social values and moral attitudes are that enable people to obey antitrust rules. (Tyler 2006)

---

[21] *Leegin Creative Leather Products, Inc. v. PSKS, Inc., 551 U.S. 877* (2007).

[22] *Dr. Miles Medical Co. v. John D. Park & Sons Co., 220 U.S. 373* (1911).

There is, in addition, a normative approach; if people believe that price-fixing is morally wrong, they will obey the rule (e.g. corporate compliance programs). Indeed, without some degree of legitimacy, law translates into "empty words" and regulations will have to rely on an expensive carrot and stick approach. In the opposite corner, when law is synchronized with people's moral attitudes, social values enforcement runs smoothly. This is because people have judged that the law is a legitimate source of morality.

There are more theoretical articles than empirical studies which explore the relationship between antitrust law and morality; the next section presents the existing literature.

2.4. VERY FEW SCHOLARS HAVE EXPLORED THE RELATION BETWEEN ANTITRUST LAW AND MORALITY

The relationship between morality and antitrust is an unexplored frontier in antitrust law. A limited number of scholars have explored it, probably because of the manner in which antitrust law has been constructed through the lens of economic science. However, in recent years there has been a shift and some scholars have explored the relationship between them. This section provides a small window into the work developed by some authors of the area:

2.4.1. "WHY PRICE FIXERS SHOULD GO TO PRISON" (Werden and Simon 1987)

According to the Becker model, fines are a price measured in units while prison is a price measured in time, that being the only difference. By the end of the '80s, some antitrust law scholars, focused on optimal penalties, considered that price-fixing should be punished exclusively with fines in accordance with the Becker model approach.

Werden and Simon argued to the contrary, stating that price-fixers should go to prison because it was the more efficient penalty. The paper explains in economic terms why it is harmful and nocuous to price-fix. The two main reasons are: (a) wealth transfers from customers to price-fixers; and (b), the dead-weight loss to society or the reduction of quantity of price increases. They also claim that

Becker's optimal fine would exceed the ability of payment by price-fixers, thus leaving imprisonment as optimal.

Leaving Becker's economic model of optimal penalties aside, it is interesting to observe a moral perspective in the paper. First, price-fixing is equated to child molestation; and, second, they claim that if society taxes price-fixing, it would send the wrong message. From their perspective, accepting a tax system for price-fixing is equal to accepting a tax for child molestation. It should not be tolerated. This bottom line denotes a profound dislike for price-fixing and a judgment between what is wrong and what is right.

2.4.2. "MORALITY AND ANTITRUST LAW" (Stucke 2006)

Maurice E. Stucke, a former trial attorney for the department of justice, provides a theoretical panoramic overview of the relationship which exists between morality and antitrust law. He argues that there is no general consensus on the wrongness of antitrust offense and points out that the views seem divided among those who judge them to be: immoral, amoral and moral. Although he views morality as a tool that helps for the enforcement of antitrust law, he believes it should be debated. However, he recognizes the limitations and understands the need to research the clash of views regarding antitrust behavior.

2.4.3. "CARTEL CRIMINALIZATION AND THE CHALLENGE OF MORAL WRONGFULNESS" (Whelan 2013)

Peter Whelan goes a step further in the analysis of the relationship which exists between morality and antitrust law, through a classical "norms based" theoretical approach of the moral wrongfulness of collusion behavior. He proposes that cartel activity, conceivably, could be judged as wrong because it violates moral norms, especially through stealing, deceiving and cheating. However, he recognizes the limited empirical evidence that supports these claims; therefore, he proposes more research in the field.

2.4.4. COLLUSIVE TENDERING IN AUSTRALIA - (Zarkada-Fraser and Skitmore 2000)

Anna Zarkada-Fraser and Martin Skitmore, two scholars, have done field research in Australia. Compiling data through telephone interviews and surveys, they researched attitudes and intentions of business people in the construction industry in Australia in the late 1990's. Their results suggest that, for construction companies in Australia, collusive tendering was a decision with a moral component. For a particular demographic group, participating in collusion is a contingent event. They found that certain characteristics were more sensitive towards "company values than to principles and feelings of right and wrong."

2.4.5. "SURVEY OF PUBLIC ATTITUDES TO PRICE FIXING IN THE UK, GERMANY, ITALY AND THE USA" (Stephan 2017).

Andreas Stephan conducted four public surveys in 2014 through YouGov and Research Now.[23] The samples selected were to be representative of the general population (United Kingdom N=2509, Germany N=2648, Italy N=2521 and United States N=2913). (Stephan 2017).

Experimental subjects were asked to react to vignettes in which businesses were engaged in monthly price-fixing. For instance, under the assumption that grocery stores were fixing new prices every month, respondents, confronted with the following attitudes, would have to decide which one of the following attitudes they agreed with:

> "...Shopper A believes that this is good for customers because it ensures similar prices and saves them the hassle of searching each shop for the lowest price / Shopper B believes that this is bad for customers because it will result in higher prices."

74% of respondents in the United Kingdom, 72% in Germany, 68% in Italy and 64% in the United

[23] YouGov and Research Now are market research and analytics companies, the first with headquarters in London, U.K and the later with headquarters in Plano, Texas, in the United States. (https://yougov.co.uk).

States, all agreed with B. The study argues that consumers observe price agreements as bad because they lead to higher consumer prices. Stephan claims that for a broad range of the public in the United Kingdom, Germany, Italy and the United States, price-fixing is viewed as a harmful act that ought to be punished; suggesting that price-fixing is neither neutral nor morally ambiguous. (Stephan 2017).

2.4.6. WHY DO COMPANIES SUCCUMB TO PRICE FIXING? (Sonnenfeld and Lawrence 1978)

Towards the end of the 70's, Jeffrey A. Sonnenfeld and Paul R. Lawrence answered this question by interviewing 40 folding-box executives. At that time, the folding-box industry had over 450 companies; the biggest one controlled 10% of the sales market, followed by others controlling 7 and 5%. However, 23 of the firms charged controlled 70% of the industry's annual output, earning $1 billion dollars. In the paper, they identified different factors - economic, industrial and technological - that led to price-fixing by the executives. Thus, granting credence to the existence of attitudes within the company culture or in the personal attitudes of executives that were more linked to moral attitudes and social values. (Sonnenfeld and Lawrence 1978)

First of all, "the culture of the business" embodies the social values that are accepted by businessmen as a normal way to conduct business. Executives argued that they were not evil people, it is just that throughout history, they have been subjected to different rules. In an interview, a convicted executive stated:

> "Price agreements between competitors was a way of life. Our ethics were not out of line with what was being done in this company and, in fact, in this industry for a long time. I've been in this industry for 32 year, and this situation was not a passing incident. That's just the way I was brought up in this business, right or wrong."

If price-fixing is part of the business culture and has been present for years, even decades, changing the way people behave may just be very complicated. Their attitudes, therefore, correspond to the social values of the business in which they work.

Secondly, cutthroat competition makes it difficult for companies to maintain competitive. The authors point out that when executives have to decide between either business survival or corporate ethics, the latter is sacrificed. In the following interview, a division manager stated:

> "This sector has been ripped off by big customers for long time. Anything this industry has done has been more in defense than offense. Business is really dwindling, and we are even more dependent on pleasing the big customers we depend on...Now the pressures are not to make more money but keep from going under. Price discussions between competitors are important just to keep from going broke. Our customers should be investigated instead."

The study suggest that people's social values and moral attitudes diverge from antitrust law. Two observations: first, the fact that some people accept that price-fixing happens because business culture does it, suggests that more people do it because it is socially acceptable; second, some people, even knowing that its unlawful to price-fix, accept this practice if that means saving a business.

In summary, the rule against price-fixing commands market actors to set prices individually; forbidding any other agreement regarding competitive terms. Antitrust law obtains compliance of this rule by using a traditional instrumental approach where a threat or reward induces behavior (e.g. carrot and stick approach of leniency programs). There is, in addition, a normative approach, if people believe that price-fixing is morally wrong, they will then obey the rule (e.g. corporate compliance programs). Indeed, without some degree of legitimacy, law translates into "empty words"; forcing regulation to then rely on an expensive carrot and stick approach. In the opposite corner, when the law is synchronized with people's moral attitudes and social values, enforcement runs smoothly; people will judge the law as a legitimate source of morality.

2.5. THE IMPORTANCE OF SOCIAL VALUES AND MORAL ATTITUDES ABOUT PRICE FIXING BEHAVIOR

People's price-fixing behavior is surely influenced by other social values besides consumer welfare.

In the early days of the antitrust movement, the concern was for the survival of small businesses when faced with cutthroat competition; this was something that was taken into account by antitrust law. This was actually the claim of Bork when he challenged antitrust law on the ground that it was at war with itself. In fact, people's attitudes against competition may still reflect these concerns. If that were the case, antitrust law would be answering only one claim while leaving behind other important social values. When law diverges from people moral intuitions, the legitimacy of the law suffers because people will not comply voluntarily.

That said, understanding the social values and moral attitudes of antitrust behavior provides a clear edge for its compliance. In the example of John Craig Havemeyer's resignation from the Sugar Trust family business, his normative views about what was wrong are what led him to resign, even going against his own personal interests. If businessmen truly believe that price-fixing is something that is wrong, they will act as John Craig Havemeyer did. If the law corresponds with their own social values and attitudes, people will judge the law as a legitimate source of morality.

Moreover, the Competition Committee of the Organization for Economic Cooperation & Development (OECD) recognizes the importance of understanding the relationship between morality and an effective compliance to antitrust laws; implying that normative commitment via the personal morality of stakeholders influences the order in which firms assign resources to comply with the law. Under that assumption, the OECD have suggested that antitrust administrative authorities highlight and promote "the idea", through media and other advocacy groups, that anticompetitive conduct is seen by the public as, "not only illegal, but immoral". (OECD 2011)

In recent years, some scholars have raised concerns regarding fairness in antitrust law. Tim Wu and Lisa Khan especially, along with other scholars and journalists that belong to the Open Market Institute, have argued that antitrust law is outdated for tech markets. In the "Amazon's Antitrust Paradox", Lisa Khan (Khan 2017), argues that the concern for consumer welfare has not been updated in order to take into account new anticompetitive concerns that have surged since the dominance of Amazon in e-commerce. Similarly, Tim Wu, in his book, "The Curse of Bigness: Antitrust in the New Gilded Age" (Wu 2018), renews old concerns regarding the relationship between the abuse of "big business" and inequality, and the risks and social challenges that

democracy has in a new Gilded Age in America. Indeed, the profound controversy which exists over the role of new concerns in competition law that are being debated, is different, though related to, the moral dimension that has not been observed by antitrust scholars.

2.6. CONCLUSION

The rule against price fixing commands market actors to set prices individually and forbids other agreements regarding competitive terms. Antitrust law obtains compliance to this rule by using a traditional instrumental approach where either a threat or a reward induces behavior (e.g. the carrot and stick approach of leniency programs). There is, in addition, a normative approach; if people believe that price-fixing is morally wrong, they will obey the rule (e.g. corporate compliance programs). Indeed, without some degree of legitimacy, law translates into "empty words" and regulation will have to rely on an expensive carrot and stick approach. In the opposite corner, where law is synchronized with people's moral attitudes and social values, enforcement runs smoothly. People will judge the law as a legitimate source of morality.

Implementing a normative approach requires focusing on the social values which influence people's behavior which regarding the price-fixing rule. It is an empirical question; whether persons consider price-fixing agreements to be a moral violation or not. Currently, limited empirical research has studied morality and antitrust without taking into consideration the social values that influence people's judgment. This dissertation attempts to extend a new empirical field by focusing its object of study on the moral divergence which exists in the rule against price-fixing.

Because of the limited number of scholars who have researched the relationship between fairness and antitrust law, such as the rule against price-fixing, there is still an open area for such research. In fact, antitrust law needs to explore the perception of fairness behind price-fixing behavior; by understating this relationship, it is possible that better strategies of compliance be developed.

CHAPTER 3: A THEORETICAL FRAMEWORK OF THE MORALITY BEHIND PRICE FIXING

3.1. INTRODUCTION

John Craig Havemeyer's confession during a service night in the Westminster Presbyterian Church, Milwaukee, indicates the significance of the role morality plays in antitrust enforcement. His remarks when he left the sugar trust in 1902 suggested a life committed to Christianity and questioned the way that a family business was managed. This would suggest that his behavior aligned with what he saw as just and moral; forcing him, in the end, to resign his family business. (The New York Times 1902)

The previous example is closely associated to the work of Tom Tyler on legitimacy, justifying people's obedience to the law. ((Tyler 2006) Tyler's work explores the relationship which exists between normative compliance from a normative perspective; suggesting that people are motivated to obey the law because they believe that it is proper to do so. Furthermore, he suggests that people's reactions are based on their evaluation of whether justice or injustice relates to their experiences and that in evaluating the justice of their experiences, they first consider factors unrelated to the outcome. These would be factors such as whether they have had a chance to state their case or whether they have been treated with dignity and respect. On all of these levels, people's normative attitudes matter, influencing what they think and/or do.

The image of the person which results from these findings is one where attitudes and behavior are influenced to an important degree by social values as well as by personal views about what is the right and /or proper thing to do. This image differs strikingly from that of the self-interest models which dominate current legal thinking in antitrust law.

A normative approach to antitrust law would require the exploration of the relationship between antitrust law and moral views. Research done by Stephan (2008) (2015) (2017) contributes to the view of what is wrong with price fixing. His findings suggest that price fixing has a moral dimension in which price fixing is viewed as a moral wrong. The expectation is that prices should be the result

of competition, not due to business agreements. This dissertation proposes to continue this line by exploring what is viewed as wrong in price fixing. The following section presents an initial theoretical framework to be used in exploring the reasons why people judge price fixing to be a moral violation.

3.2. THE NATURE OF MORAL JUDGMENT

An entire field of moral psychology is devoted to gaining an understanding of the meaning of "morality". In order to answer the question of whether price fixing is a moral violation or not, it would seem useful to start by defining moral judgment as "the rightness or wrongness of specific acts or policies". (Waldmann, Nagel and Wiegmann 2012)

In moral psychology, the initial theory that dominated the field was "deliberative moral reasoning", which, claims that moral judgment is a result of a "conscious moral reasoning" and something that may be developed through a process of role taking that initiates since childhood. Probably, the most well-known representative of this view is Lawrence Kohlberg's and colleagues who claim "that moral development proceeds through a stage hierarchy in a step-wise, invariant sequence, regardless of sub – and cross-cultural variation in moral norms and beliefs." (Kohlberg, Levine and Hewer 1983)

However, during the last decades, the narrative supporting the theory of moral sentiments has switched from rationality to emotions and intuitions. (Kahneman and Sunstein 2005) New research frames moral judgment as the result of an automatic and rapid intuitive process referred to as a moral intuition. Jonathan Haidt, one of the leading scholars of this theory, defines it as "the sudden appearance in consciousness, or at the fringe of consciousness, of an evaluative feeling (like-dislike, good-bad) about the character or actions of a person, without any conscious awareness of having gone through steps of search, weighing evidence, or inferring a conclusion." (Haidt and Bjorklund 2008) This does not mean that moral reasoning is idle, instead, it plays an important but secondary role in arguing in favor of moral intuitions whenever they are socially required to support intuitions. (Graham, et al. 2013)

Moreover, Jonathan Haidt initially proposed the social intuitionist model, claiming that "moral judgment is caused by moral intuitions and is followed (when needed) by slow, ex post facto moral

reasoning". (Haidt 2001) Therefore, defining moral judgment as: "evaluations (good vs. bad) of the actions or character of a person that are made with respect to a set of virtues held to be obligatory by culture or subculture". (Haidt 2001) In his model, reasoning and intuition are both cognitive human processes that differentiate in the way they reach a judgment: reasoning involves a process of conscious thought that searches, analyzes available information and balances evidence in order to reach a judgment; intuition is a cognitive, spontaneous or automatic process that bypasses reason and reaches a moral judgment without any process of conscious thought. Further research by psychologists has led to labeling the intuitive process of thinking or "fast thinking" as System 1; and to labeling the conscious rational process or "slow thinking" as System 2. (Kahneman, Thinking Fast and Slow 2011)

Haidt advances his initial theory by proposing: first of all, nature and evolution have provided a universal first draft of moral structure; second, through a culture-learning process and experience, humans modify the initial draft throughout childhood and to some extent into adulthood; third, moral judgments are the result of an automatic process that bypasses reason and reaches a judgment of right and wrong without any process of conscious thought; fourth, if evolution has shaped humans' moral first draft and foundation morality as a response to marginal changes in nature and vicissitudes of life and society, then here might well exist a plural response for diverse, adaptive challenges. So far, six moral foundations have been identified and traced back to our ancestors. (Graham, et al. 2013)

According to Haidt et al., moral judgment is the result of a process of intuition sensitive to the categories of a moral foundation theory: care/harm; fairness/cheating; loyalty/betrayal; authority/subversion; and sanctity/degradation. This theory is not restricted to new foundations, other possible "candidates" could be contemplated as moral foundations. For example, the liberty/oppression foundation was included in a new category in recent years; this foundation can be understood as an emotional response of "reactance and resentment" of power that burdens personal liberty and freedom, understood as abusive. (Iyer, et al. 2012)

In summary, this dissertation understands that moral intuitions are emotional reactions of either disgust or enjoyment; reactions which are then used to evaluate social conducts. We would expand

our understanding of how people behave towards regulation of competition by examining moral intuitions. The following section questions and analyses price fixing in terms of moral violation, providing an initial hypothesis of people's reactions to price fixing.

3.3. FUNDAMENTS OF MORAL JUDGMENTS & PRICE FIXING

3.3.1. COMMUTATIVE JUSTICE AND THE DUAL ENTITLEMENT PRINCIPLE

The consumer's reaction to price fixing will depend on how the consumer perceives the fairness underlying the competitive market mechanism. Consumer judgment will be based on the reasons which justified businesses' departure from price mechanisms and the point used to set prices. For instance, if a labor strike affects both the supply of eggs as well as the wholesale price of eggs in a given region; the action taken by regional supermarkets in the setting of egg prices at a certain level might be perceived as fair. But, there would have to be limits. The businesses would have to set prices as something reasonable; and, particularly delimited by the initial frame established by the price mechanism.

The prediction regarding fairness perception when confronted by the deviation of market price has deep theoretical roots. Thomas Aquinas claimed that buyer and seller dealings are just when there is absolute equality, satisfying "mutual giving and receiving". This mutual benefit is the general rule for market transactions. However, extraordinarily market transactions would translate into greater benefits for one party over the benefits acquired by the other; resulting in one party imposing disadvantages over the other. (Aquinas 1273)

Aquinas' main argument is that the origin of the benefit obtained by the buyer is not originated by the action of the seller, but by some "circumstance" that affected the buyer. If a buyer obtains a "great advantage" when acquiring the property of the seller, without the seller suffering a disadvantage, then the seller "ought not to raise the price". Moreover, if the seller suffers a loss by selling at a market price, the just price should be adjusted to include "the loss that the sale brings on to the seller". (Aquinas 1273)

The commutative justice theory was solid ground for the scholastic school of economic thought. It

was a basis for the development of a theory for a just price, a natural price or market price existing between sellers and buyers as opposed to a legal price ruled by the government. (De Roover 1951) (Langholm 2006)

The theory of "commutative justice" and "just price" overlaps with the dual entitlement theory proposed by Kahneman, Knetsch, and Thaler (1986). This theory proposes that people observe rules of fairness in market pricing. The moral rule behind the dual entitlement is that market transactions are judged as unfair if one party profits at the expense of the other. Two ideas summarize this theory: (a) buyers perceive transaction terms as rights; and, (b) sellers have a right to profit according to the reference frame of the initial transaction.

Kaheman et al. (1986) inferred rules of fairness based on the perception of public opinion obtained through telephone surveys of randomly selected residents of two Canadian cities during 1984 and 1985. The study does not claim normative status; it is simply a descriptive claim which generalizes the public perception of fairness as an abbreviation based on what the public thinks it is. The study focuses on the fairness perception of market transactions, the outcomes for the parties involved and the motives behind the business action. Perhaps an excellent example which best explains the entitlement principle is the "snow shovel example".

Imagine for a moment a hardware store which sells snow shovels at $15; however, the morning after a large snowstorm, the hardware store raises the price to $20. According to their findings, 82% of those polled (N=107), judged the increase of 33% in the price of the snow shovels in the aftermath to be unfair. (Kahneman, Knetsch and Thaler 1986)

The work of Kahneman et al. (1986) was built on the same premises as that of Aquinas. Taking advantage of an increase in demand when caused by a blizzard would be judged as unfair; something that under the principle of Aquinas would also be considered unfair. In the scenario framed as "a large snowstorm," it is understood that while this is a circumstance that affects the buyer, the scenario is "not due to the seller". Because of the snowstorm, the buyers have a greater need for the snow shovels; however, the seller is not adding new value to the shovel nor is the seller accruing increased costs due to the snowstorm. Under Aquinas' theory, it would thus be unfair for the hardware store

to raise the prices on the snow shovels in order to take advantage of an increase in demand due to the snowstorm. In a scenario where the hardware store suffers an increase in its costs, Aquinas would say that if a seller suffers a loss by selling at a just price, the just price should then include 'the loss that the sale brings on to the seller". (Aquinas 1273)

The snow shovel example suggests that the general public judges the exploitation of market power as unfair. This example can also be applied to close substitutes of market power exploitation; even for mild abuses of market power. For instance, when a grocery store which had no competitors in a given location charged prices which were 5% higher than those charged in other communities by grocery stores which had to deal with other competitors; the behavior was judged to be unfair by 76% of respondents (N=101). (Kahneman, Knetsch and Thaler 1986)

Kahneman et al., also test the dual entitlement theory in demand auctions, a mechanism which clears the market for scarce goods. In 1983, the Cabbage Patch Kids dolls were normally sold for $20 dollars, but as the Christmas season approached, prices were hiked to $50 dollars per doll. (Ferretti 1984) In 1984 Kahneman et al. used the Cabbage Patch Doll craze in order to build a scenario: a store runs out of Cabbage Patch Dolls but is finally able to find one the week before Christmas Eve. The store managers then announced a demand auction as the method which would be used to allocate the unique doll. In the scenario created, the doll would be sold at auction to the person who offered to pay the most. Initially, the respondent's reactions were 74% (N=101) unfair. However, when the auction earnings were donated to UNICEF, respondents then judged the behavior of the business as only 26% unfair. (Kahneman, Knetsch and Thaler 1986)

The general findings of Kahneman et al. suggest that both consumers and producers observe terms and profits of transactions as entitlements. According to this principle, a seller would be judged as fair if in order to protect his profits, he sets prices in a transaction with competitors. However, if price increments were to be arbitrary, meaning unjustified (e.g. a cost-increasing event outside the firm's control), the price increase would be judged to be unfair and would be set against the entitlement of consumer reference prices. (Rajiv and Praveen 2003) (Kahneman, Knetsch and Thaler 1986)

Whether the theory is labeled commutative justice or dual entitlement, both ideas analyze the fairness of individual pricing decisions. We can envision the decision, judgment of price fairness as a comparison between two starting points that serve as a reference for pricing decisions:

1. The pre-existing terms on the consumer transaction.
2. The pre-existing profit earned by the business on the transaction.

The moral rule behind the principle of commutative justice or dual entitlement is that market transactions are judged as unfair when the new price increases the firm's profits at the expense of the buyer; nonetheless, this moral rule seems to be somewhat mitigated when a cost-increasing event occurs which is beyond the firm's control and the new price simply maintains the previous profit.

In a price-fixing scenario, consumers would react harshly to price-fixing which would increase the firm's profits in violation of the preexisting terms regarding consumers' transactions. Judging unfairness for the consumer would entail an important process which would involve analyzing the reasons the firm had to depart from the pricing mechanism. If a firm were to become victim to a cost-increase event outside the firm's control and which were to affect all of the industry, then price-fixing as such in order to maintain the firm's profit margin would then be judged as less unfair. Consumers would then compare the explicit price range established by the competitive market (the bottom and the roof price) to the new price provided by the firm's agreements. Thus, the price range provided by the competitive market would serve as a reference point for consumer comparisons. The firms would have to set reasonable prices within the price range. The new prices set by the firms would then be subject to a point of reference from which the consumers could judge whether the price fixing were reasonable or not.

To sum up, the theory of commutative justice/dual entitlement will be used as a framework in the analysis of the unfairness of price fixing. Two hypotheses may be observed:

H1: Consumers will judge price fixing as more unfair when the new price increases the businesses' profits.

H2: Consumers will judge price fixing as less unfair when a cost-increasing event occurs beyond the

business's control and the new price only maintains the previous profit.

3.3.2. THE DOCTRINE OF DOUBLE EFFECT

Consumers may have the tendency to judge price fixing according to its collateral effects. Specifically, consumer judgments regarding price fixing may be considered an instantiation of the doctrine of the double effect. The double effect principle explains the moral permissibility of an action that has harmful effects. This principle distinguishes between actions with foreseen harmful side effects vs. actions in which harm is a means to an end in order to obtain something good. For instance, the double effect principle might justify the bombing of a military target in wartime even if there are side effects in which civilians would be harmed. In this sense, the attack furthers the attacker's wartime goals and shortens the war; thus making it morally permissible even with having civilian casualties. The attacker might even justify a terror-bombing campaign similarly – claiming that the terror bombing would further the attacker's wartime goals and shorten the war. However, the double-effect principle could not be used to justify this attack. The terror-bombing campaign is a direct action that harms and thus the double-effect principle would not apply. (Miranda Montecinos 2008) (Boyle 2001) (Waldmann, Nagel and Wiegmann 2012). The idea of the double effect principle has a long provenance, dating back centuries.

3.3.3. THE THEOLOGICAL ORIGIN OF THE DOUBLE EFFECT PRINCIPLE.

The doctrine of double effect began as a theological idea. Theologians in the Catholic Church developed the theory in its classic form in the nineteenth century, arguing that human activities which are good or neutral are to be permitted in order to obtain a good effect, even if the actor could foresee a bad effect as a result of this action. In other words, a human action which is intrinsically good or neutral with two opposite effects possible, a good, intended effect and a bad, unintended effect, is approved when certain conditions are satisfied. (Gury 1852) (Mangan 1949) (Boyle 2001) (Marquis 2001) (Miranda Montecinos 2008).

The classical theological formulation of the theory recognizes four fundamental conditions needed at the same time in order for the action to be considered permissible. It is important to understand

these four conditions because philosophers and moral psychologists use these features as building blocks in conjecture of how people use the double effect principle to morally reason.

The first condition is “that the action in itself from its very object be good or at least indifferent”. (Mangan 1949) The action of the agent must be socially meaningful, considered “good”. This theological framework assumes “good” as an objective meaning within a social group. When something is “good”, there is a sentiment of satisfaction, approval, or pleasure; while the opposite sentiment produces dissatisfaction, disapproval or displeasure. This approach observes the effects of the action to categorize the feeling as good. But good also has a “social” meaning, referring to what is the right conduct in an objective manner for a social group. When a driver switches a trolley track, a doctor performs surgery, or when two companies enter into a business agreement, all these are actions that are socially constructed as “good” (or at least indifferent). This does not mean that these actions might not be seen as harmful, for other reasons, in which case they would be judged as harmful – not by the nature of their actions but by the effects resulting from their actions.

The second condition is “that the good effect and not the evil effect is intended.” (Mangan 1949) An intentional action is linked with deliberative behavior directed in order to obtain a result. The intention is a mental process of the agent. People judge intention through different ways. On some occasions, people rely on what they say, but they also use facts to judge the agent’s intentions. For instance, in the research done by Robert C. Ellickson of social norms in Shasta County, neighbors would likely judge cattle trespass as intended if the cattle rancher put a salt block that attracts his cattle on the property that suffered the trespass. The rancher's actions suggest a deliberative act. (Ellickson 1986) On other occasions people judge intention by using deontological rules as mental shortcuts such as a wrong may not produce a right. In this case, the intention is judged by the moral judgment of the action.

The third condition is "that the good effect is not produced by means of the evil effect." (Mangan 1949) If the harm were a means to an end of the good effect, the action would not be permissible. This condition is related to a deontological principle that bad things may not produce good things. (Gury 1852) (Luther 1903) For instance, suppose a physician prescribes drugs as a medical treatment to cure an illness that would otherwise pose a great danger to the patient’s life; knowing that there is

the possibility of side effects that could cause minor harm or even on a rare occasion, threaten the life of the patient. Imagine a physician that in the absence of other available antibiotics prescribes an antibiotic known to cause an allergic reaction as recorded in a patient's medical history. The benefit of the antibiotic is to battle a bacterial infection that threatens the patient's life, while the harmful effect would be the allergic reaction. The harm that comes as a consequence of the medical treatment would be observed as a side effect of the good action and would not be considered as intentional harm as a means to an end. This condition is similar to the second condition and has been debated in psychology literature in the studies of trolley problems, as it is discussed below.

The fourth condition is "that there be a proportionately grave reason for permitting the evil effect." (Mangan 1949) The benefit must be of a superior value in order to allow harm as a bad effect. For instance, according to the Catholic tradition, the preservation of the life of the person being attacked would be a grave reason to impose a bad effect. The example mentioned in the Catechism of the Catholic Church is that murder in self-defense is an honest act; the intention is not to kill but to defend one's own life, something good in itself. The bad effect is something foreseen but not directly intended, harming and even killing the person who attacks. The good effect is produced through self-defense; the bad effect is a mere consequence. The grave reason is the supreme good of preserving life.

3.3.4. PHILOSOPHERS TURNED THE DOCTRINE OF DOUBLE EFFECT INTO A NORMATIVE PROJECT.

Philippa Foot reformulated the doctrine of double effect by asking why there is a moral acceptance of unjust actions with the same benefit when harmful effects are not directly intended and not when harm is aimed with intention. (P. Foot 2001)

For instance, what happens when the pilot of an airplane with engine malfunction has to decide between an urban or rural area in which to crash-land when in either case, the decision of the pilot would pose harm to a third party? The pilot's decision would likely be to decide for the outcome which would cause the least harm possible, thus choosing to crash-land the airplane in a less populated area. Philippa Foot argued that human intuition would approve this type of behavior as

an action that was not directly intended to cause harm; but one in which harmful side effects were oblique and intentionally foreseen. (P. Foot 2001)

The self-contradictory example, which is not an example of double effect but is provided as an example outside the scope of the principle, would be a judge that faces a riot which is demanding the release of a suspect in police custody for vigilante justice or if the suspect is not released, the rioters will attack the community which would mean forthcoming murder for hundreds. Therefore, the judge must choose between either releasing a suspect for vigilante justice or condoning the bloodshed of the community. In this case, the action would be not allowed because the action of the judge would directly posit harm as part of the action.

From a consequentialist or utilitarian approach, the question will be which effect implies the least harm. From Foot's deontological approach the decision needs to be based on a moral reasoning that would directly favor unintended harmful actions even if the harmful consequences would be the same in both instances. To provide the deontological answer, Foot turned to the double-effect principle by differentiating between those actions that were directed towards harm, but unintended harm; and those which were intended to harm.

Foot borrowed Jeremy Bentham's idea of "direct" and "oblique" intentionality. (P. Foot 2001) Bentham understood intention as "the state of the will" of the agent, interpreted as a desire by John Austin and Philippa Foot. (Austin 1875) (P. Foot 2001) According to Bentham, the difference between direct and oblique is the place they occupy in the mental process that activates the agent action. Direct intentionality, implies that the result is a cause in the mental process that activates the action; however, if the result is something that will likely happen but is not a cause linked to the mental process that activates the action, it corresponds to an oblique intentionality. (Bentham 1879)

The trolley problem is the most well-known example that captures the essence of the double effect principle. In its basic form, a runaway trolley will run over five people if nothing is done. However, the only option to save the five people is to switch from the first rail to an alternative rail which has only one bystander. The action of switching the trolley rail is neither good nor bad by itself. The two opposite effects are saving five people by harming the bystander, and the second effect (killing

someone) is a byproduct of the first effect (throwing the switch). In another version of the trolley problem the actor – called the "agent" in this literature – stands on a footbridge above the rail and the only way to stop the runaway trolley is by pushing a "heavy man" that is also on the footbridge, to the track below (footbridge dilemma) (Thomson 1985).

The double effect principle helps to solve moral dilemmas of actions that cause harm by distinguishing between those that pose harm as a side effect and those which aim to harm as part of the action. (P. Foot 2001) In the case of the trolley dilemma, it would be expected that people would reason that the action is tolerated because harm is not aimed at directly but obliquely. However, in contrast, the footbridge dilemma would be censured as the harm is directly aimed as a means to an end.

Theologians and philosophers have thus formulated normative principles of the double effect theory by reasoning from consequentialist or deontological principles. Whether one agrees, or not, with the normative conclusions that might be drawn from the double-effect principle in any particular instance, will often depend on a person's perspective. Returning to the examples of the military attack having civilian casualties, even if the attacker justifies the attack by using the ideas of the double-effect principle, this does not mean that the victims of the attack will agree the attack was morally permissible. The claim is not that the application of the double-effect principle inevitably provides an answer to the moral permissibility of an action with which all will agree; rather, the claim is that people will use the idea of the double-effect principle in order to reason morally. Centuries of theological and philosophical illustrate this moral reasoning process; suggesting that the double-effect principle is deeply intuitive. Thus, there is every reason to expect that people will use the double-effect principle when engaging in moral reasoning about price fixing.

3.3.5. WHAT DRIVES PEOPLE TO MORAL JUDGMENT IN THE DOUBLE EFFECT DOCTRINE?

Moral psychologists have more recently turned to the question of whether the doctrine of the double effect accurately describes how people actually reason morally. The point made by moral psychologists is that not necessarily because a principle of moral philosophy says people should

reason in a certain manner that people end up reasoning in that way. The double effect doctrine has been extensively used to test what drives people's moral judgment, their conscious reasoning. (Kohlberg 1969) (Kohlberg, Levine and Hewer 1983) or their intuitive process. (Waldmann, Nagel and Wiegmann 2012) (Cushman 2016) (Mikhael 2007)

Moral psychologists have understood the content of the double effect principle as a moral rule that approves of harmful actions when it is the only manner in which to obtain a good outcome. Most often, the "good" of an outcome is judged in the number of human lives that are better off. This is probably given by the fact that moral psychologists have applied the trolley example as elaborated by Philippa Foot, to distinct harmful actions used as a mean or as a side effect. (P. Foot 2001)

The archetype example used in moral psychology experiments on the double effect principle is the trolley problem. The double effect principle requires two conditions for the approval of harmful actions: a) if a greater good comes from the harmful action; and b) if the harmful action does not serve as a means to a good outcome, but instead is a side effect that, if removed, would not affect the existence of the action. (Waldmann, Nagel and Wiegmann 2012)

Moral psychologists have explored the hypothetical formulation of the double effect principle through analysis of the trolley and footbridge dilemmas. These studies suggest that people would be more likely to accept the decision to switch tracks in the trolley dilemma but not in the footbridge dilemma. From there, the central question explored by the moral psychologist in trolley problems has been, what makes it a moral violation in the footbridge dilemma but not in the switching scenario? (Waldmann, Nagel and Wiegmann 2012)

Greene et al. proposed a dual process theory as an answer to the previous question. This theory considers that in some cases trolley problems are solved by two mental processes: a) "controlled cognitive responses": a "slow" system where thinking is the center of meditated decisions that follow "conscious reasoning" (e.g. consequentialist thinking); and, b) "intuitively emotional responses": a "fast" system where thinking is outstripped by intuition and gut feelings that follow emotions (e.g. deontological thinking). (Greene 2014) (Greene 2015)

Greene et al., observed a tendency to approve of human action under the trolley double effect principle because it seemed to rely less on emotional processing. This study used functional magnetic resonance imaging (fMRI) in order to associate brain activity when subjects were judging trolley problems, including the double effect theory. In total, 9 subjects responded to 60 dilemmas in two experiments. The findings suggested that the brain activity of the subjects was different depending on whether they were exposed to either the trolley or to the footbridge dilemma. For instance, trolley dilemma with areas related to "cognitive processes" (e.g. working memory, problem-solving, etc.). (Greene, Sommerville, et al. 2001) (Greene 2014). Therefore, the difference which exists between these dilemmas is that which is associated with the different characteristics of each scenario: the trolley dilemma is characterized as impersonal, whereas the footbridge dilemma is considered a personal moral violation.

The personal moral violation implies that: a) the action causes physical harm to a particular person; and that, b) the harm is derived directly from the agent's action. For instance, when the agent on the footbridge "pushes" the "heavy man", that is a personal moral violation. The agent is author of a harmful action that causes tremendous physical harm to a person. Contrary to all this, the impersonal moral judgment implies a) no physical harm to a particular person intended; and, b) the action of the agent does not intend or target harm, it simply redirects it. For instance, the agent that switches the tram rail does not create harm; his action will only redirect a threat of harm that is already exists. (Greene and Haidt 2002)

Moreover, people's moral judgment of trolley problems is influenced by: a) "personal" circumstances, where deontological thinking is driven by "intuitively emotional responses" and (b) "impersonal" circumstances, where consequentialist thinking is driven by "controlled cognitive responses". (Greene and Haidt 2002) (Greene 2014)

In other empirical research, Hauser et al. (2007) in a within-subjects study explored the trolley problem with a wider population. The pool of subjects was composed of more than 5,000 people from 120 countries and these were recruited through the Internet. The purpose of the study was to test the trolley problem in a more representative population, exploring the underlying mechanism

(e.g. conscious reasoning vs. intuitive emotional reasoning) used by people in order to process moral judgment decisions.

In the switching scenario, when the agent inside the trolley cabin switches the trolley onto a new track, thereby saving 5 people and harming 1 bystander, 89% of the subjects approved the action. On the contrary, in the footbridge scenario where harm is the means to an end, (the footbridge case where the agent pushes a heavy man off the footbridge and onto the track, thereby saving 5 people but harming the heavy man) only 11% of the subjects judge the action as permissible (N=2,646). (Hauser, et al. 2007)

Hauser et al. examined the underlying mechanism (e.g. conscious reasoning vs. intuitive emotional) of moral judgments in trolley problems by asking subjects who provided different answers in scenarios to justify answers in no more than 150 words. The results indicate that 70% of subjects (N=330) failed to explain in a conscious manner the judgment made according to any factual difference between the two trolley problems. For instance, if the subjects answered: "the death of the one man on the side track is not a necessary means to saving the five…the death of the one man on the bridge is necessary means to saving the five" would be classified as sufficient. On the contrary, if the subject responded: "It just seemed reasonable…it was gut feeling" would be classified as insufficient. (Hauser, et al. 2007)

Hauser et al. suggested that subjects' moral judgment relied on intuitions with little participation of conscious reasoning that was supposed to be justified by using as a proxy the principle of double effect; something that would indicate that some moral judgments are made in the absence of a complete comprehension of the reasons that would support the moral decision. (Hauser, et al. 2007)

The results confirmed that people do reason as the normative theory of double effect predicts and suggested that actions that foresee harmful effects that are not directly intended are more permissible than actions that intentionally cause harm as means to obtain a good. The results of Hauser et al. conflict with the idea that a conscious reasoned process drives moral judgment of the trolley problems. Rather, they claim that the double effect principle in the trolley problem is capturing a moral intuition.

Another finding of Hauser et al. (Hauser, et al. 2007) is that trolley problems seem guided by intentions of the agent in the personal-impersonal differences. Two experiments elaborated impersonal differences (e.g. switching the trolley to a new track) differing in the intention as a means vs. foreseen side effect in harming. As in the following scenario:

> Ned/Oscar is walking near the train tracks when he notices a train approaching out of control. Up ahead on the track are 5 people. Ned/Oscar is standing next to a switch, which he can throw to turn the train on to a side track. There is a heavy object on the side track. If the train hits the object, the object will slow down the train, giving the men time to escape/giving the people time to escape. The heavy object is 1 man, standing on the side track (Intended harm as means to an end) / There is one man standing on the sidetrack in front of the heavy object (Harm foreseen as side effect).

In the intended harm scenario 56% of the subjects judged the action as permissible, while in the harm foreseen side effect scenario 72% of the subjects judged the action as permissible (N = 2612). (Hauser, et al. 2007)

The results suggest that switching the trolley rack is a morally irrelevant action in both cases. An assumption of the double effect principle is that the agent must intend the good and not the bad effect. In either case, the action in the trolley problems has the same consequences (5 persons saved, 1 person harmed). The difference of both scenarios is the directness and intention of the action. In the footbridge scenario the action implies that the trolley is intended to hit a person, but in the switching scenario the trolley is intended to hit an object to reduce speed and harm is a foreseen side effect. If the person harmed (bad effect) is removed as a feature in the footbridge scenario the trolley would not reduce speed and the 5 persons would likely be harmed, whereas in the switching scenario the object would slow down the trolley saving the 5 persons.

The results of Hauser et al. (2007) suggests the main difference between moral judgment of trolley problems seem related with the agent intention of harm as a side effect or as a means to an end in order to achieve a greater good. This result complements the dual process proposed by Greene et

al. (2002) by adding new features in the debate that seem connected with the philosophical ground in which the theory is grounded. These features imply a closer look on the role of intention in the process of moral judgment in trolley problems.

In another empirical study Jonathan Baron et al. suggests that people seem to have a tendency to favor indirect vs. direct harm. (Royzman and Baron 2002) (Baron 2014) A total of 176 subjects responded to scenarios of an in-person survey with two versions at the end. The survey design implied actions that pose harm to obtain a good. The two endings differed between direct/indirect harm. For instance, a commercial aircraft that would be hit by a loose missile, and a respondent could decide between: a) direct action by altering a private jet course to interrupt the missile; or b) indirect action by altering the commercial plane course behind the private jet. Subjects seem to favor indirect harm over direct harm, across all the scenarios 88% approved indirect harm, 12% responded neutral and 1% approved direct harm. (Royzman and Baron 2002)

These studies indicate that the directness and intention of harmful action are relevant in determining what makes a moral violation the footbridge and not the switching scenario. The tendency of people in favoring indirect versus direct harm (Royzman and Baron 2002) (Baron 2014) overlaps with how people favor actions that are intended towards good outcomes and unintended harmful effects. (Hauser, et al. 2007)

Barak-Corren, et. al., classifies the deontological principle between an action and intention principle: the "action principle", prohibits any harmful action no matter what benefit comes from it ("do no harm"); and ,"the intention principle" forbids actions that intend to harm ("do not intend harm"). (Barak-Corren, et al. 2018)

The double effect principle is underlined by the action principle because people will approve the harmful consequences whenever the desire was not to harm in a direct manner. This will be the case of the bystander dilemma. However, the "do not intend harm" principle will forbid any action in the footbridge dilemma, because the desire to harm is a direct part of the action. (Barak-Corren, et al. 2018)

Finally, an action with harmful consequences will be approved whenever is not directed or intended to harm. This type of moral judgment will be considered as consequentialist, whenever moral judgment rejects the action and intention principle. Conversely, if the "do not intend harm" guides moral judgment, harmful consequences will be approved. If the harmful consequences are not desired (e.g. harming a bystander when tracks are switched), the action will be approved, and if the harmful consequences are intended to harm (e.g. pushing a "heavy man" in the tracks) as a means to an end, the action will be forbidden by the deontological principle. Finally, an issue that requires a closer look is the role of intention in the double effect doctrine and trolley problems.

3.3.6. THE MEANING OF INTENTION IN THE DOUBLE EFFECT PRINCIPLE

The role of intention in the double effect theory corresponds to a feature in moral judgment that forbids harmful actions that are directly intended to harm. (P. Foot 2001) According to Foot's definition of double effect, an action may have two effects: one intended and desired and the other foreseen and not desired. (P. Foot 2001) If the harmful action corresponds to direct intentionality it will be morally condemned as predicted by the double effect principle. In this same line of thought, Netta Barak-Corren argues that the role of intention is the essence of the deontological principle behind the double effect principle, as "do no intended harm." If the action desire implies harm as a means to an end it will violate the intention principle. (Barak-Corren, et al. 2018)

The idea of intentionality as a "desired outcome" corresponds to one of the five components that research in psychology has proposed as a "folk concept" of intentionality.[24] (Knobe 1997) (Robbennolt and Hans 2016) This means that Foot's and Bentham's use of intention matches with the concept that laypeople have about intention.

Psychological studies have shown that people have a tendency to evaluate intentional actions as more negative than unintended one. (Ames and Fiske 2013) (Darley and Huff 1990) (Young and Saxe 2011) (Robbennolt and Hans 2016) For example, Daniel L. Ames and Susan T. Fiske measured

[24] People's folk understanding of intentionality also includes: "belief, intention, awareness, and skill.) (Knobe, The Folk Concept of Intentionality 1997) (Robbennolt and Hans 2016)

the financial harm caused by a CEO to employees in an online research on M-Turk. The scenario implied a company with profit-sharing incentives, where employee compensation increased with company profits. The desire of the CEO switched between a business decision expecting a poor investment result (poor investment intention); and, a business decision expecting a good result (good investment intention). Regardless of the intention of the CEO, the business project performance was poor and the harmful effects on the employees were the same. Subjects were asked to judge how much harm the CEO business behavior caused to the employees. Subjects using a scale from 0 to 100 judged the poor investment intention as more harmful (M=65.95, SD=23.20) than the good investment intention (M=47.59, SD=26.40). (Ames and Fiske 2013)

The role of intention in the double effect principle is a key part of the process of moral judgment because people have tendency to view intentional harmful actions as more negative than unintentional harmful actions. The tendency to evaluate intentional actions as more negative than unintentional could be an explanation for the divergence in moral judgments in trolley problems, when people are confronted with harming a bystander to obtain a good consequence. The mean becomes the end. In other words, harming one person by pushing one to the tram to save five will be morally unacceptable, because the action is directly intended towards a harm outcome. The role of intention in the double effect theory is to influence moral judgment of harmful consequences. (Barak-Corren, et al. 2018)

The role of intention in the double effect theory means that people construct a picture of the mental state of the agent's desires. But, other possibility is that the moral judgment helps build the intentionality of the agent in the double effect principle. That will mean that the intentionality may be constructed backwards. The moral judgment will not follow the agent intention, but from the moral judgment of the side effect the intentionality of the agent actions will be determined. In other words, in some circumstances the moral judgment of harmful consequences leads to a judgment about the intentionality of the agent's actions.

In series of studies Joshua Knobe noticed people tendency to attribute intention when side effects were harmful, as oppose to helpful. This asymmetry is usually known as the Knobe effect. (Knobe

2003) Knobe, in one of his first studies conducted in a Manhattan Public Park, used the following example:

> "The vice-president of a company went to the chairman of the board and said, "We are thinking of starting a new program. It will help us increase profits, but it will also (harm/ help) the environment…The chairman of the board answered, "I don't care at all about (harming/helping) the environment. I just want to make as much profit as I can. Let's start the new program. They started the new program. Sure enough, the environment was harmed."

Knobe asked subjects to judge the degree of wrongfulness/compliment and the intentionality of the chairman action (scale 0-6). If the side effect was harmful, 82% of the subjects judged the chairman's action as intentional as compared to 77% where the side effect was unintentional. (Knobe 2003)

If the moral judgment of the intentionality of agent is constructed, this will explain why people in the footbridge dilemma disapprove pushing the person from the footbridge. The intentionality of the action seems to be constructed backwards from the side effect that implies to directly harm a person in order save five. In this case the intentionality of the agent is influenced by the harmful consequence of the side effect – harming the footbridge person – this type of deontological principal corresponds to the action principle: "do not harm". (Barak-Corren, et al. 2018)

In summary, the moral judgment of double effect doctrine is not exclusively grounded on moral consequentialist reasoning, but the puzzle seems to be constructed also by the intuitive use of deontological principles: "do not harm" and "do not intend to harm".

Some final observations:

First, the double effect principle captures moral intuitions whenever an action poses two opposite effects. Moral judgment will accept the harmful effect if the action does not use it as a means to an end (switching dilemma). On the contrary, people would condemn the action, whenever the harmful effect is something directly aimed as a means to an end (footbridge dilemma).

Second, the role of intention in the double effect theory corresponds to a feature in moral judgment that forbids harmful actions that are directly intended to harm. Two main ideas must be noted. Intention in the double effect is a key part of the process of moral judgment because people have tendency to view intentional harmful actions as more negative than unintentional harmful actions. And, intentionality is also constructed backwards; moral judgments of harmful consequences may shape viewer's perception of agent intention. The agent action must be directly intended to obtain a good effect, even if a negative consequence is foreseen.

3.3.7. PRICE FIXING AND THE DOUBLE EFFECT PRINCIPLE

Applied to price fixing, empirical research has suggested that people judge price fixing as something harmful because prices would rise. (Stephan 2017). Notice the sentiment is grounded on a consequence of price fixing. It comes after prices have risen. But what would happen if people observe positive consequences of price fixing, besides the negative effect?

Using the double effect principle, we can hypothesize that people intuitively might judge price fixing as an action with two opposite effects. On one side, the action would have as an end something honest, good, positive, that could be grounded on utilitarian motivation (e.g. the sustainability of jobs, of a business or protection of smaller firms). On the other, the bad effect would be the transfer of wealth from consumers to producers via higher prices, harm of consumers, and unfairness in market transaction, among others. On the other side, the price fixing has negative effect, something that would harm consumers such as wealth transfers via higher prices. In this case the price fixing would be a permissible action when it aims at the good effect and the bad effect is just something foreseen as a side effect.

The questions are not hypothetical. In fact, the United States antitrust law incorporates the principles of double effect. For example, the United States Supreme Court has established the rule of reason in vertical price fixing restraints (where an upstream manufacturer sets the prices at which a downstream seller may sell). The rule of reason is a legal approach by judicial or administrative agencies to evaluate the permissibility of restrictive business practices according to its pro-competitive

or anticompetitive effects. In Leegin when the Supreme Court overruled the prohibition established in Dr. Miles for a rule of reason it pondered what benefits and disadvantage resale price maintenance would have.[25] For instance, permitting a price fixing between the manufacturer and the retailers ensures retailers will earn a profit to be able to operate and likely helps expand manufacturer market versus the possibility of monopoly profits by retail cartel and harming consumers.

The Court's approach considers that the benefits of permitting the practice, outweighs the harmful effects that consumers might suffer through higher prices. If the vertical price fixing agreement happens to be a sham and existed without any real benefit, just with a purpose of cartelizing it would have to be invalid as an unlawful business practice under the rule of reason. The rule of reason approach means that the vertical price fixing is tolerated if good effects compensates bad effects. The resemblance derives from the idea that the double effect principle is a guide to approve behaviors that are intrinsically viewed as wrong, not because by nature they are wrongful but because of its effects, whenever good effects comes after them and compensate the bad effects.

Another example suggests existing antitrust legislation reflects the idea of double effect even in the area of horizontal price fixing. The Newspaper Preservation Act of 1970 established an exemption for joint operation arrangement for newspapers, whenever financial difficulties affected one of the newspapers in the same area. In the absence of this law, the joint operation agreements would be collusion among competitors in local newspaper markets. The purpose of the act was to maintain independent newspapers by merging operations (e.g. printing, distribution, advertisement, etc.) that would reduce costs that would otherwise distress financially the business. The act would help small and medium newspaper to affront competition from bigger newspaper and market dynamics that would have threaten their viability and preserve separate news and editorials. Newspaper Preservation Act, 15 U.S.C. §1801 (1970)

Moral judgment of trolley problems seems grounded on intuition that differentiate actions that harm as a means to an end and others that harm as a side effect, whenever a good comes from them. If a

---

[25] *Leegin Creative Leather Products, Inc. v. PSKS, Inc., 551 U.S. 877* (2007); *Medical Co. v. John D. Park & Sons Co., 220 U.S. 373* (1911)

similar intuition exists in horizontal price fixing, people might approve price fixing, if the action is aimed to a good action even if they foresee the existence of harmful actions.

In the Newspaper Preservation Act, the action is the joint agreement of operations, and the benefit is guaranteeing the existence of small and independent voices in the public sphere (Habermas 1962). The negative effect is that consumers would be likely harmed (e.g. higher prices, joint advertisement), but this harm is just foreseen as a federal court ruled about the constitutionality of the act, "the Act was designed to preserve independent editorial voices…it is merely a selective repeal of the antitrust laws. It merely looses the same shady market forces which existed before the passage of the Sherman, Clayton and other antitrust laws." Bay Guardian Company v. Chronicle Publishing Company, 344 F. Supp. 1155, 1158 (N.D. Cal. 1972)

These sentiments remain salient today. The falloff in newspaper revenue has only accelerated with the entrance of big tech companies such as Facebook, Google, and Craigslist that serve the functions once performed by community newspapers. In 2000-07 local newspapers lost 5 billion dollars in classified advertisement. (Seamans and Zhu 2014). The News Preservation Act of 1970 was intended to help the "brick and mortar newspaper" industry. Greenberg has proposed a price fixing scheme for online subscriptions to circumvent a coordination problem in the adoption of new technology for local newspapers. (Greenberg 2011) In fact, United States Congressman David N. Cicilline, proposed the Journalism Competition and Preservation Act, "[t]o provide a temporary safe harbor for the publishers of online content to collectively negotiate with dominant online platforms regarding the terms on which their content may be distributed." (Cicilline 2018)

All these examples show that when the hour comes to judge the permissibility of actions, which as generally disapproved by the harmful effects they pose on the public, the analysis seem to resemble the double effect principle. The permissibility of the action seems to be judged less harshly when the good effect is directed and intended and the harmful effect is just foreseen as a byproduct. In this case the benefit is "a free and vibrant press" as the crucible in which the debates of the public sphere are nurtured, something that ended is essential for a democratic system.

The double effect principle permits people a guide to balance moral rules, whenever circumstances

merit exceptions to obtain a better good than harm posed. If that were the case, the people will judge price fixing less harshly where a double effect principle problem features the scenario. According to the double effect principle people would morally reason the permissibility of a harmful action, whenever the action that poses the opposite effects is directly intended to obtain the good effect.

Three hypotheses may be observed:

H3: Consumers will judge price fixing less harshly when a third-party benefit from the new price increase of the businesses' profits.

The main reason is that when price fixing is benefiting a third-party consumers observe the price fixing as not intended to harm consumers and directed to obtain a benefit for a third party. For example, when four toy stores in a town agree to fix prices of dolls during December with the purpose to transfer the earnings to UNICEF. The transfer of benefits to a third party mitigates the directness and intention of the harmful effects with the price fixing.

H4: Consumers will judge price fixing as more unfair when the firm's involvement is direct.

The main reason is that consumers will perceive firm's direct involvement in price fixing as intended to harm consumers. The firm's direct relation with the price fixing will influence consumer's moral judgment by signaling an intention to harm consumers.

H5: Consumers will judge price fixing as more unfair when the firm intends to harm consumers.

The main reason is that consumers will perceive firm's indirect involvement in price fixing as less intended to harm consumers. Consumers would observe the directness of the price fixing in a third party (e.g. through a business association) and observe firm's involvement in price fixing as indirect and not intended to harm the consumers.

H6: There is an interaction such that consumers will judge price fixing as more unfair when the firm's involvement is direct, and the firm intends to harm consumers.

3.4. JUDGMENT ABOUT THE TYPE OF PRODUCT OR SERVICE

3.4.1. INTRODUCTION

Other studies have not considered whether the nature of the goods or services affects judgment around fairness about the pricing. In the seminal work of Kahneman, et al. (1986), snow shovels, apples, lettuces, restaurant dinning services, and other products were used in scenarios that tested fairness rules in pricing decisions. The study suggests that fairness perceptions of pricing decisions follow the dual entitlement principle. As it has been previously observed, the principle claims that buyers are entitled to the terms of the agreement and sellers to the expected profit of the transaction. Although, Kahneman, et al. (1986), used different types of products to infer rules of fairness in pricing decisions, they did not consider how different products influence the intensity of fairness judgment in pricing decisions. The researchers attributed the effects of their experiments to behavioral theory and did not consider whether these effects might be different or go away entirely with different products.

Studies in antitrust law and moral judgment also have not considered whether the products influence people judgment in price fixing. (Stephan 2008) (Stephan 2015) (Stephan 2017) (Zarkada-Fraser and Skitmore 2000) Stephan's initial study explored price fixing attitudes in U.K. by conducting a representative survey (N=1219) testing moral judgment about a price fixing agreement between corner shops (groceries stores). The product involved in the price fixing was "groceries." Respondents identified more with a buyer who thought the price fixing was harmful to consumer rather than a consumer who thought the price fixing saved consumers time by avoiding the hassle of shopping for lower prices. The findings were interpreted as meaning respondents thought price fixing is a harmful business practice that will mean higher prices for buyers. (Stephan 2008)

The same scenario about groceries and corner shops was replicated in the U.K (N=2509), Germany (N=2648), Italy (N=2521) and the USA (N=2913). Not surprisingly, most respondents judged the price fixing as wrongful. In U.K. 79%, Germany 78%, Italy 73% and United States 66% of respondents identify with buyer B. (Stephan 2015) No consideration was given to whether similar

results would be obtained with other products.

In the same way, from a business perceptive Zarkada-Fraser and Skitmore conducted research on the factors that influence collusive tendering in the construction market in Australia. Their findings suggest that collusive tenderings are committed by businesspersons who are aware of its moral implications but also who are subject to achieve professional objectives in its organization. (Zarkada-Fraser and Skitmore 2000) Needless to say, the findings are limited to the construction industry.

Indeed, there are a number of examples that suggest the product or services does matter. In the early years of the antitrust movement some common law courts held that price fixing was unlawful whenever commodities necessary for life were involved (e.g. ice, salt, milk, meat).[26] In other cases, it was important the item was not a necessity. For example, in Gloucester Isinglass & Glue Co. v. Russia Cement Co. (1891) (fish skins) the Supreme Court of Massachusetts considered a price fixing agreement of fish skins - a raw material to produce glue – and held it lawful between competitors. The court specifically considered it important that fish skins were not an article "of prime necessity, nor a staple commodity ordinarily bought and sold in the market."[27]

In Herriman v. Menzies (1896) (stevedores services) the Supreme Court of California held lawful a minimum price agreement between competitor's members of a stevedores association in the port of San Francisco. For the court, stevedore's services weren't "a staple commodity, or thing of general requirement and use or of necessity." In this case the court observed that stevedore's services were a "mere luxury or convenience."[28]

Both decisions underlie the influence of products when common law courts established the harmful effects of price fixing. Certainly, articles necessaries of life delimited the harmful effects of price

[26] Herriman et al. v. Menzies et al.,115 Cal. 16 (1896); Gloucester Isinglass & Glue Co. v. Russia Cement Co., I54 Mass. 92, 27 N. E. 1005 (1891); Tuscaloosa Ice Mfg. Co. v. Williams, 127 Ala. 110 (1900); Cummings v. Union Bluestone Co., 164 N.Y. 401, 58 N.E. 525 (1900)

[27] Gloucester Isinglass & Glue Co. v. Russia Cement Co., I54 Mass. 92, 27 N. E. 1005 (I89I)

[28] Herriman et al. v. Menzies et al.,115 Cal. 16 (1896)

fixing.[29] Whether it was an article necessary of life or other type was something common law courts had to elaborate in each decision.

In contrast, the Supreme Court in United States v. E. C. Knight Co., 156 U.S. 1 (1895) found illegal a monopoly in sugar refining. This case had its origins in an 1888 New Jersey law that allowed corporations chartered in the state to hold stock in other corporations. The law permitted competitors to combine without the need of trusts. Henry Osborne Havemeyer used the law to create the American Sugar Refining in 1891, which purchased E.C. Knight Company and other sugar companies obtaining 98% of sugar production. (Stocking and Watkins 1951) The government condemned the purchases, arguing that the American Sugar Refining Company had a monopoly on the manufacture of sugar, an article necessary for life that affected a large part of the population in interstate commerce of the nation. Therefore the general government would have the power to repress such monopoly directly and confine the instruments, which have created it.

The Supreme Court, however, considered that the harmful effects of price fixing should not be confined to articles necessaries of life, but applied to all type of articles including those of general consumption. Without entering in the details of the decision, the outcome was unfavorable for the government because the court held that refining sugar was subject to the jurisdiction of the states' police power and not of congress regulation of interstate commerce. Justice Harlan, in the dissenting opinion argued that capital through corporations were combining to destroy competition through all the country, particularly in articles necessaries of life. The distinction between the government and Justice Harlan against the majority of the Court shows a propensity of viewing the harmful effects of collusion more harmful whenever articles necessaries of life are involved.

Similarly, the dissenting judge in States v. Trans-Missouri Freight Ass'n, 58 F. 58, 86 (8th Cir. 1893), rev'd 166 U.S. 290 (1897), an important early antitrust case, deemed it important to distinguish manufacturers of lumber and other "dry goods" from railroad corporations that had a public duty, a distinction that was important when the case reached the Supreme Court. In the dissenting opinion

[29] Herriman et al. v. Menzies et al.,115 Cal. 16 (1896); Gloucester Isinglass & Glue Co. v. Russia Cement Co., I54 Mass. 92, 27 N. E. 1005 (I89I); Tuscaloosa Ice Mfg. Co. v. Williams, 127 Ala. 110 (1900)

two types of articles were made evident: articles of prime necessity where contractual spillovers posed harm to public welfare (e.g. food, fuel, staple goods etc.); and, articles where contractual spillovers pose incidental harmful effect to public welfare.

The distinction made of articles considered necessities underlies the influence of products in judging the harmful effects of collusion. The influence is an indication that products may matter in attitudes toward price fixing. As is noticed in one common law case, whenever articles considered necessities of life are price-fixed there is a predisposition to judge the offensive behavior as more flagrant.[30]

The influence of products in the moral judgment of price fixing is also noticeable in the social reaction against price fixing involving articles considered necessities of life. For instance, the antitrust enforcement agency of Chile has publicized cartel enforcement actions as not only unlawful but also as a signal to the public regarding the moral wrongness of price fixing. This has been especially noticeable when announced price-fixing agreements where articles of prime necessity for life have been involved led to intense social condemnation against the cartel members, even boycotts.

The Chilean Antitrust Enforcement Agency accused two of the biggest producers of toilet paper in Chile of price fixing. (Fiscalía Nacional Económica) Since the early 2000s, and for more than 10 years, the two companies had implemented a 34% price increase. The Chilean Antitrust Enforcement Agency and the Chilean Supreme Court considered that the price fixing accrued was a serious offense because, among other reasons, the product involved was an article of prime necessity having high consumption in Chilean households.[31] This price-fixing offense received national attention in Chile because the product involved was a product of primary necessity and one of the companies involved was the family business of one of the wealthiest families in Chile, the Matte family. The scandal was publicized through social media (Twitter, Facebook, etc.) to the point where the public then called for a boycott to the companies involved. (Sepulveda 2016) (CPI 2016) (Universo 2016). In a survey about antitrust law and market insights in Chile, 97% of respondents said they knew about the toilet price fixing and 80% considered that criminal sanctions were

[30] Cummings v. Union Bluestone Co., 164 N.Y. 401, 58 N.E. 525 (1900)

[31] Court for the Protection of Free Competition, Judgment N° 160 of 2017.

something that was necessary for price fixing violations. (Universidad Adolfo Ibáñez, CADEM and Centro de Estudios Horizontal 2015) The outrage was so great that Eliodoro Matte Larraín, the head of the family business group and CEO of the CMPC resigned his position, denying any involvement or knowledge regarding the price-fixing scandal and asking the consumers for forgiveness in name of the company. (Thumala 2018) Responding to public outcry, cartel members got their comeuppance once Chile's law made business collusion a punishable felony, sentencing offenders to jail time from 3 to 10 years.[32]

The rhetoric of the courts and antitrust authorities suggests that there are many ways in which goods or services might affect moral judgment regarding price fixing. In the next two sections, I will consider two specific ways in which goods or services might do this. First of all, goods provide information concerning the harmful economic effects that price fixing poses for consumers (e.g. lack of necessities and goods, lack of close substitutes, etc.). Second, goods and/or services provide information about the morality of the people involved in the transactions. In many transactions, product information mirrors the moral character of the seller who is profiting. There may be, however, other transactions which reflect the moral character of the buyer.

3.4.2. GOODS PROVIDE INFORMATION ABOUT THE HARMFUL ECONOMIC EFFECTS OF THE PRICE FIXING.

The fact that a good or service can convey information about the economic effects of the price fixing is inescapable. Products provide a different type of information. Suppose you are walking on a sunny day and see people nearby with umbrellas. It's because it's probably going to rain. Umbrellas are generally carried on the days it rains.

Like umbrellas signaling rain, the products involved in price fixing signal the harmful economic effects on consumers. People are likely to react differently to price fixing on a Ford than to price fixing on a Ferrari or to price fixing on a visit to the dentist vs. a visit to a music concert. Fords, Ferraris, dentists, and music concerts provide different types of information that nudge people to a

[32] Law Number 20.945 Chile.

moral judgment regarding price fixing. Although in some ways these are less interesting hypotheses, it is important to consider the economic effects of goods or services, thus eliminating the possibility that all results are merely driven by these effects.

The first way that price fixing on goods or services might convey information is by signaling the dollar amount of the harm. In the case of Ferraris, they are much more expensive than Fords. The price fixing on the former might raise the price by tens of thousands of dollars as compared to a few thousand dollars on the latter. People might judge that the harmful effect of price fixing increases as the dollar amount of the product is higher.

The second way the good or service might convey information is that it signals the ability of consumers to avoid harm. It is much easier to go without avocados than toilet paper. Price fixing toilet paper will cause more harm because people are more likely to pay the higher price than they would if the same price fixing had occurred with avocados. It is easier to find an alternative to avocados than toilet paper, even if the prices of both products are equal.

Economics refer to this concept as elasticity. A product or service without good substitutes or alternatives is said to have inelastic demand. Toilet paper has an inelastic demand because of the lack of close substitutes. Consumer's response would be less than the percentage variation of price. Avocados have more close substitutes and correspond to an elastic demand. In this case the percentage variation in consumption would be higher than the percentage variation of price. (Cooter and Ulen 2007)

Toilet paper is an absolute must have of the grocery list with a demand more inelastic than avocados. If a product or service has inelastic demand, it will tell a person that price fixing on the product is likely to lead to greater economic harm. If this idea is correct, it suggests that people have a predisposition to view offenses on articles that are necessities of life as more harmful because with this type of products they have fewer options. In short, they are like to feel ripped off.

The study of Kahneman, et al., tested a product with inelastic demand considering the case of snow shovels immediately after a mayor snowstorm. The results suggest that whenever businesses

increment prices in a situational monopoly, people will judge them as unfair under certain conditions as explained previously. (Kahneman, Knetsch and Thaler, Fairness as a Constraint of Profit Seeking: Entitlements in the Market 1986) The situation monopoly of hardware stores with snow shovels provided the information for the moral judgment. As with gauging prices in a monopoly situation, people may obtain information of the harmful effects of price fixing whenever the demand of the products is inelastic.

The price elasticity of the good is associated with the degree of harshness of the moral judgment. If the price elasticity of demand were inelastic, as in the toilet paper the consumer harshness in judgment would increase. Conversely, if the price elasticity of demand were elastic, the avocados case, the moral judgment of price fixing will be lenient. Stated formally, there are two hypotheses:

> H7. People will judge price fixing more harshly the more expensive the good or service.
>
> H8. People will judge price fixing more harshly the more inelastic the demand is for the good or service.

3.4.3 THE GOOD OR SERVICE PROVIDES INFORMATION ABOUT THE PEOPLE INVOLVED IN THE TRANSACTION.

A good or service also inescapably conveys information about the seller or the buyer. Ferrari ownership not only signals wealth but also says something about taste, maybe "I like cars" – just as going to music concert might signal, "I like music". The goods or services also say something about the provider, just as it does about the purchaser. A Ferrari dealer conjures up different images than the local Ford dealer just as the stereotypes of dentists and concerts promoters are different. The question then becomes how this information might affect a person's moral judgment.

The first way in which information about the buyer or seller might influence attitudes of price fixing is to establish whether the person that makes the moral judgment identifies with the seller or the buyer. In psychology, Tajfel and Turner in a seminal work (1979) observed that people have the need to belong and identify with groups (e.g. family, religion, politics, sports etc.), noticing the

presence of a tendency to favor in-group members. The products involved in the price fixing might signal group identity with transactors, and the people who judge the price fixing may identify with transactors and favor them.

The first implication has to do with in-group identity favoritism with the seller or buyer side. The in-group's favoritism identity is a bias in human behavior basically establishing a preference for the group with whom they identify as opposed to other groups with whom they don't identify. There is considerable evidence that people are biased with respect to the referee's performance whenever they identify with one of the teams. (Hastorf and Cantril 1954) For instance, in world championship tournaments spectators criticize a game whenever a referee knows the language of one team but not the language of the other. This will be a type of group identity bias were language permits one to identify with a group. The identity group bias might operate when people identify with the products of the transaction. The moral judgment will follow the group identity signaled by the product. If people identify with artists, they will likely judge less harshly a price fixing agreement between art painters.

From the buyer perspective, people will judge more harshly the actions of those with whom they identify and judge more leniently the actions of people whom the don't identify. The average American will not identify with the buyers of Ferrari automobiles, because people who buy Ferraris belong to the top 1%. But the average American is more likely to identify with Ford automobiles. If people identify with the Ford driver, they might judge the price fixer of a Ford more harshly. The corollary is that people might judge more harshly those who victimize with whom they identify and judge more leniently those who victimize with whom they don't identify.

The same principles apply to the seller. When people identify with the seller, they will judge the seller less harshly. If respondents identified with the seller group, they will judge the price fixing less harshly than people who don't identified with the seller group. The average American will not identify with the sellers of Ferraris or Ford automobiles, unless he works for one them. If that were the case, the person would judge the price fixing less harshly because of the ingroup preference.

Another way in which information about the buyer or seller might affect moral judgment regarding

price fixing is if this information says something about the moral character of the buyer or the seller. In particular, products provide the information for consumers to picture the moral character of the transactor. This will happen whenever the price fixing involves repugnant goods or services, such as the case of prostitution, pornography, cultural treasures, organ donation, interest on loans, marijuana and narcotics. (Roth 2007) For instance, usury has usually been related with immoral business behavior. Price fixing between moneylenders that charge usury rates will be judge harsher than a price fixing between moneylenders at regular interest rates.

Generally speaking, there is a belief that good things should happen to good people and bad things happen to bad people. The idea underlies a tendency to view a just order in life, where people deserve what they get. (i.e. the just world hypothesis) (Lerner 1980). According to this view, if moneylenders charge usury rates it is because poor people are riskier credits and deserve higher interest rates.

Buyers of illegal drugs might be perceived as just what getting that which they are owed. Similarly, persons who not only sell illegal drugs but also collude with rival gangs might be perceived as the worse.

These observations lead to the following hypotheses:

H9: People will judge price fixing more harshly if they identify with the buyer.

H10. People will judge price fixing less harshly if they identify with the seller.

H11. People will judge price fixing less harshly if they perceive the buyer as bad person.

H12. People will judge price fixing more harshly if they perceive the seller as a bad person.

Some methodological comments concerning the hypothesis and experiments, I will test only hypotheses H9 and H11 and leave the other two hypotheses for further research. My methodology will use a broadly representative sample of persons who will predominately identify as buyers. Therefore, it will be difficult to test H10 and H12 about the effects of identification with sellers.

The effect of price fixing from "bad" sellers are difficult to tease out from an underlying moral judgment about the seller. For instance, people might think that persons who happen to have a day job as marihuana dealers are bad persons because it harms consumers. Other possibility is because sellers are ruthless people, willing to do whatever it takes in its black-market. Thus, if it's an illegal product it attracts ruthless people. The concern is not present when buyers, because the act of buying a price fixed good/service is not seen as inherently bad.

CHAPTER 4: PRICE-FIXING ATTITUDES IN THE LAB

4.1. INTRODUCTION

This chapter presents the empirical research hypothesis, design, methodology, results and conclusions of a quantitative study conducted through experimental surveys that measure how people respond to particular price fixing vignettes. Participants answered questions that explore attitudes and moral judgment of price fixing against. As discussed in the last chapter, the present research seeks to build a descriptive theory of price fixing attitudes. Previous research has explored the relationship between moral judgment and price fixing suggesting that people attitudes view price fixing as something morally wrong. (Zarkada-Fraser and Skitmore 2000) (Stephan 2015) However, studies have not explored under what circumstances people's attitudes vary. Its purpose is not to establish what should be, or ought to be fair about price fixing, but to describe what are people's attitudes about price fixing.

4.2. A THEORY ABOUT MORAL JUDGMENTS & PRICE FIXING IN THE LAB

The previous chapter provides the theory and hypothesis of people's moral judgment of price fixing agreements. The central theory of this dissertation is that people judgment of price fixing is influenced by the commutative justice/dual entitlement principle, the doctrine of double effect and the judgment of the product. This chapter presents the methodology and results of each theory tested. people's attitudes and moral judgment of price fixing agreements.

4.3. PARTICIPANTS

The research was conducted on Amazon Mechanical Turk on August 20th, 2018. A sample of 304 American participants volunteered for a study of "Pricing Decisions" using Mechanical Turk service (Buhrmester, Kwang and Gosling 2011); participants were remunerated with US$ 1.00. Three participants were removed for not following the instructions, leaving a total sample size of 301

subjects. Political orientations of participants who completed the experiment were: 54.15% liberal, 27.57% conservative and 18.27% as neither liberal nor conservative. The effective sample size was 301 participants (43.85% women, M age = 38.54, SD= 11.17; 56.15% men, M age = 36.01, SD= 10.4). Ethnic groups included: 69.10% White, 10.63% Asian, 8.31% Black, 5.65% Hispanic, 1.33% Native American or Alaskan and 4.97% other.

A total of seven experiments were conducted. Each experimental vignette had a treatment and control version. Each subject only tested one of the vignette experimental versions, either the treatment group or the control version. In H1, H2, H3, H7, H8, H9 and H11 a simple controlled experiment between subject study was conducted. In H4, H5 and H6 a 2x2 factorial design two test two interventions on the pool of subjects (2x2 Experimental Design between subjects). Thus, each participant was tested in only one condition on each experiment (Between subject study).

4.4. THEORY OF COMMUTATIVE JUSTICE & DUAL ENTITLEMENT PRINCIPLE

4.4.1. INTRODUCTION

Having argued in the previous chapter that people's attitudes of price fixing will follow the reason the firm deviates from the price mechanism and the point used to set prices. The theory is grounded in the work of fairness as a constraint on pricing decisions developed by (Aquinas 1273) and Kahneman et al. (1986).

Two hypotheses are observed:

H1 - Consumers will judge price fixing as more unfair when the new price increases the business' profits

People will judge the price fixing as more unfair whenever the new price increases the business profits, the price fixing would facilitate firms to obtain benefits at expense of consumers against the entitlement of consumers to the transaction price.

H2 - Consumers will judge price fixing as less unfair when a cost-increasing event occurs beyond the business's control and the new price only maintains the previous profit.

The judgment of price fixing will be more lenient whenever a cost increasing event outside a firm's control affects the firm's profit. In each case participants only tested one version of the scenario (treatment and control group), being asked to evaluate the fairness of scenarios between completely unfair, somewhat unfair, completely fair and somewhat fair. The responses were collapsed into categories of "unfair" or "fair." Results were also treated on a Likert Scale Completely Unfair =1, Somewhat Unfair=2, Somewhat Fair = 3, Completely Fair = 4) as a robustness check. All scenarios infer rules of fairness of price fixing schemes through the perception of the MTurk's participants.

4.4.2. METHODOLOGY: SURVEY EXPERIMENT (BETWEEN-SUBJECTS DESIGN)

The experiment consisted of two scenarios in which four firms cooperate through a price-fixing agreement. Each hypothetical scenario had two versions (treatment and control group) that were randomly presented to participants.

4.4.2.1. SCENARIO 1. – CONSUMERS WILL JUDGE PRICE FIXING AS MORE UNFAIR WHEN THE NEW PRICE INCREASES THE BUSINESS' PROFITS

In the first scenario, four hardware stores, agree in setting prices in tools and appliances. H1 is that consumers will judge price fixing as more unfair when the firm profits are raised. In other words, whenever businesses use price fixing increases to obtain more profits people will judge the behavior as unfair. The question used, with experimental manipulations in italics, was:

> Imagine that where you live there are four locally owned hardware stores. Each of them sells a wide variety of tools and appliances in competition with the other stores. For example, they each sell the same hammer at prices that range between $8.00 and $12.00 depending on the store. Rather than continuing to compete against each other, they all agree that they will [continue to sell their products at the same prices that each store has been using/raise their prices by $2.00 on each item]. For example,

the hammer will [continue to /now] cost between [$8.00 and $12.00 / $10.00 and $14.00] depending on each store. Based on these facts, how would you describe what the four hardware stores have done?

The hypothetical case was designed to test whether people attitudes of price fixing are influenced by the new price which increases profits. Two variations were presented. In the control condition, firms price fixed at the same price level they previously used in competition. The hammer that each hardware stores sell continues to cost $8.00 to $12.00, but the stores have now agreed on that price. In the treatment condition, the stores agree to raise the price by $2.00. The hammer will now cost between $10.00 and $14.00. H1 predicts that respondents will find the agreement that raises prices to be more unfair.

4.4.2.2. RESULTS & DISCUSSION SCENARIO 1.

In a strict sense, hardware stores have suppressed or eliminated competition by distorting the price mechanism. When the hardware stores price fixed to raise prices by $2.00 on each item are judged as unfair by 73% of respondents (N=156). On the other hand, when hardware stores price fixed without raising prices 26.2% of participants judged as unfair the business behavior (N=145). (Figure 1. Moral Judgment of Price Fixing & Dual Entitlement Theory (New Price Increases Businesses Profits)

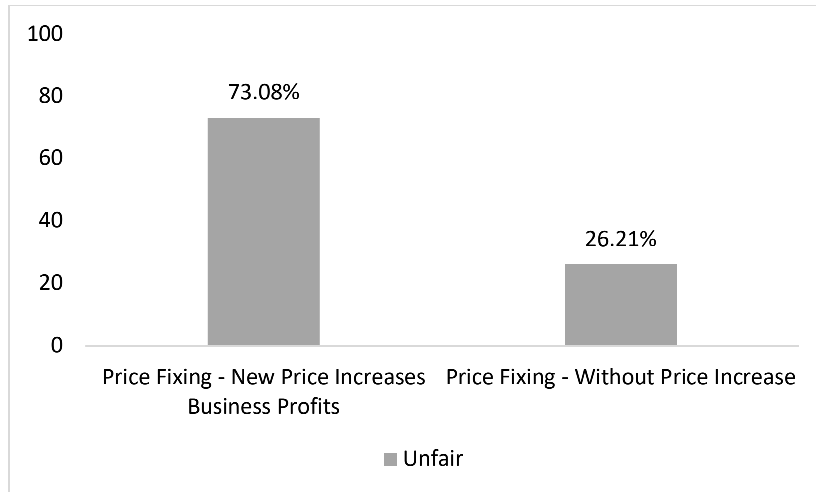

Figure 1. Moral Judgment of Price Fixing & Dual Entitlement Theory (New Price Increases Businesses Profits)

The chi-square was used to test for differences in the proportions of responses; the significant difference between the responses (X2 (1, n = 301) = 66.04, $p < .001$) indicates that price-fixing behavior in both agreements is not treated identically. The results suggest that moral judgment of business behavior is harsher when the price-fixing increases firms profits above the previous reference price level.[33]

4.4.2.3. SCENARIO 2. – CONSUMERS WILL JUDGE PRICE FIXING AS LESS UNFAIR WHEN A COST-INCREASING EVENT OCCURS BEYOND THE BUSINESSES CONTROL AND THE NEW PRICE ONLY MAINTAINS THE PREVIOUS PROFIT.

In the second scenario, four grocery stores deviate from the competition by price fixing the cost of eggs. After reviewing data on the price of a cartoon of eggs at the time of the survey,[34] it was decided that the price of a carton of eggs cost between \$2.00 and \$3.00. H2 predicts that price fixing attitudes

[33] When treating responses of fairness as a Likert Scale (Completely Unfair =1, Somewhat Unfair=2, Somewhat Fair = 3, Completely Fair = 4) respondents in H1 score lower (M=1.97, SD=0.96) than respondents in control group score (M=3.04, SD=0.95). An ANOVA on the means for both groups confirmed that respondents in H1 found an agreement that raises prices to be more unfair ($F(1, 299) = 94.34$, $p < .00$).

[34] The average price of eggs, grade A, large, per dozen in United States city average price at the time the survey was elaborated was \$2.081 (April 2018), at the time the survey was conducted it was \$1.622 and the average of 2018 was \$1.742. (Bureau of Labor Statistics 2018)

will be less harsh whenever the price agreement compensates the loss of profits suffered by an exogenous, cost-increasing event. In other words, it would be judged with less harshness if firms price fixed to protect the amount of profit there was before the event, also called the "reference profit." The question was:

> Imagine that where you live there are four locally owned grocery stores. Each of them sells a variety of groceries in competition with each other. Of course, one of the most popular items at all stores is a carton of one dozen eggs which sells for between $2.00 and $3.00 depending on the store. Unfortunately, problems in the poultry industry have increased the wholesale price of eggs. The price of one dozen eggs has increased by $0.50. Because eggs are such a popular item, the four owners of the four grocery stores are concerned what the price increase will do to their businesses. At a meeting, the owners agree they will raise the price of one dozen eggs by [$1.00/$.50]. Based on these facts, how would you describe what the four grocery stores have done?

The hypothetical case was designed to test whether people attitudes of price fixing are influenced whenever the firms suffer a cost increasing event outside the firm's control - problems in the poultry industry have increased the wholesale price of eggs – affects business reference profit. Two variations were presented. In the treatment condition, the firm's price fixed the same amount in which the wholesale price of eggs has increased ($0.50). In the control condition, firms price fixed by the double of the cost increasing event that had affected firms' profits ($1.00).

4.4.2.4. RESULTS & DISCUSSION SCENARIO 2.

As in the previous scenario, groceries stores have eliminated competition by price fixing the cartoon of eggs on each store. The only variation in both cases is the price charged for the cartoon of eggs. In the treatment condition, when the groceries price fixed at the exact amount of the cost increasing event - $0.50 - the price of eggs respondents judged as unfair by 26.3% the business behavior (n=148). In the control condition, when grocery stores price fixed above the level of the costs increasing - $1.00 - event 54.6% of participants viewed the business practice as unfair (n=152). (Figure 2. Moral Judgment of Price Fixing & Dual Entitlement Theory (New Price Increment Compensates Business

Profits).

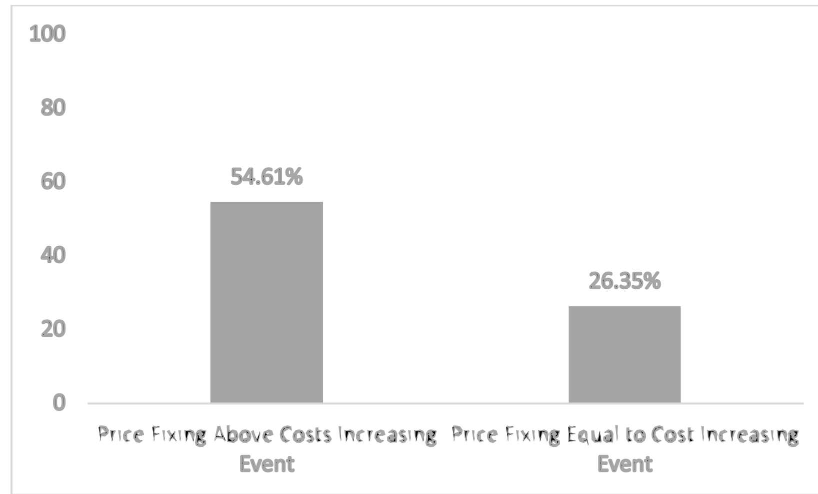

Figure 2. Moral Judgment of Price Fixing & Dual Entitlement Theory
(New Price Increment Compensates Business Profits)

The chi-square was used to test for differences in the proportions of responses; the significant difference between the responses (X2 (1, n = 300) = 24.81, p = 0.001) indicates that price-fixing behavior is judged differently based on whether the agreement only preserves a reference profit. [35]

4.5. THEORY OF DOUBLE EFFECT PRINCIPLE

4.5.1. INTRODUCTION

The doctrine of double effect explains the permissibility of an action that has harmful effects. Three hypotheses are observed:

(a) H3: Consumers will judge price fixing less harshly when a third-party benefit from the new price increase of the businesses' profits.

[35] When changing response measure of fairness as a Likert Scale (Completely Unfair as 1 to Completely Fair as 4) respondents in H2 score lower (M= 2.39, SD=0.87) than respondents in control group score (M=2.95, SD=0.92). An ANOVA on the means for both groups confirmed that respondents in H1 found an agreement that raises prices to be more unfair (F(1, 298) = 28.86, p < .00).

The main reason is that when the price fixing is aiming to favor a third party it will signal the intention of the firm in harming consumers.

(b) H4: Consumers will judge price fixing as more unfair when the firm's involvement is direct.

The firm's direct relationship with the price fixing will influence consumer's moral judgment by signaling an intention to harm consumers.

(c) H5: Consumers will judge price fixing as more unfair when the firm intends to harm consumers.

The price fixing will be perceived as intended when firms aim at the harmful effects. Firms aiming at the harmful effects will signal the intention of the agent.

(d) H6: There is an interaction such that consumers will judge price fixing as more unfair when the firm's involvement is direct, and the firm intends to harm consumers.

4.5.2. METHODOLOGY: SURVEY EXPERIMENT (BETWEEN-SUBJECTS DESIGN) AND 2X2 EXPERIMENTAL DESIGN

The experiment consisted of two scenarios in which four firms cooperate through price-fixing agreement. H3 will be explored in the first hypothetical scenario (Scenario 1.). This scenario had two versions (treatment and control group) that were randomly presented to participants (Between subject's design). H4, H5, and H6 will be explored with two treatments in a 2x2 experimental design in the second scenario (Scenario 2.), with the aim to understand the relation of directness and intention in moral judgment of price fixing. Each hypothetical scenario had two versions (treatment and control group) that were randomly presented to participants.

In each case participants only tested one version of the scenario (between subject's design); being asked to evaluate the fairness of scenarios between completely unfair, somewhat unfair, completely

fair and somewhat fair; categories are grouped to indicate the proportions of respondents who judged the action as unfair or fair. All scenarios infer rules of fairness of price fixing schemes through the perception of the M-Turk's participants. Two types of firms were sellers: Christmas tree lots and dairy farms.

4.5.3. SCENARIO 1.

In the first scenario, firms price fixed for the benefit of a third party. The treatment hypothetical case involves four Christmas lot owners who are concerned about profits and decent living of its Christmas tree suppliers (a third party). The price-fixing agreement involves paying more to suppliers and raising the price in the exact amount to consumers. The control condition changes the intention of firms. The firm's intention is to price fixed for their own benefit. Respondents evaluated the fairness of scenarios between completely unfair, somewhat unfair, completely fair and somewhat fair. The responses were collapsed into categories of "unfair" or "fair." After the scenario was presented in each variation a manipulation check asked respondents to check what happened to the extra money from the price increase. The response options were: 1. "The store kept the additional profits." 2. "The store gave it to the Christmas tree growers." And, 3. "Something else."

The question used proceeds as follows:

> Imagine that where you live there are four lots that sell trees at Christmas time. The owners of the four lots have been talking about how the prices on Christmas trees affect their [growers/profits]. [So these growers can earn a decent living, the four lot owners agree to pay $10.00 more per tree from their growers and raise the prices for their customers by $10.00 per tree./To make more money, the four lot owners agree to raise their prices for their customers by $10.00 per Christmas tree.] Based on these facts, how would you describe what the four lot owners have done?

The hypothetical vignette was designed to test whether people attitudes will be influenced whenever a third-party benefit from the price fixing. The theory behind is that a price-fixing will be perceived as not intended when a third-party benefit by it.

4.5.4. RESULTS & DISCUSSION

The manipulation check showed that in the treatment condition, 59% of respondents considered that the lot owners gave the benefits of price fixing to the Christmas growers and 33% of respondents considered that the store kept the additional profits (n=153). In the control condition, 89% of respondents understood that businesses kept the additional profits and 7% that lot owner gave it to the Christmas growers. (n=148). In total in the treatment scenario 79 respondents were excluded from the analysis after failing to respond the manipulation check.

In both variations, the Christmas lot owners price fixed by $10.00 per tree and the harmful effect on consumers is exactly the same ($10.00 per Christmas tree). In the treatment condition, when firms price fixed to obtain a benefit for a third party 24% of respondents judge the price fixing as unfair (n=90). However, in the control variation when firms priced to benefit themselves, 71% of respondents judge the price fixing as unfair (n=132). (Figure 3. Moral Judgment of Price Fixing & Double Effect Doctrine - Third Party Benefit) The significant difference between the responses to the variation of treatment and control ($X2$ (1, n = 222) = 46.91, $p < .001$) indicates that respondents' attitudes were more benevolent when price fixing benefits are transferred to a third party than when benefits enlarge firms' pockets.[36]

---

[36] When changing response measure of fairness as a Likert Scale (Completely Unfair as 1 to Completely Fair as 4) respondents in H3 score higher (M= 3.02, SD=0.89) than respondents in control group score (M=1.93, SD=0.92). An ANOVA on the means for both groups confirmed that respondents in H3 confirm that transferring the price-fixing benefit to a third party is judged less harshly than when firms keep the benefit. ($F(1, 220) = 77.23$, $p < .001$).

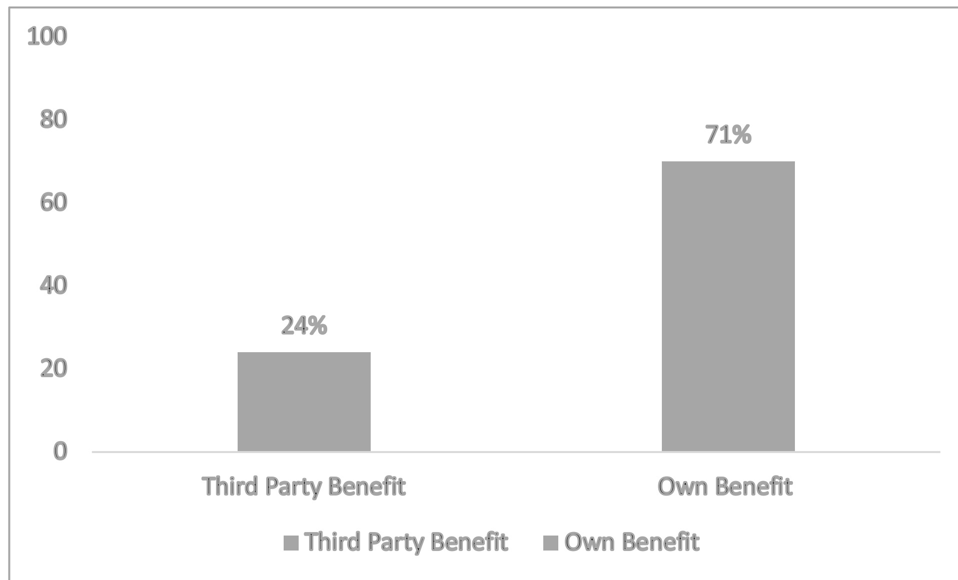

Figure 3. Moral Judgment of Price Fixing & Double Effect Doctrine
(Third Party Benefit)

4.5.5. SCENARIO 2.

As previously mentioned, the second scenario involves three theories: H4, the first variation tested whether respondents judged price fixing as more unfair when the firm's involvement is direct. H5, the second variation tested whether respondents judged price fixing as more unfair when the firm's conduct implies an intention to harm to consumers. And, H6, an interaction such that consumers will judge price fixing as more unfair when the firm’s involvement is direct, and the firm intends to harm consumers.

Participants were randomly assigned in each price fixing scenario. In each scenario, four dairy farms price fixed harming consumers in the same way and amount. The two independent variables were: first, the dairies farms directness in the price-fixing; second, the dairies farmers intention to harm consumers. The respondents will be randomly assigned to price fixing to only one of the four experimental conditions. The experimental conditions are: Group A, firms participate directly and intend to harm consumers. Group B, firms participate indirectly and intend to harm consumers. Group C, firms participate directly and do not intend to harm consumers. Group D, firms

participated indirectly and do not intend to harm consumers. (Figure 2. Experimental Design 2x2). As with the other scenarios, the responses were collapsed into categories of "unfair" or "fair."

	Firms Involvement Direct	
	Direct	Indirect
Intention to Harm Consumers	Group A	Group B
No Intention to Harm Consumers	Group C	Group D

Figure 4. Experimental Design 2x2

The question used proceeds as follows:

> In the city where you live, four dairies supply all of the milk. The price of a gallon of milk is between $2.00 and $3.00 depending on the dairy. [Group A - All four dairies are struggling financially. The owners of the four dairies meet and agree to raise prices by $1.00 per gallon so they can make more money.] [Group B- The dairy farmers have been struggling with low milk prices. The state dairy association always works to increase prices and requires its members charge to the price listed in the dairy association newsletter. The owners of the four dairies are not members of the dairy association. At a meeting, all four owners agree to join so they can make more money. When the next newsletter raises prices by $1.00 per gallon, the owners of the four dairies implement the price increase.] [Group C- All four dairies are struggling financially. The owners of the four dairies meet and agree to raise prices by $1.00 per gallon so they can save their struggling businesses.] [Group D- The dairy farmers have been struggling with low milk prices. The state dairy association always works to increase prices and requires its members charge the price listed in the dairy association newsletter. The owners of the four dairies are not members of the dairy association. At a meeting all four owners agree to join so they have more resources

to save the struggling businesses. When the next newsletter raises prices by $1.00 per gallon, the owners of the four dairies implement the price increase.] Based on these facts, how would you describe what the four dairies farmers have done?

Price fixing through the dairy's association masks the price increase as oblique. Indeed, it is the association who works on price increases and enforces the agreements. The dairy farmers are simply going on with what the association has already established. The reasoning behind the increase is not relevant, either case, the result will be the same. On the contrary when dairies farmers participate directly they are the ones who increase the prices. The harmful effects are more direct.

4.5.6. MANIPULATION CHECKS

After the scenario was presented a manipulation check asked respondents to check for the reasons the dairy farmers made the agreement. the options were: 1. "To make more money" 2. "To save their business." And, 3. "Something else." The idea behind the instruction manipulation check was to determine if the control and treatment of firm's intentionality to harm was understood as planned across all four groups. For the firm's involvement direct indirect control no manipulation check was made.

The manipulation check showed that in group A, 61% of respondents considered that dairy farmers made the agreement because they wanted to save their struggling business and 38% to make more money (n=74). By contrast, in group B, 57% of respondents understood that dairy farmers price fixed to make more money and 40% considered that it was to save businesses (n=75). In group C the manipulation check showed that 86% of respondents considered that dairy farmers made the agreement because they wanted to save their struggling business and 12.5% to make more money (n=80). Similarly, in group D 75% of respondents consider that dairies farmers price fixed to save their struggling business and 24% to make more money (n=72). The idea of the instruction manipulation check control and treatment of intentionality was understood as planned across all four groups. (Table 1. 2x2 Firms Involvement Direct & Intention to Harm Consumers)

Table 1. 2x2 Firms Involvement Direct & Intention to Harm Consumers

	To Make More Money		To Save the Struggling Business		Something Else		n
	n	%	n	%	N	%	
Group A (Firms Involvement Direct & Intention to Harm)	28	38%	45	61%	1	1%	74
Group B (Firms Involvement Indirect & Intention to Harm)	43	57%	30	40%	2	3%	75
Group C (Firms Involvement Direct & Good Intention)	10	12.5%	69	86%	1	1.5%	80
Group D (Firms Involvement Indirect & Good Intention)	17	24%	54	75%	1	1%	72

There seems to be a high percentage of respondents who failed to identify the manipulation check. For example, in group A majority of respondents failed to recognize that the intention of dairy's farmers was to make more money. Similarly, a high percentage of respondents in group D failed to identify the good intention. In both scenarios, the dairies farmers are in a situation with financial struggle or low milk prices. It was difficult to signal an intent of harm without outright telling respondents how to answer the question. Either they were going to save the struggling business or making more money. That said, the scenario was probably did not signal the harmful effects. Another possibility is that that respondents didn't read the scenario carefully. Those participants who failed to respond the manipulation check will be excluded from the analysis of each group in the 2x2 experimental design. In total 107 respondents were excluded from the scenario after failing to respond the instrumental check.

4.5.7. RESULTS & DISCUSSION

In all variations, the four dairies price fixed the price of milk in the same amount ($1.00 per gallon). The harmful effects on consumers are exactly the same in each case. Examining if the moral judgment of price fixing will imply comparing Group A with Group B and Group C with B. The influence of the directness with price fixing needs to be observed in two contexts with the intention to harm consumers and with the intention to save the struggling business. Table 2. (2x2 Factorial Design Firms Involvement Direct & Intention to Harm Consumers)

Table 2. 2x2 Firms Involvement Direct & Intention to Harm Consumers

	Firms Involvement Direct		Firms Involvement Indirect		Unfairness %	N
	Unfairness %	N	Unfairness %	N		
Intention to Harm Consumers	71%	28	58%	43	63%	71
No Intention to Harm Consumers	19%	69	31%	54	24%	123
Unfairness %		34%		43%		
N		97		97		194

4.5.8. WHEN FIRMS INTEND THE HARMFUL EFFECTS

When dairies farmers price fixed with the intention to make money 63% of respondents judge the price fixing as unfair (n=71). Contrary, when the dairies farmers agree on prices with an intention to save the dairies business 24% of respondents react against the price-fixing (n=123). The statistical difference in respondent's reaction to vignettes suggests that respondents understood differently both scenarios (X2 (1, n =194) = 28.86, p = .001). As expected by H5 when dairies farmers directly intend to make more money respondents judge more harshly the scenario. In the opposite scenario, when dairies intend to save their struggling business the response seems more sympathetic to price fixing.

4.5.9. WHEN FIRMS DIRECTLY PARTICIPATE IN THE PRICE FIXING

When the dairy farmers participate directly in the price fixing 34% of respondents judge the price fixing as unfair (n=97). In the opposite scenario, when the dairy farmers indirectly price fixed through the association 43% of respondents judge the action as unfair (n=97). It was argued that direct price fixing would elicit harsher reaction that price fixing direct. Respondents' reactions, however, were the opposite of what was expected. In both variations, the respondent's attitudes tend to be more sympathetic to price-fixing agreements. There is no statistical difference in respondent's reaction to vignettes (X2 (1, n =194) = 1.76, p = 0.184). It seems tempting to say that whether the price fixing is

done directly or indirectly by the dairy's farmers does not seem to influence respondents' price fixing attitudes. Another explanation is that the scenario the degree of the attitudes against price fixing is not properly reflected in a dichotomous scale, although results don't show evidence that respondents' reaction were different between the direct and indirect effect. That said, that does not mean that there is no evidence, just that the measure used in the analysis is not proper for a 2x2 between subjects' experiment and there is an absence of evidence. The next subsection will use a Likert Scale not as a robustness check, but as a way to find if evidence might appear on the directness effect.

4.5.10. LIKERT SCALE MEASURE

In the previous section, a dichotomous measure was used to analyze respondent's reaction. This subsection uses a continuous measure. Table 3 shows the mean moral judgment scores of the four experimental conditions when changing responses as a Likert Scale (Completely Unfair =1, Somewhat Unfair=2, Somewhat Fair = 3, Completely Fair = 4). (2x2 Factorial Design Firms Involvement Direct & Intention to Harm Consumers).

Table 3. 2x2 Firms Involvement Direct & Intention to Harm Consumers[37]

	Firms Involvement Direct			Firms Involvement Indirect		
	Mean Moral Judgment	SD	N	Mean Moral Judgment	SD	N
Intention to Harm Consumers	1.85	0.93	28	2.98	0.91	43
No Intention to Harm Consumers	2.41	0.90	69	2.90	0.84	54

Figure 5 illustrates the dependent variable, the moral judgment of price fixing in the vertical axis.

[37] A one-way ANOVA was conducted to determine if the moral judgment was different for groups. Respondents were classified into four groups: Groups A (n = 28), Group B (n = 43), Group C (n=69), Group D (54). There was a statistically significant difference between groups as determined by one-way ANOVA ($F(3,190) = 13.02$, $p < .001$). Thus, the moral judgment of price fixing in the groups is statistical not the same.

Two separate graphs are shown. The graph suggests an interaction in the data, notice how the lines in the graph are not equal as they change from left to right to the point where they converge. The difference seems to depend on the firm's intended effect in the price fixing. Low scores suggest harsher attitudes for price-fixing when price fixing occurs in a context where firms intention signals the harmful effect and firms' participation is direct. Different attitudes are observed when the firm's intention aims a good effect and firms' directness in the price fixing is maintained. Attitudes seem to moderate when firms participate obliquely in the price fixing. That is a different finding as the one shown in the previous subsection.

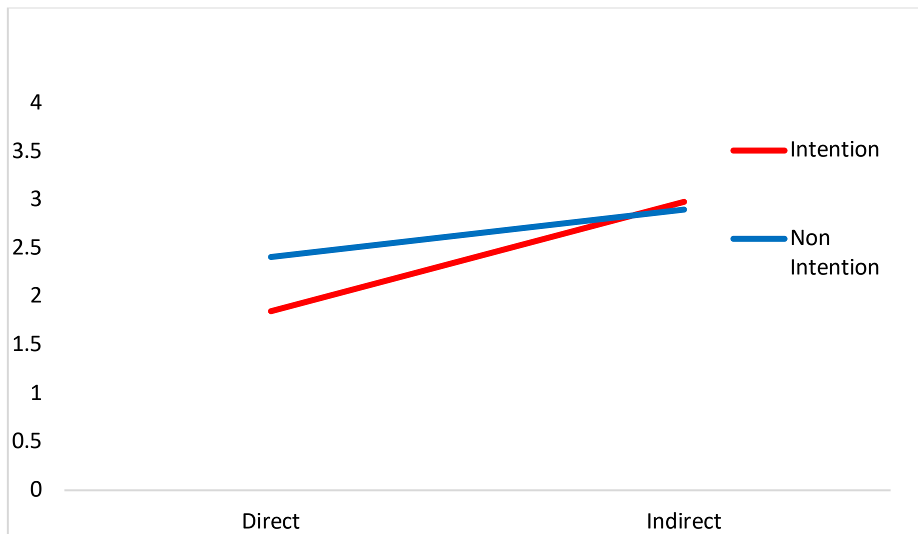

Figure 5. Treatment Means Moral Judgment of Price fixing

In a two-way ANOVA (Intention to harm vs. Good intention) (Directness vs. Indirectness) there was a main effect in the firm intention of the price-fixing ($F(1,190) = 32.11$, $p < .001$). Price fixing to make more money is more likely to irritate respondents' attitudes than when price fixing is framed to save businesses from a business struggle. The main effect for the firms directness was not significant ($F(1,190) = .06$, $p = .80$). The interaction between the firm's intention and directness was significant. ($F(1,190) = 6.88$, $p < .001$) The interaction between intention and directness suggests that attitudes towards price fixing are moderated whenever the firm's intention changes from direct to indirect involvement. In other words, when price fixing is done indirectly through the dairy's association respondents' reaction is less harsh to price fixing. It seems as if the business association

blurs the intention effect. As in the case of the trolley problem, the indirectness means that the price fixing harmful consequences are foreseen as a mean to an end are more likely accepted. The other way around, when price fixing is done directly the intentional bias roles on as a tendency to evaluate intentional actions as more negative than unintended ones. Moreover, the directness by itself does not seem to play a key role in the judgment only in the interaction.

4.6. JUDGMENT ABOUT THE TYPE OF PRODUCT OR SERVICE

4.6.1 INTRODUCTION:

In the previous chapter, it was argued that goods provide information about the harmful economic effects of the price fixing and about the moral character of people involved in the transaction. Four hypotheses were addressed:

(a) H7. People will judge price fixing more harshly the more expensive the good or service.

(b) H8. People will judge price fixing more harshly the more inelastic the demand is for the good or service.

(c) H9. People will judge price fixing more harshly if they identify with the buyer.

(d) H11. People will judge price fixing less harshly if they perceive the buyer as a bad person.

4.6.2. METHODOLOGY: SURVEY EXPERIMENT (BETWEEN-SUBJECTS DESIGN)

The experiment involved two experimental vignettes in which four firms cooperate through a price-fixing agreement. Each hypothetical scenario had two versions (treatment and control group) that were randomly presented to participants. In each case participants only tested one version of the scenario (between subject); being asked to evaluate the fairness of scenarios between completely unfair, somewhat unfair, completely fair and somewhat fair; categories are grouped to indicate the proportions of respondents who judged the action as unfair or fair. All scenarios infer rules of

fairness of price fixing schemes through the perception of the MTurk participants

4.6.3. SCENARIO 1. - PEOPLE WILL JUDGE PRICE FIXING MORE HARSHLY THE MORE EXPENSIVE THE GOOD OR SERVICE.

In the first scenario, the firms price fixed. The scenario does not provide any reason for engaging in business behavior. The hypothetical scenario involves four eyeglasses stores who agree in raising the prices of the frames of eyeglasses they sell. Eyeglasses frames were chosen because they have a wide price range. For example, a quick look on Amazon Marketplace shows a wide price range between $10 and $1000. Thus, this type of product would allow using the same product for a treatment group and a control group. The price-fixing treatment condition was a high dollar price - between $100 and $200 - amount in eyeglasses frames. The control condition changes the dollar amount of the eyeglass's frames to a low amount - between $10-$20. In this scenario, firms did not provide any reason for the price fixing or any other type of cue about intentionality. The experiment was intended as a pure measure of the cost of the item. Price fixing on higher cost items implies more harm to consumers.

The question used proceeds as follows:

> In the town where you live, there are four eyeglasses stores. They sell many different types of frames of eyeglasses that sell between [$100-$200/$10-$20] for each one. The owners of the four eyeglasses stores meet occasionally. At one of these meetings, the four owners agree to raise prices on the eyeglasses they sell at their stores. Based on these facts, how would you describe what the four eyeglasses stores have done?

4.6.4. RESULTS AND DISCUSSION

The theory stated that people will judge price fixing more harshly the more expensive the good or service. In the vignette grounded by a product with high price, 73% of respondents reacted negatively to the frame eyeglasses price fixing (n=164). Similarly, when the price of the same product was low 77% judge as unfair the price fixing (n= 137). (Figure 6. Moral Judgment of Price Fixing & Judgment

About the Product or Service - Product with High and Low Price) There is no statistical difference between respondent's reaction to scenarios ($X2$ (1, n =301) = 0.65 , p = .4190).[38] The same product with a low price or high price does not seem to influence people attitudes of price fixing.

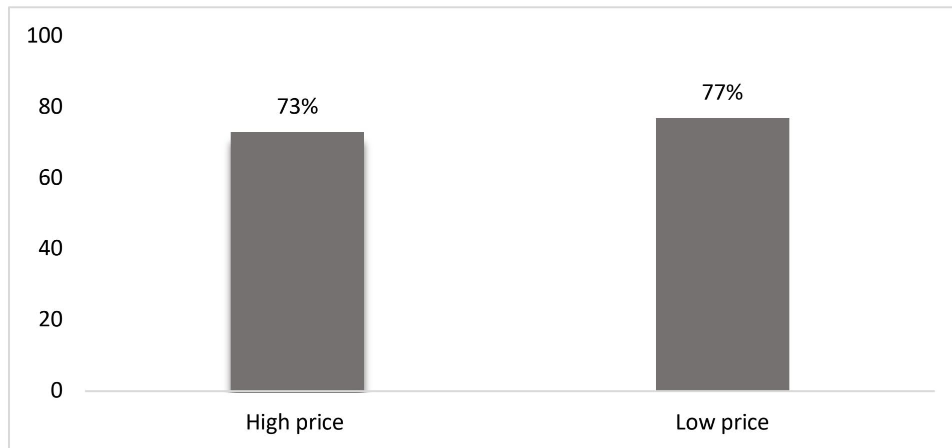

Figure 6. Moral Judgment of Price Fixing & Judgment About the Product or Service (Product with High and Low Price)

4.6.5. SCENARIO 2. – PEOPLE WILL JUDGE PRICE FIXING MORE HARSHLY THE MORE INELASTIC THE DEMAND IS FOR THE GOOD OR SERVICE.

In the second scenario, four hardware stores price fixed snow shovels. Like the previous scenario, the scenario does not provide any reason for engaging in business behavior. The theory behind the scenario is that price fixing a product with inelastic demand is judged more unfair. The scenario was inspired in the snow shovel example used by Kahneman et. al., (Kahneman, Knetsch and Thaler 1986) In the snow shovel a temporary monopoly is formed after a blizzard increases the demand to an inelastic point for snow shovels. The treatment condition is a situational monopoly on a product

[38]When changing response measure of fairness as a Likert Scale (Completely Unfair as 1 to Completely Fair as 4) respondents in H7 score the same (M= 1.97, SD=0.90) than respondents in control group score (M=1.97, SD=0.92). An ANOVA on the means for both groups confirmed that price-fixing the same good with high or low value is judge similarly by respondents. (F(1, 299) = .002 , p = .91).

– i.e., a product with inelastic demand. A snowstorm generates a temporary monopoly in some type of products, such as snow shovels. The only difference with the snow shovel scenario of Kahneman et al. is that it's not gauging but price fixing in the aftermath of a snowstorm and the control condition is the same price fixing in the absence of a snowstorm.

The question used was:

> In the place where you live, there are four hardware stores located around the city. They sell the same snow shovels for $15 to $20 depending on each store. [The morning after a large snowstorm/(omitted),] The storeowners meet and agree to raise the price of snow shovels to $20. Based on these facts, how would you describe what the four hardware stores have done?

The harmful effect of both variations is the same. The price of snow shovels is price fixed in $20 depending on each store. In one vignette the price fixing is done after a snowstorm, the control group is in the absence of the snowstorm. The snowstorm condition creates a situational monopoly for hardware stores. People who demand snow shovels after a snowstorm would have an inelastic demand. It is likely that people feel like they are getting ripped off when hardware stores enjoy an inelastic demand, thus generating a stronger sentiment than the price fixed in the absence of the snowstorm. Thus, price fixing after the snowstorm would imply an exploitation in the monopoly power.

4.6.6. RESULTS AND DISCUSSION

The theory predicted that people will judge the price fixing of a product with inelastic demand more harshly than in the case of a product without inelastic demand. In the vignette when the hardware stores price fixed snow shovels after the snowstorm - the situational monopoly - 76% of respondents judged negatively the price fixing (N= 154). Similarly, when the hardware stores price fixed without the snowstorm 71% of respondents judge the price fixing as unfair (N= 147). (Figure 7. Moral Judgment of Price Fixing & Inelastic Demand) There is no statistical difference between

respondent's reaction to scenarios (X2 (1, n =301) = 1.05 , p = .3049).[39] The results were contrary to what was expected and suggest that people judgment of price fixing does not seem to react more harshly the more inelastic the demand. As in the snow shovel example of Kahneman et. al. firms gain $5 and customers loss $5 with the price fixing. People view that in both situations' firms are gaining an advantage of $5 at expense of them.

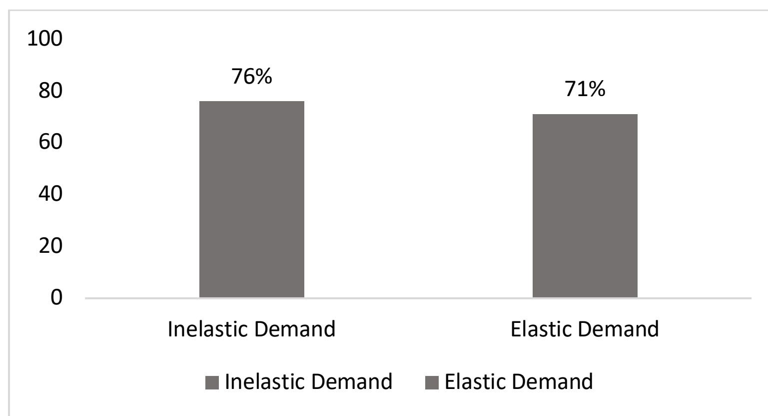

Figure 7. Moral Judgment of Price Fixing & Inelastic Demand

4.6.7. SCENARIO 3. - PEOPLE WILL JUDGE PRICE FIXING MORE HARSHLY IF THEY IDENTIFY WITH THE BUYER & PEOPLE WILL JUDGE PRICE FIXING LESS HARSHLY IF THEY PERCEIVE THE BUYER AS A BAD PERSON.

In the third scenario, the treatment condition involves four tattoo stores who regularly set prices for tattoos. In recent years tattoos have been popularized among young Americans. However, tattooed people still are viewed as more negatively than people without tattoos. The stereotype carries on with an image that portraits tattooed people as troublemakers, heavy drinkers and less intelligent. (Broussard and Harton 2017) Thus, price fixing tattoos will be a nudge for moral judgment of price fixing. Two theories are tested: First, people that identify with tattoo buyers will have a stronger

---

[39] When changing response measure of fairness as a Likert Scale (Completely Unfair as 1 to Completely Fair as 4) respondents in H8 score (M= 1.85, SD=0.90) similarly than respondents in control group (M=1.98, SD=0.76). An ANOVA on the means for both groups confirmed that price-fixing the snow shovels after a snow blizzard or without elicit similar reactions of disapproval by respondents. (F(1, 299) = 1.94 , p = .79).

feeling against price fixing tattoos because they belong to the same group. Second, people that have a stereotype against tattooed persons will judge less unfair a price-fixing that affects tattoo buyers. In other words, people will judge price fixing less harshly if they perceive the buyer as a bad person.

The control condition were hair salons. The scenario had the same structure only that changes tattoo stores with hair salons and tattoos with haircuts. Haircuts are not repugnant goods and it's likely that respondents identify with buyers. The harmful effects of price fixing are not established in both scenarios. It only states that every month firms' price fixed and set prices. Each scenario provides an example of an outcome of the price fixing. Therefore, it is expected that people judge more harshly a price-fixing of haircuts than tattoos.

The question used was:

> Imagine that where you live there are [four tattoo/ hair salons] stores located around the city. Every month the four owners of the [tattoo/salons] stores meet and agree on the prices of [tattoos/ haircuts] that they will charge in each store. For example, they might decide the price of [a basic tattoo/haircut] will be $30 for the next month. Based on these facts, how would you describe what the four [tattoo/ hair salon] stores have done?

After the experimental vignette, two questions were asked to infer pro-and anti-tattoo attitudes of respondents. First, "People who have tattoos are people like me." And, "People who have tattoos are bad people." The response option was a 5-point Likert scale from Strongly disagree (1) to Strongly agree (5).

4.6.8. RESULTS AND DISCUSSION

In the vignette with tattoos' stores, 48% of respondents reacted negatively to the price fixing (N=148). Respondents reactions to the price fixing of hair salons shifted to 61% as unfair (N= 153). Respondents reactions to variations is statistically significant ($X2$ (1, n =301) = 5.81, $p = .0159$). The

results suggest that variation is given by the firm and product involved in the scenario.[40] (Figure 8. Moral Judgment of Price Fixing Tattoo Stores & Hair Salons - Third Party Benefit)

It was expected that respondents would judge more negatively price fixing haircuts than tattoos. However, respondents judge tattoos price fixing less harsh than haircuts. Two reasons might explain the difference in reactions. First, respondents may view tattoos with some sort of prejudice and react less harshly against price fixing that involves tattoo consumers. That said, it is extremely difficult to come up with a good manipulation that involves a product that signals consumers as a bad person. Illegal activities, such as prostitution or drugs, may not be used because attitudes against them may be grounded in the illegality separate and apart from the moral reaction. Things that are viewed as immoral are in most cases legally condemned. Second, it is possible that respondents that didn't identify with buyers of tattoo services reacted more tolerantly to a price-fixing of tattoo stores. If they don't identify with the buyer, they likely judge price fixing with less harshness. On the contrary, it would be expected that more respondents would identify with haircuts service and react more harshly to a price-fixing that would affect their group.

[40] When changing response measure of fairness as a Likert Scale (Completely Unfair as 1 to Completely Fair as 4) respondents score on the price fixing tattoo vignette were more complaisant (M= 2.55, SD=1.02) than respondents in control group (M=2.15, SD=0.91). An ANOVA on the means for both groups confirms that respondents' reactions to price-fixing between price fixing tattoos and haircuts is statistically different. ($F(1, 299) = 11.5$, $p < .005$).

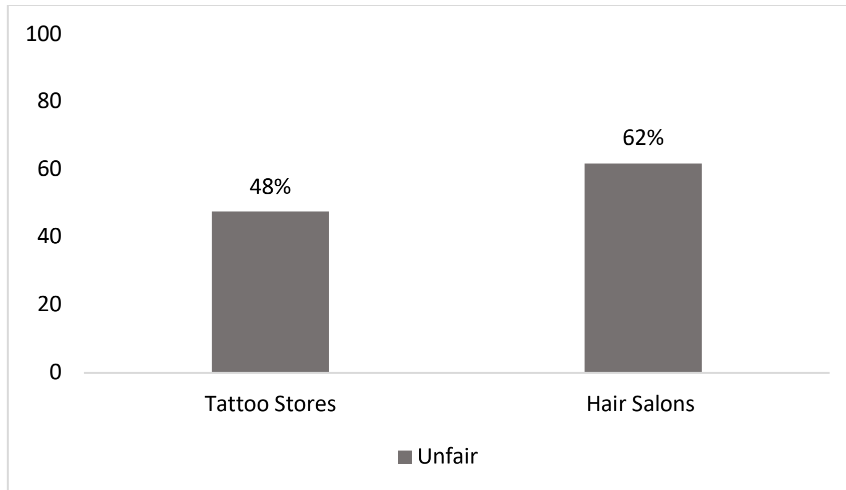

Figure 8. Moral Judgment of Price Fixing Tattoo Stores & Hair Salons
(Third Party Benefit)

4.6.9. PRO-AND ANTI-TATTOO ATTITUDES OF RESPONDENTS

After the experimental vignette, two pro-and anti-tattoo attitudes questions were asked. First, a question to determine if people identified with tattoo consumers. Second, a question to establish if people had some sort of prejudice with tattoo consumers. The measure option was a 5-point Likert scale from Strongly disagree (1) to Strongly agree (5).

The results indicate that the effect size between the mean respondents who judged price fixing as unfair and fair is very small in both measures. For instance, people who judged the price fixing as unfair score 1.6 in the negative attitudes of tattoo consumers, whereas respondents judge the price fixing as fair score 1.5 on the same question. The only group that is close to a medium effect is people who identified with tattooed persons, the mean response of people who judge the price fixing as unfair was 2.6 in comparison with 3.3 who judged them as fair. In the control question, as expected no major difference in effect size is found in respondents that judge the hair salons as unfair and fair.

Table 4. Moral Character of the People Involved in the Transaction

	Unfair			Fair			
	N	Mean	SD	N	Mean	SD	Cohen's d
People who have tattoos are people like me	71	2.6	1.2	78	3.3	1.3	0.3
People who have tattoos are bad people		1.6	0.8		1.5	0.8	0.1
People who go to hair salons are people like me	94	3.2	1.3	58	3.4	2.6	0.1
People who go to hair salons are bad people		1.3	0.6		1.2	1.1	0.1

When the response measure of the fairness reaction of the price-fixing scenario was changed as a Likert Scale (Completely Unfair as 1 to Completely Fair as 4) respondents who judge the tattoo price fixing as unfair (M=1.6, N=71) score lower than respondents who judged it as fair (M=3.4, N=78). A one-way ANOVA was conducted to determine if respondents scored differently identifying with tattoo consumers. Respondents were classified into unfair (n = 71) and fair (n = 78). There was a statistically significant difference between groups as determined by one-way ANOVA ($F(1,147) = 10.01$, $p < .001$). Thus, between respondents who judge price fixing as fair and unfair responded differently when they identified with tattoo consumers.

4.6.10. SCENARIO 3. - PEOPLE WILL JUDGE PRICE FIXING MORE HARSHLY IF THEY IDENTIFY WITH THE BUYER

Other way of analyzing the data is by dividing respondents between people who identified with tattoo consumers and people who didn't.[41] People who identified with tattoo customers scored slightly higher on the moral judgment of price fixing (M= 2.9, SD=0.9, N= 59) than respondents who didn't identified (M-2.43, SD=0.99., N=58). (Figure 9. Moral Judgment & Identifying with Tattoos Buyers)

[41] Respondents who answered neither agree or disagree scored slightly lower (M=2.08, SD=1.02, N=34) were excluded from the analysis because they range in a middle point.

That said, respondents who view themselves more closely to customers of tattoo stores were slightly more lenient in judging price fixing of tattoos than people who didn't view themselves like customers.

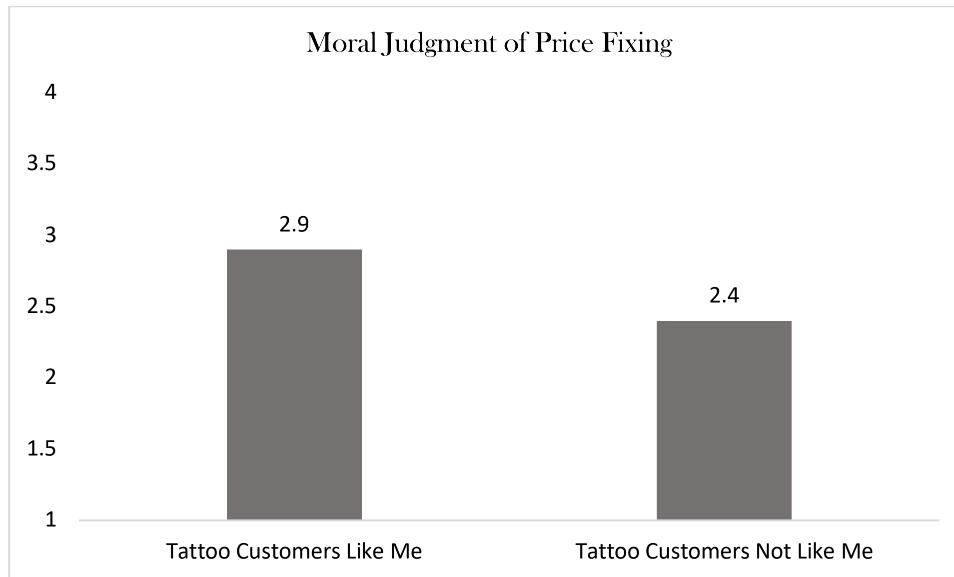

Figure 9. Moral Judgment & Identifying with Tattoos Buyers

The results were contrary to what was expected that expected people to judge more harsher the price fixing if they identified with the tattoo customers. But the data shows that it was the other way around. People like tattoo customers were more prom in accepting a price fixing scheme of tattoo stores. A one-way ANOVA was conducted to determine if judgment of price fixing scenarios were different among people who identified with tattoo costumers. There was a statistically significant difference between groups as determined by one-way ANOVA ($F(1,113) = 6.61$, $p < .05$) (Figure 9. Moral Judgment & Identifying with Tattoos Buyers).

4.6.11. SCENARIO 4. - PEOPLE WILL JUDGE PRICE FIXING LESS HARSHLY IF THEY PERCEIVE THE BUYER AS A BAD PERSON

The majority of respondents don't seem to view tattoo people as bad persons. Respondents who judge the price fixing as unfair scored the same as those who judge them as fair ($F(1,147) = 1.70$, $p < .001$). The results were contrary as expected because it was hypothesized that some respondents would actually have stereotypes of tattooed people and an image that portrait them as troublemakers

and heavy drinkers. Unexpectedly, only five respondents judged people with tattoos as bad people. There is not enough data to develop an analysis between both groups.

4.7. PRELIMINARY CONCLUSIONS

4.7.1. THEORY OF COMMUTATIVE JUSTICE & DUAL ENTITLEMENT PRINCIPLE

The results in H1 indicate that consumers' moral judgment of price fixing will be harsher whenever the amount price fixed is above the cost that affected the reference profit of the firm. In contrast, in H2, price fixing will be judged with some degree of consideration when a cost increasing event affects firms' profits. In other words, if the firm has suffered a cost increasing event, it will be viewed as less unfair to set prices as a way to compensate for the loss of profit level. Now if the price fixing is above the amount of compensation of the cost increasing event it will be judged as unfair.

The findings would suggest the following. First, consumers view price fixing as unfair when firms obtain a benefit at expense of consumers, that is, when firms price fixed as a way to make more profits than the reference price of the market. Second, consumers will view price-fixing agreements as a loss when the price fixing is above the level of compensation for a cost increasing event that had affected firms' profits. If the price fixing compensates exclusively for the cost increasing event, people will judge it as less unfair. The previous analysis supports the general hypothesis, that people judge price fixing as a moral violation influenced by the commutative justice and the dual entitlement principle.

4.7.2. THEORY OF DOUBLE EFFECT PRINCIPLE

In H3 results support the hypothesis that people judge the harmful effects of collusion as less unfair when the benefit is transferred to a third party. One possibility is that transferring the benefit signals the firm's intention to do harm. That will mean that people follow the "do not intend harm" as a shortcut to judge harmful effects. This would fit the psychological studies on the tendency of people to evaluate intentional actions as more negative than unintended ones. (Ames and Fiske 2013) (Darley and Huff 1990) (Young and Saxe 2011) (Robbennolt and Hans 2016)

Another possibility is that transferring the benefit to a third party captures the entitlement of firms to a reference profit. As in the dual entitlement theory, consumers will view a price-fixing as unfair whenever businesses profit are increased above the reference price of consumers. Thus, price fixing to compensate for the loss of profits of a cost increasing event will not be viewed as a loss. The agreement to pay more to Christmas tree growers implies a cost increasing event under the firm's control. On one hand, transferring the benefit implies a loss on the firm's profits, a loss that is compensated by the price increase. On the other, a price-fixing to increase the reference profit at expense of consumers will be seen as something that goes against the idea of a reference price.

A final remark, the moral judgment of price fixing is not only judged by the harmful effects it poses on consumers. In both variations the consumers' surplus is being reduced in the same amount, thus the harmful effects seem equal. But the fact, when firms transfer the price-fixing benefit to a third party suggests that moral judgment of price fixing is not exclusively grounded on moral consequentialist reasoning, but it seems to play in the process an intuitive deontological principle "do not intend to harm". It also may be that the "do not intend to harm" principle also grounds the literature of dual entitlement of fairness in the pricing of Kahneman et al. (1986). For instance, the store that has been sold out of the Cabbage Patch dolls and a week before Christmas auctions the last doll shows how firms intention drives the attitudes about pricing. The authors suggest that the auction is not approved because it benefits the firm against a rule of acceptability. The perception of common people is that Cabbage Patch dolls are goods not used to store value. Thus, an auction with the last Cabbage patch doll by the store is viewed as unfair. However, when the benefit goes to UNICEF the attitudes towards the auction of the Cabbage patch doll were the opposite. Transferring the benefit of the auction to a third party nudge the intention of the firm to benefit at consumers expense. In the end is the role of intention the one that carries on consumers attitudes in the case of the Cabbage doll auction or on the Christmas trees price fixing.

Transferring to a third party the benefit of the price-fixing signals the firm's intention. One explanation signals the firm's intention to do no harm. The harmful consequences of price fixing are approved grounded by the "do not intend harm" principle. In the research on trolley problems done by Hauser et al. (2007) and by Greene et al. (2002) the harmful effects not desired (e.g. harming a

bystander when tracks are switched) will be approved; and, if the harmful consequences are intended to harm (e.g. pushing a "heavy man" in the tracks) as a means to an end will be forbidden by the deontological principle. The principle captures the tendency of people to evaluate intentional actions as more negative than unintended ones. (Ames and Fiske 2013) (Darley and Huff 1990) (Young and Saxe 2011) (Robbennolt and Hans 2016) In other words, a shortcut to accept the harmful effects of price fixing whenever the price-fixing aims to relieve the negative effects of cutthroat competition.

As expected, in H4 when firms intend the harmful effects of price fixing respondents reacted harsher to the price-fixing behavior. On the contrary, when the intention in price fixing aimed to save the struggling business respondents tends to tolerate price fixing. As previously mentioned, a plausible explanation is that respondents are nudged by the role of intention. In the scenario, dairy farmers intend to make more money, which elicits in respondents an intention to harm consumers. That said, the moral judgment of price fixing follows the role of intention of the firm's business behavior, as previously mentioned the principles captures a tendency in people to judge intentional actions as more harmful than unintended ones. (Ames and Fiske 2013) (Darley and Huff 1990) (Young and Saxe 2011) (Robbennolt and Hans 2016)

In H5, contrary to what was expected, people's attitudes don't seem to differ when dairy farmers price fixed directly or obliquely. An explanation is that both scenarios present firms' intention is something embedded in the firm and not in the association. For instance, the four dairies farmers agree to join the association because they can make more money. The intention is something embedded in the firms and not the association. However, when observing individually each group (A, B, C, D) price fixing aiming to make more money elicits a more hostile reaction against price fixing. In the case the price fixing is direct this reaction would be harsher than whenever it is indirect. When the firm's participation is oblique, for instance through a business association, attitudes tend to be more lenient. That said, the role of intention seems to be moderated by the directness in the price fixing. The results seem to be consistent with the literature about the tendency of people to evaluate intentional actions as more harmful than unintentional. If the price fixing is done because dairies farmers purpose is to save the struggling business prices people will tend to evaluate the consequence as less harmful than when the same price fixing is done with the intention of making

money. Ans as with the trolley problems, when price fixing is done indirectly through the business association the intention effect is moderated and the acceptance of the price fixing is slightly higher.

4.7.3. JUDGMENT ABOUT THE TYPE OF PRODUCT OR SERVICE

In H7, the theory claimed that people will judge price fixing more harshly the more expensive the good or service. The similarity in reactions in both responses means that participants reacted similarly to both scenarios (high and low-price product). The findings suggest two things.

First, the results support the previous study of Andreas Stephan (2008) (2015) (2017) which found that people view price fixing as morally wrong. In previous scenarios, the findings suggest that moral judgment of price fixing moves in the case of the theories derived from the principles of dual entitlement and double effect theory. Although with eyeglasses, majority of respondents judged the price fixing as something harmful.

Second, respondents did not differentiate between the harmful effects of price fixing when a product is presented with a high or low dollar amount. Either the case it suggests respondents are reacting to the price fixing agreement which they view as morally wrong.

In H8 the theory expected a stricter response of people attitudes whenever price fixing implicates an inelastic good or service. The results in reactions suggest that participants' attitudes of price fixing were similar in both vignettes. As expected, when firms price fixed after a snowstorm respondent's show a strong aversion of price-fixing behavior. The results seem in line with the findings of Kahneman et. al. (1986) when 82% of respondents said that gauging $5 on snow shovels after a snow blizzard was unfair. The price fixing of snow shovels in the aftermath of a snowstorm is judge similarly in the absence of the snowstorm. Interestingly, both scenarios price fixed in the same amount $5, which actually means that the hardware stores are obtaining an extra benefit and the respective customer is losing $5. In both scenarios, with or in the aftermath of a snowstorm the price fixing was mostly judged as unfair. The theory predicted that people will judge the price fixing of a product with inelastic demand more harshly than in the case of a product without inelastic demand.

In the absence of the snowstorm, respondents' reaction seems contrary to what was predicted. Attitudes of price fixing of snow shovels don't have any meaningful difference in the absence of a snowstorm. A $5 gain by the firms and a customer loss of $5 with or without snowstorm is viewed similarly by most respondents. The fact that people reacted the same way in both scenarios suggest that price fixing a product with inelastic demand is likely to be judged as unfair as in the case of an elastic demand. As in the previous scenario, whenever businesses obtain a benefit - $5 – by imposing a loss on buyers -$5 - without any reason or cue of the intention of the price-fixing, respondents will tend to judge the price agreement as unfair. The rule seems to be, if price fixing benefits the firms without no reason or cue to determine the intention it equals a judgment of unfairness.

In H9 it was expected that people who identify with tattoo buyers would react harshly against price fixing firms and more leniently with those whom they don't identify. But the results were the opposite, respondents who were more tolerant of price fixing of tattoo stores score higher when identifying with buyers. An explanation could be that people that identified with tattoo buyers view themselves as members of a tattoo culture were tattoos are regarded as some form of art expression, identifying with the buyer and the seller. In other words, buyers and sellers would belong and identify with the same group and tolerate a price-fixing. As it was stated previously, if people identify with artists, they will likely judge leniently a price-fixing agreement between artists. That said, the results don't mean that the theory is not plausible simply that there is not sufficient evidence to reject the null hypothesis and further research needs to be done.

Finally, in H11 results were contrary to what was expected. It was predicted that some respondents would actually have stereotypes of tattooed people and judge them as bad people. Nevertheless, the majority of respondents don't seem to identify tattoo people as bad persons, no statistical difference between the score of people who judge price fixing as something unfair/unfair.

4.8. MEASURES AND SCALES

4.8.1. PRICE FIXING ATTITUDE SCALE

In an attempt to better understand if the reaction to vignettes were capturing attitudes about price fixing an instrument was developed to measure price fixing attitudes and correlate it with respondents' answers. The price-fixing attitude scale (PFAS) consists of six statements of beliefs related to price fixing that measure the distance of respondent's attitudes to price fixing. Participants rate the degree to which each statement serves as an accepted belief (Table 5). Beliefs were developed from semi-structured interviews with public and private officials related with the sugar sector in Colombia on January of 2017. The statements reflect a distance of price-fixing schemes in two perspectives sympathetic or unsympathetic.

Table 5. Items from the Price Fixing Attitude Scale[42]
1. Price Agreements Are an Accepted Way of Companies to Get Through Economic Tough Times.
2. Price Agreements Can Be Part of a Cultural Business Tradition.
3. Price Agreements Are A Way to Protect Jobs Under Economic Tough Times.
4. Economic Downturns Are Not A Justification for Business to Agree on Prices.
5. When Businesses Agree on Prices, They Are Robbing Customers.
6. When Businesses Agree on Prices, They Are Making the Rich Richer and The Poor Poorer.

The first three statements were worded using sympathetic terms for price-fixing schemes. For instance, "[p]rice agreements can be part of a cultural business tradition." Score items for sympathetic terms were reverse coded using a 5-point scale running from "strongly disagree" to "strongly agree", where -2 = strongly agree, -1=somewhat agree, 0=neither agree nor disagree, 1=somewhat disagree, 2=strongly disagree.

[42] Questions 1 – 3 were reverse coded.

The second three statements were unsympathetic; for example, "[w]hen businesses agree on prices, they are robbing customers." Scores items are rated using a 5-point scale where 2 = strongly agree, 1=somewhat agree, 0=neither agree nor disagree, -1=somewhat disagree, -2=strongly disagree. Higher scores on the PFAS (+12) indicate an unsympathetic view of price-fixing agreements.

4.8.2. PRICE FIXING ATTITUDE SCALE (PFAS)

Participants total score on the PFAS was summed; total scores ranged from -12 to 12 (M=0.25, SD=5.5). Highest scores (+12) The internal consistency of the PFAS seems reliable with a Cronbach's Alpha = 0.87. (Table 6. Items from The Price Fixing Attitude Scale)

Table 6. Items from the PFAS	Item Test Correlation	Item Rest Correlation	Cronbach's alpha if item deleted
1. Price Agreements Are an Accepted Way of Companies to Get Through Economic Tough Times.	0.83	0.74	0.83
2. Price Agreements Can Be Part of a Cultural Business Tradition.	0.73	0.60	0.85
3. Price Agreements Are A Way to Protect Jobs Under Economic Tough Times.	0.80	0.70	0.84
4. Economic Downturns Are Not A Justification for Business to Agree on Prices.	0.75	0.63	0.85
5. When Businesses Agree on Prices, They Are Robbing Customers.	0.79	0.68	0.84
6. When Businesses Agree on Prices, They Are Making the Rich Richer and The Poor Poorer.	0.75	0.63	0.85
Test Scale			0.87

4.8.3. MEANS AND COHEN'S D SCORES PFAS AND UNFAIR/FAIR REACTIONS TO VIGNETTES

Table 6 shows means of the PFAS and Cohen's d scores indicating how respondents differed between those who judged the price agreements as fair/unfair on the hypothesis grounded on the dual entitlement and commutative justice theory, double effect theory and judgment about the

product.

People who judge price-fixing agreements as unfair score higher on the Price Fixing Index as compare to people who judge it as fair. In H1(N=114), when firms circumvent the price mechanism increasing business prices above the previous reference market price consumers who judge the price fixing as unfair score higher on the PFAS (M= 1.13, SD= 5.13) as oppose to people who people who judge the price fixing as fair (M=-3.57, SD= 3.06). In H2, people who judge the price fixing as unfair in the treatment and control condition tend to score higher on the scale. (Table 7. Means Price Fixing Attitude Scale & H1-H9H11)

The PFAS instrument measures a spectrum of people attitudes between sympathetic (higher score) or unsympathetic (lower score) about price fixing. The results show that average PFAS scores are higher when respondents judge negatively a price-fixing in all experimental vignettes.

Table 7. Means Price Fixing Attitude Scale & H1/H2

Scenario	Unfair	Fair	Cohen's d score
H1 - Consumers will judge price fixing as more unfair when the new price increases the businesses' profits	1.13	-3.57	0.57
N	114	42	
H1Control – Price Fixing does not increase business profits.	3.10	-0.20	0.59
N	38	107	
H2 - Consumers will judge price fixing as less unfair when a cost-increasing event occurs beyond the business's control and the new price only maintains the previous profit.	4.05	-0.94	0.96
N	39	109	
H2 Control - Price Fixing with cost-increasing and the new price increase the previous profit.	1.96	-2.07	0.81
N	83	69	
H3 - Consumers will judge price fixing less harshly when a third-party benefit from the new price increase of the businesses' profits.	4.90	0.11	0.82
N	22	68	
H3Control – Price fixing benefits firms profits with the price increase	1.51	-4.36	0.67
N	94	38	
H4 - Consumers will judge price fixing as more unfair when the firm's involvement is direct.	5.48	-1.51	1.32

N	33	64	

Table 7(Cont). Means Price Fixing Attitude Scale & H1/H2

Scenario	Unfair	Fair	Cohen's d score
H4 Control – Price Fixing Indirect (Business Association)	2.11	-.345	0.47
N	42	55	
H5 - Consumers will judge price fixing as more unfair when the firm intends to harm consumers.	3.91	-1.65	0.97
N	45	26	
H5 Control – Price fixing with unharmful intention	3.13	-.784	0.78
N	30	93	
H7 - People will judge price fixing more harshly the more expensive the good or service.	1.65	-4.22	1.34
N	119	45	
H7Control – Low price product	1.73	-3.56	1.08
N	105	32	
H8- People will judge price fixing more harshly the more inelastic the demand is for the good or service.	1.18	-2.83	0.85
N	117	37	
H8 Control – Demand for product elastic	2.11	-4.16	1.41
N	104	43	
H9 & H11 – Tattoo stores price fixing	3.47	-3.21	1.42
N	71	78	
H9 & H11 Control – Hair salons price fixing	2.57	-2.81	1.27
N	94	58	

4.8.4. EXPERIMENTER DEMAND EFFECTS AND THE PFAS

Experimenter demand effects (EDE's) is a common concern in survey experiments because subjects tend to confirm the research hypothesis when they know what's going on with the experimental hypothesis. (Orne 1962) (Charness, Gneezy and Kuhn 2012) The PFAS questions were randomly presented before and after survey experimental vignettes with the purpose to control if the instrument was potentially influenced by EDE's. The results of the PFAS instrument score is presented before and after the experimental vignettes in table 8.[43] (Means Moral Foundation Subscales & Price Fixing Attitude Scale – PFAS First & Experiment First).

[43] In the appendix the results of the PFAS instrument score is presented before and after the experimental vignettes using correlation coefficient. (Table 9.1, 9.2., 9.3. and 9.4. Means Moral Foundation Subscales & Price Fixing Attitude Scale – PFAS First & Experiment First).

Table 8. Means Moral Foundation Subscales & Price Fixing Attitude Scale

Scenario	PFAS First					Experiments First				
	Unfair	(SD)	Fair	(SD)	Cohen's d score	Unfair	(SD)	Fair	(SD)	Cohen's d score
H1 - Consumers will judge price fixing as more unfair when the new price increases the businesses' profits	2.22	(4.95)	-1.30	(4.76)	0.72	2.87	(5.03)	-3.05	(3.84)	1.32
N	51		25			63		17		
H1Control – Price Fixing does not increase business profits.	2.21	(5.14)	0.18	(5.09)	0.42	4	(5.19)	-0.59	(5.19)	0.76
N	19		53			19		54		
H2 - Consumers will judge price fixing as less unfair when a cost-increasing event occurs beyond the business's control and the new price only maintains the previous profit.	2.22	(4.95)	-1.30	(4.76)	0.72	5.61	(4.64)	-0.56	(5.86)	1.16
N	18		56			21		53		
H2 Control - Price Fixing with cost-increasing and the new price increase the previous profit.	0.27	(5.21)	-2.6	(3.02)	0.68	3.87	(5.64)	-1.65	(4.68)	1.06
N	44		29			39		40		
H3 - Consumers will judge price fixing less harshly when a third-party benefit from the new price increase of the businesses' profits	5	(5.35)	-0.21	(5.28)	0.98	4.83	(6.86)	0.41	5.90)	0.69
N	10		32			12		36		
H3 Control - Price fixing benefits firms profits with the price increase	-1.07	(4.00)	-4.05	(2.85)	0.85	3.59	(5.12)	-4.65	(2.97)	1.96
N	42		18			52		20		
H4 - Consumers will judge price fixing as more unfair when the firm's involvement is direct.	2.53	(6.59)	-1.28	(4.49)	0.67	8.23	(3.25)	-1.75	(5.21)	2.29

Table 8 (Cont). Means Moral Foundation Subscales & Price Fixing Attitude Scale

Scenario	PFAS First					Experiments First				
	Unfair	(SD)	Fair	(SD)	Cohen's d score	Unfair	(SD)	Fair	(SD)	Cohen's d score
N	15		32			17		32		
H4 Control – Price Fixing Indirect (Business Association)	0.70	(3.83)	-0.92	(4.63)	0.38	3.08	(5.13)	0.17	6.31	
N	17		26			25		29		
H5 - Consumers will judge price fixing as more unfair when the firm intends to harm consumers.	0.93	(5.72)	-0.9	(5.17)	0.34	5.55	(5.31)	-2.12	(6.07)	
N	16		10			29		16		
H5 Control - Price fixing with unharmful intention	2.23	(4.98)	-1.16	(4.43)	0.72	4.30	4.71	-0.37	(5.69)	
N	17		48			13		45		
H7 - People will judge price fixing more harshly the more expensive the good or service.	0.12	(4.55)	-4.04	(2.37)	1.14	3.06	(5.33)	-4.45	(4.38)	
N	57		25			62		20		
H7 Control - Low price product	0.61	(5.17)	-2.57	(4.81)	0.68	2.83	(5.48)	-4.33	(3.85)	
N	52		14			53		18		
H8- People will judge price fixing more harshly the more inelastic the demand is for the good or service.	1.18	(5.64)	-2.83	(3.59)	0.85	2.33	(5.99)	-2.71	(4.76)	
N	117		37			69		14		
H8 Control – Demand for product elastic	2.11	5.22	-4.16	3.44	1.41	2.48	(5.22)	-5.25	(3.82)	
N	104		43			54		16		
H9 & H11 – Tattoo stores price fixing	1.63	(5.37)	-2.71	(3.66)	0.94	5.07	(4.65)	-3.80	(4.53)	
N	33		42			38		36		
H9 & H11 Control – Hair salons price fixing	1.44	4.66	-3.33	(3.08)	1.13	3.52	(5.23)	-2.25	(4.25)	
N	43		30			51		28		

The respondents that judged experimental vignettes as unfair score on average higher on the PFAS instrument than respondents who judge price fixing as unfair. As Table 8 shows presenting the PFAS instrument before or after the vignette experiments does not affect that average respondents score higher on the PFAS that respondents who judge the vignettes as fair. Respondents who judge the price fixing as unfair score higher on the PFAS instrument than people who judge price fixing as fair. It does not matter whether they got the PFAS instrument first or last.

Examining the mean difference between respondents PFAS score that judge the price fixing as unfair/fair before and after the experimental vignettes there seem to be a difference between the effect size when people tested the PFAS instrument first or after the experimental vignettes. In H1, Cohen's d scores indicate a medium effect when respondents tested the PFAS first than by comparison with the large effect when they started with the experimental vignettes, the same observation could be made for H2 and H4. In H8 and H9 & H1, when respondents tested the PFAS first obtained large effect sizes as compare with very large effect sizes when respondents started with the experimental vignettes. In H5, when respondents tested the PFAS first obtained a small effect size as compared with a large effect size when respondents tested later the PFAS instrument.

The results suggest that respondents who tested the PFAS instrument first (before the experimental vignettes) obtained slightly lower difference effect sizes between respondents who judge the price fixing as unfair/fair. The intensity of the PFAS after the vignette experiments is partially influenced when people tested the PFAS after the experimental vignettes. Do these findings mean that the PFAS results are just being driven by demand effects? I believe no. The effect sizes between groups suggest a preponderant difference between respondents who judge the price fixing as unfair and fair. It did not seem to matter if the instrument was taken first or later, under both scenarios the difference in effect sizes seem to suggest a magnitude in difference between groups. In other words, PFAS scores of people who judge the price fixing is higher when people judge the price fixing than when they approved the price fixing. It does not matter if they got the PFAS first or last.

4.9. REGRESSION ANALYSIS

The primary theory used by this study understands moral judgment as a result of an automatic and rapid process in which feelings of acceptance or rejection evaluate human subjects or its actions. (Haidt and Bjorklund 2008) (Graham, et al. 2013) Therefore, respondent's attitudes implied a judgment between unfair and fair as the outcome of respondent's moral judgment of business behavior. Thus, a categorical variable - fair (1)/unfair (0) – was created for price fixing and used as a dependent variable and a logistic regression used to include other variables and control for explanations on the moral judgment behind price-fixing agreements.

4.9.1. LOGISTIC REGRESSION: MEASURES USED

The first explanatory variable is the hypothesis that grounds the treatment condition. The theory that grounded each hypothesis was coded as (1) and the control group was coded as (0). In H1, the theory states that consumers will judge price fixing as more unfair when the new price increases the businesses' profits, all respondents who tested this experimental vignette were coded as (1). On the contrary, the control condition tested whether a price-fixing that does not increase a business profit was coded as (0). The same process is repeated through the collapse of each of the eight hypotheses with control groups.

The second explanatory variable is the PFAS instrument, which as has been explained reflects the distance of price fixing as an acceptable and unacceptable business practice and implies that experiments were capturing people attitudes of price fixing. People who obtained a higher score in the scale would likely judge harsher price-fixing behavior than respondents with lowers scores. Because the intensity of PFAS seems to have been influenced by the order in which respondents reacted to the PFAS instrument, the regression analysis was also conducted in the sample where the instrument was presented before and after the experimental vignettes.

In this experiment the liberal and conservative spectrum is tested for political, social, and economic issues. It has been widely noticed by moral scholars that liberals tend to react more sensitively to

harm and fairness than conservatives. Liberals seem to relate fairness with equality concerns (e.g. companies and business should pay their "fair share" in order to achieve society outcomes). Conversely, for conservative's "fairness" is a matter of "proportionality" and benefits should be earned and proportionate as contribution. (Haidt and Bjorklund 2008) (Graham, et al. 2013). Many people identify differently in the liberal/conservative spectrum when they face political, social, and economic issues. That said, the third, fourth and fifth explanatory variable is respondents self-reported attitudes of liberal-conservative spectrum in politics, social and economic issues. And, the last explanatory variable is age and gender that were the basic demographic characteristics collected.

4.9.2. LOGISTIC REGRESSION: RESULTS

To analyze the relationship between moral judgment of price fixing and the theory that grounded each scenario with other independent variables, the PFAS and other political and other demographic variables a regression analysis was conducted. Table 9 presents the results of the logistic regression of the moral judgment of price-fixing agreements under each hypothesis.

4.9.3. THEORY OF COMMUTATIVE JUSTICE & DUAL ENTITLEMENT PRINCIPLE

Tables 9 and 10 show the results of a logistic regression predicting the probability of judging the price fixing as unfair/fair

Table 9. Moral Judgment of Price Fixing Dual Entitlement[44] [45]

	Dependent Variable – Price Fixing (Fair)	
	H1- Consumers will judge price fixing as more unfair when the new price increases the businesses' profits	H2- Consumers will judge price fixing as less unfair when a cost increasing event occurs beyond the business control and the new price only maintains the previous profit.
	Odds Ratio Std. Err.	Odds Ratio Std. Err.
Hypothesis	0.07 *	4.59 *
	(0.02)	(1.32)
PFAS	0.85*	0.84*
	(0.02)	(0.02)
Politics Issues		
Conservative	0.51	1.00
	(0.43)	(0.74)
Independent	0.40	1.46
	(0.27)	(0.85)
Economic Issues		
Conservative	2.06	1.07
	(1.29)	(0.59)
Independent	6.11*	1.69
	(3.60)	(0.88)
Social Issues		
Conservative	1.87	0.86
	(1.14)	(0.49)
Independent	0.56	0.54
	(0.37)	(0.31)
Gender	0.82	1.00
	(0.24)	(0.28)
Age	0.99	1.00
	(0.01)	(0.01)
Intercept	4.71	0.72
	(2.91)	(0.40)
Model Statistics		
N	301	300
Pseudo R-Squared		
	0.278	0.18
Likelihood Ratio Chi-Square	116.24*	74.63*
Correctly Classified	76.08%	71.33%

[44] The asterisk means statistical significance less than or equal to the 5% level.

[45] The results of a logistic regression for each group that presented the PFAS first and second are reported in the Appendix as a way to check for the presence of EDE's. The results suggest that when experiments are presented first lower effect sizes are obtained in the PFAS. Though, the main effect maintains. There is a demand effect that itself does not have a big effect size.

In H1 price fixing, a one-unit change from price fixing without a price increase to price fixing without raising prices would be associated with 0.07 odds ratio on the dependent variable (unfair = 0, fair =1). That said, respondents were less likely to react to the price fixing as fair when changed from the price-fixing without a price increase to price fixing with a price increase.

The PFAS operates as it was expected. When the score on the PFAS is lower respondents are less likely to judge with harshness price-fixing agreements under the first hypothesis of dual entitlement theory. An increase in PFAS leads to a decrease in the predicted probability of judging the price fixing as fair (Odds ratio = 0.85). The results show that a one-unit change in the PFAS is associated with only being 85% as likely to judge the price fixing as unfair..

In H2, respondents' reaction to price fixing were 4.59 times likely to accept the price fixing when firms maintained the profit level increased by a cost increasing event than when firms price fixed above the cost increasing event. The results show that a one-unit change in H2 is associated with a 359% increase in judging the price fixing as fair.

The PFAS operates as it was expected. When the score PFAS is lower respondents are less likely to judge with harshness price-fixing agreements under the second hypothesis of dual entitlement theory. The results indicate that an increase in PFAS leads to a decrease in the predicted probability of judging the price fixing as fair by 0.84 for price fixing agreements framed under a reference profit scenario. The results show that a one-unit change in the PFAS is associated with a 16% decrease of judging the price fixing as fair. One last thing to note, the PFAS instrument captures the different attitudes between a broad and a narrow view of competition, even where self-reported political views are not showing results.

4.9.4. THEORY OF DOUBLE EFFECT PRINCIPLE

Table 10 shows the results of a logistic regression predicting the probability of judging the price fixing as unfair/fair.

Table 10. Moral Judgment of Price Fixing Double Effect Theory [46]

	Dependent Variable – Price Fixing (Fair)		
	H3- Consumers will judge price fixing less harshly when a third-party benefit from the new price increase of the businesses' profits.	H4-. Consumers will judge price fixing as more unfair when the firm's involvement is direct.	H5-. Consumers will judge price fixing as more unfair when the firm intends to harm consumers
	Odds Ratio Std. Err.	Odds Ratio Std. Err.	Odds Ratio Std. Err.
Hypothesis	27.2* (13.0)	1.65 (0.56)	0.16* (0.06)
PFAS	0.79* (0.03)	0.85* (0.02)	0.85* (0.02)
Politics Issues			
Conservative	0.75 (0.74)	1.10 (1.05)	0.83 (0.85)
Independent	0.44 (0.37)	1.31 (0.95)	0.95 (0.76)
Economic Issues			
Conservative	0.63 (0.46)	1.39 (1.04)	2.12 (1.64)
Independent	2.23 (1.75)	1.92 (1.12)	2.58 (1.67)
Social Issues			
Conservative	2.97 (2.17)	0.74 (0.48)	0.78 (0.58)
Independent	2.72 (2.16)	0.89 (0.62)	1.07 (0.83)
Gender	0.75 (0.27)	0.10 (0.34)	1.10 (0.39)
Age	0.99 (0.01)	1.00 (0.01)	1.00 (0.01)
Intercept	0.31 (0.22)	0.91 (0.63)	2.11 (1.49)
Model Statistics			
N	222	194	194
Pseudo R-Squared	0.34	0.142	0.232
Likelihood Ratio Chi-Square	106.29*	36.77*	60.15*
Correctly Classified	77.93%	65.98%	75.26%

[46] The asterisk means statistical significance less than or equal to the 5% level.

In H3, a one-unit change in price fixing when firms' benefit themselves to benefit a third-party would mean the odds of respondents judging price fixing as fair would be 27.2 greater. The magnitude of the odds ratio suggests a strong association between respondents' likelihood of judging the price fixing as fair and a third-party benefit. The PFAS operates as before. An increase in PFAS leads to a decrease in the predicted probability of judging the price fixing as fair (Odds ratio = 0.79). The results show that a one-unit change in the PFAS is associated with the respondent only being 79% as likely to view the price fixing as fair.

In H4, the PFAS was the only independent variable statistically significant. The direction of PFAS implies that respondents with a higher score on PFAS judge more harshly price-fixing agreements. A one change in PFAS leads to a decrease in the predicted probability of judging the price fixing as fair (Odds ratio = 0.85).

In H5, a one-unit change – going from price fixing with the intention to save the struggling business to price fixing with the intention of making more money - would be associated with 0.16 odds ratio on the dependent variable (unfair = 0, fair =1). Respondents were less likely to react to the price fixing as fair when changed from the price fixing to save the struggling business than to make more money. The results are associated with a reduction of 94 % of respondent's judging the price fixing as fair. The second independent variable with statistical significance was the PFAS (Odds ratio = 0.85).

4.9.5. JUDGMENT ABOUT THE TYPE OF PRODUCT OR SERVICE

Table 11 and Table 12 shows the results of a logistic regression predicting the probability of judging the price fixing as unfair/fair.

Table 11. Moral Judgment of Price Fixing Judgment of Type of Product or Service [17]

	Dependent Variable – Price Fixing (Fair)	
	H7 - People will judge price fixing more harshly the more expensive the good or service Odds Ratio Std. Err.	H8 - People will judge price fixing more harshly the more inelastic the demand is for the good or service Odds Ratio Std. Err.
Hypothesis	1.23 (0.39)	0.69 (0.21)
PFAS	0.74* (0.03)	0.77* (0.03)
Politics Issues		
Conservative	0.21 (0.17)	0.61* (0.13)
Independent	0.36 (0.24)	0.20* (0.13)
Economic Issues		
Conservative	1.38 (0.79)	2.83 (1.65)
Independent	1.57 (0.97)	1.31 (0.82)
Social Issues		
Conservative	3.46 (2.27)	3.74* (2.40)
Independent	2.85 (1.96)	4.67* (3.17)
Gender	0.81 (0.25)	1.07 (0.32)
Age	0.99 (0.01)	0.96 (0.01) (0.01)
Intercept	0.28 (0.18)	0.78 (0.48)
Model Statistics		
N	301	301
Pseudo R-Squared	0.237	0.216
Likelihood Ratio Chi-Square	81.38*	75.29*
Correctly Classified	79.07%	76.74%

In H7 the experimental manipulation was not statistically significant. The PFAS was the only independent variable statistically significant. The PFAS captures respondents' attitudes of price fixing

[17]The asterisk means statistical significance less than or equal to the 5% level.

Higher scores on the PFAS imply that more intolerable attitudes of price-fixing agreements. A one change in PFAS leads to a decrease in the predicted probability of judging the price fixing as fair (Odds ratio = 0.74).

Likewise, in H8 the PFAS was statistically significant (Odds ratio = 0.77). The effect implies for a one-unit change in the PFAS a 23% decrease of judging the price fixing as fair. Respondents that self-reported political and social attitudes as conservatives and independents show statistical significance. In the case of respondents that self-reported as conservatives in politics (odds ratio = 0.61) and social issues (odds ratio = 2.76), respondents who identified with neither conservative or liberal in politics (odds ratio 0.26) and social issues (4.67).

Table 12. Moral Judgment of Price Fixing Judgment of Type Product or Service H9 & 11[48]

	Dependent Variable – Price Fixing (Fair)
	Odds Ratio Std. Err.
H9 - People Like Me	2.83* (0.46)
H11 - Bad People	0.96 (0.20)
PFAS	0.74* (0.03)
Politics Issues	
Conservative	0.12* (0.11)
Independent	0.24* (0.17)
Economic Issues	
Conservative	2.58 (1.68)
Independent	3.03 (2.07)
Social Issues	
Conservative	2.76* (1.88)
Independent	1.10* (0.75)
Gender	0.99 (0.01)
Age	0.96 (0.01)
Intercept	0.06 (0.05)
Model Statistics	
N	301
Pseudo R-Squared	0.4036
Likelihood Ratio Chi-Square	167.30*
Correctly Classified	80.07%

[48] The asterisk means statistical significance less than or equal to the 5% level.

In H9 & H11, H9 - people that self-reported similarity with tattoo consumers - were statistically more likely to judge price fixing as fair (odds ratio = 2.83). The results show that a one unit change of people that were more like with tattoo buyers increase in 183% the judgment of price fixing as fair. As in the other regressions, the PFAS was statistically significant. A one change in PFAS leads to a decrease in the predicted probability of judging the price fixing as fair (Odds ratio = 0.74).

4.10. SUMMARY

The role of the PFAS captures the distance of person attitudes with respect to price fixing. A total of six statement were selected to capture different intuitions about price fixing. To illustrate, a person with similar attitudes, such as Louis Brandies and Samuel C.T. Dodd, will likely agree on the first question (price agreements are an accepted way of companies to get through economic tough times). But that does not mean that they stand on the same side. In the last statement, the attitudes would be likely different (when businesses agree on prices, they are making the rich richer and the poor poorer) The PFAS is computed by summing the score each question about questions that reflect an unsympathetic and sympathetic view of price fixing. It captures that distance between the unsympathetic attitudes (PFAS=12) and the opposite a person with a benevolent (PFAS= -12).

The objective of using the PFAS is to determine if experiments are capturing attitudes about price fixing. It must be observed; all experiments deviate from the price mechanism and people reacted to experimental vignettes. Consistently, the PFAS predicts in all regressions people moral judgment of price fixing. That is, even when political attitudes are not showing any consistent relation with moral judgment of price fixing. Overall, the PFAS prediction does not seem to change the moral judgment of price fixing even the experimental manipulations does not work.

4.11. CONCLUSIONS

The results indicate that people judgment of price fixing attitudes is correlated with price fixing attitude scale (PFAS). The variable operates as it was expected. When the score on PFAS is lower respondents are less likely to judge with harshness price fixing agreements under scenarios of dual entitlement theory. Moreover, the PFAS results suggest that experiments are capturing people attitudes about price fixing and not only moral questions. People were reacting to price fixing

experiments where they judge the scenarios according to their price fixing attitudes, not just only moral questions.

But, as the social and moral context of the scenario change people's attitudes about price fixing moves around. This will suggest that people's moralistic views of price fixing will be different according to the context in which it is done. In other words, people intuitions about price fixing move whenever the social and moral context changes.

CHAPTER 5: CONCLUSION

The findings of this research suggest that people's attitudes towards price fixing are more complex than the assumption on which the theory of antitrust law is erected. Indeed, people get angry when they feel that businesses rip them off through unequal transactions, such as price fixing and other forms of collusion-behavior. But there is more to it than that, the evidence also suggests that people care more about fairness when judging antitrust behavior; not being exclusively concerned with consumer welfare and its measure through low prices. In other words, people don't get mad at businesses because price-fixing is inefficient; rather, people's price-fixing attitudes vary depending on the circumstances. There are other social values and moral concerns which are viewed as being more positive than people's self-interest.

The present work advances the understanding of antitrust law by providing some implications of what people view as unfair regarding price-fixing agreements. It also contributes to filling the gap that exists between antitrust law and morality by studying what is wrong about price fixing. Its implications for antitrust analysis are the following.

The first implication is that the commutative justice/dual entitlement theory captures a tendency of people to judge price fixing based on the rule of fairness. Specifically, it was shown that people tend to judge price-fixing as unfair when they feel that firms obtain a benefit at the expense of consumers.

The results suggest that people's attitudes tend to judge as something wrong a price-fixing that increases the business profits at the expense of consumers.

In H1, the results of the experiments became positively associated with an increase of 7% of respondent's approval of price fixing in the case they switched from a price-fixing with a price increase to one that does not increase prices. The results are consistent with the self-interest model of antitrust law in which consumers react to a welfare loss by disapproving a cartel agreement.

But, the story of what people view as unfair in price fixing is more complex, attitudes toward price-

fixing vary under a context that is grounded by a loss suffered by the firm in accordance to the theory of commutative justice/dual entitlement even against their self-interest. Thus, in contrast, a price-fixing will be more likely seen as fair when a cost increasing event affects firms' profits and firms price fixed to recoup the loss suffered. But there are limits to such tendency when the price-fixing increases profits above the recoup level attitudes move along to the ground of unfairness. Moreover, in H2 the results show that a one-unit change from a price-fixing that increases the price above the recoup level to one that price fixes at this level become positively associated with a 359% increase in judging the price fixing as fair. A possible explanation is that respondents view the price fixing as a legitimate defense for businesses to maintain their reference profit after suffering a cost increasing event outside firms control. But as the firm's profits increase above the recoup level people's attitudes judge the price fixing as unfair.

The results implicate that people will tend to judge price fixing as unfair when firms agree on prices as a way to make more profits than the reference price of the market. The research shows that when price fixing only increases profit level to recoup the loss suffered by firms by a cost increasing event out of firms control it will be likely accepted. It is clear that peoples' attitudes of price fixing are not exclusively correlated with the consumer welfare concern, because as the moral content of the context changes attitudes towards price fixing move along with them.

The second implication is that peoples' attitudes toward price-fixing vary under a context in which the price-fixing aims to a good effect. The results suggest that people have a tendency to react in a more benevolent way to a price-fixing when a third party receives the benefits than when firms enlarge their pockets with the price-fixing benefits. In H3, the results show that a one-unit change in price fixing when firms' benefit themselves to benefit a third-party became associated with a 72.8% increase of judging the price fixing as fair. A possible explanation is that by transferring the price-fixing benefit to a third-party respondent interprets the firm's action as not intended to harm consumers. This is probably a consequence of the tendency of people to judge intentional actions more harmful than unintentional equal harmful actions.

Moreover, in H5 the respondents' reaction became associated with a reduction of 94% of respondent's judging the price fixing as fair. The role of the firm's intention with the price fixing is a

strong predictor of people moral judgment. The results show that respondents' attitudes were more permissible to accept price-fixing behavior when the firms' intention is to save the struggling business as compare when the firm's intention is to make more money. The results are consistent with psychological studies that show that people have a tendency to evaluate intentional actions as more negative than unintended one. (Ames and Fiske 2013) (Darley and Huff 1990) (Young and Saxe 2011) (Robbennolt and Hans 2016)

The results implicate that people judgment of fairness in price fixing is influenced by the role of intention captured by the double effect theory. When the firm agrees on prices aiming at the harmful consequences, obtaining a benefit at the expense of consumers the business behavior is perceived as more unfair than aiming to save the struggling business. Moreover, another possible explanation is that respondents are reacting to the fact that firms are holding price-fixing profits. When firms retain the profits from the price-fixing people will perceive the business behavior as greedy and have a tendency to evaluate the behavior as intentional and more harmful. Either the case the price-fixing poses the same harmful effect on consumer pockets.

Third, the results suggest that price agreement among competitors is likely judged as fair by people that self-reported likeness with the service being price-fixed. In H9, the results show that people that self-reported to be identified with buyers were 183% more likely to judge the price fixing as fair. A plausible explanation is that people that identified with buyers view tattoos as a form of art expressions and themselves as members of an artist's community, thus tolerating price fixing as a form of fair prices for tattoo artists and consumers. The fact that people that identified with the buyers and were more prone to accept the price-fixing suggests that more research needs to be done with the relation between price fixing attitudes and the judgment of the product.

Fourth, the price-fixing attitude scale (PFAS) is a tool that captures price-fixing attitudes and measures the distance of price fixing schemes between tolerable and intolerable business behavior. The spectrum moves from a higher score (unsympathetic) to a lower score (sympathetic) about price fixing. Whenever respondents judge price fixing attitudes as an unfair score higher on the PFAS, the scale must be developed further and must be tested in with other cultural groups. It must be noticed that experiments do not manipulate whether there was a price fixing, but the fact that PFAS

correlates with respondent's reaction to vignettes suggests that people moral judgment of price fixing moved when the scenario was grounded by a moral dimension.

The previous results show that people attitude of price-fixing varies according to moral context. This finding suggests that the assumptions upon which antitrust theory is erected are incomplete because they do not value important considerations that influence what people's views as unfair with price-fixing agreements. Nowadays price fixing among competitors is considered so harmful for the competition that it leaves no room for any legal justification or defense and inherently illegal per se conduct. This legal approach does not capture people's attitudes toward price fixing. It has been said before that when law diverges from people moral intuitions the legitimacy of the law suffers because people will not comply with the law voluntarily. One possibility is to expand the rule of reason to business behavior covered by the per se illegality rule that would allow to explore alternative concerns as antitrust goals, such as rules of fairness, to guide competition policy. The other possibility is to start rethinking compliance programs with the moral dimension and social concerns of price fixing. Antitrust authorities should not take for granted that people view price fixing as something harmful and should emphasize people's moral intuitions of price fixing as a limitation for actual compliance antitrust programs. The suggestion is for antitrust authorities to focus corporate compliance programs on people's intuitions of price fixing as a way to improve compliance in the prevention of cartel agreements

However, some limitations of the present research must be considered in further research projects.

First of all, the experimental settings test collusion exclusively and does not include other scenarios; such as the exploitation of market power by single firms in a competitive context. Secondly, all measures used in the experiments are indicative of what people think of the evaluation of hypothetical scenarios, they infer rules of fairness based on price-fixing behavior. Therefore, the quantitative results might not be capturing all of the true attitudes of the subjects. Thirdly, research was conducted on Amazon Mechanical Turk, limiting the study to English native speakers living in the United States. A common concern in survey research is that results of convenience samples may not be useful for generalization; subjects are different from those of the public. Fourth, treatment and control manipulation in some of the experiments, particularly with the relationship between

price-fixing attitudes and judgment of the product was difficult to tease.

Therefore, these limitations would have to be acknowledged beyond the convenience sample conducted on Amazon Mechanical Turk in order to generalize implications. Also, further research should take into account the possibility of researching groups having different cultural backgrounds, allowing for the comparison of results and generalization of findings.

Finally, antitrust law is trapped in a labyrinth of its own making. The fact that people care about rules of fairness when encountering antitrust scenarios indicates that there is a need for antitrust scholars to complement the theoretical model upon which antitrust is erected. With the help of other disciplines, like behavioral sciences the assumptions upon which antitrust is erected would have a more consistent model regarding human behavior.

REFERENCES

Ames, Daniel L., and Susan T. Fiske. 2013. "Intentional Harms Are Worse, Even When They're Not." Psychological Science (SAGE Publications - Association for Psychological Science) 24 (9): 1755-1762.

Ann Arbor Argus. 1894. "The Sugar Trust Autocracy." Ann Arbor Argus, December 21.

Aquinas, Thomas. 1273. Summa Theologica. Translated by 1912 Fathers of the English Dominican Province. Raleigh, North Carolina: Hayes Barton Press.

Austin, Jhon. 1875. Lectures on Jurisprudence or the Philosophy of Positive Law. London: Spottiswoode and Co. New Street Square.

Barak-Corren, Netta, Chia-Jung Tsay, Cushman Fiery, and H. Max Bazerman . 2018. "If you're going to do wrong, at least do it right: considering two moral dillemmas at the same time promotes moral consistency." Management Science (Institute for Operations Research and the Management Sciences) 64 (4): 1528-1540.

Barber, O. C., J. A. Kohler, Washington Gladden, and George Gunton. 1889. Debate on Trusts, Between O.C. Barber and Hon. J.A. Kohler; Also the Debate on Trusts Between Dr. Washington Gladden, of Columbus, Ohio, and George Gunton of New York City, at the Chautauqua Assembly,. Akron, Ohio: Beacon Publishing Company.

Baron, Jonathan. 2014. "Moral Judgment." In Behavioral Economics and the Law, by Eyal Zamir and Doron Teichman, 73. New York: Oxford University Press.

Beach, Charles F. 1889. "The Facts About Trusts." The Forum, September 1: 65.

Bentham, Jeremy. 1879. Principles of Moral and Legislation. Oxford University Press Warehouse.

Bork, Robert H. 1978. The Antitrust Paradox A Policy at war With Itself. New York City: The Free Press .

Boyle, Joseph M. 2001. Toward Understanding the Principle of Double Effect. Vol. 1, in The Doctrine of Double Effect Philosophers Debate a Controversial Moral Principle, by P.A. Woodward, edited by P.A. Woodward, 8. Notre Dame, Indiana: University of Notre Dame Press.

Broussard, Kristin A, and Helen C Harton. 2017. "Tattoo or taboo? Tattoo stigma and negative attitudes toward tattooed individuals." The Journal of Social Psychology (Routledge, Taylor & Francis) 158 (5): 521-540.

Buhrmester, Michael, Tracy Kwang, and Samuel D. Gosling. 2011. "Amazon's Mechanical Turk: A new Source of Inexpensive, Yet High-Quality, Data?" Perspectives on Psychological Science (SAGE Publications Inc) 6 (1): 3-5.

Bureau, Paul. 1899. The Iatlo-Clolumbian Dispute (The Cerruti Affair) The Statu of Aliensa According to International Public Law And The Defects in The Present Procedure of International Arbitration. Paris: Arthur Rousseau.

Carlton , Dennis W, and Randal C Picker. 2014. "Antitrust and Regulation." In Economic Regulation and Its Reform: What Have We Learned?, by Nancy L Rose, 5. Chciago: University of Chicago Press.

Charness, Gary, Uri Gneezy, and Michael Kuhn. 2012. "Experimental methods: Between-subject and within-subejct design." Journal of Economic Behavior & Organization (Elsevier) 81: 1-8.

Chicago Tribune. 1897. "The Evil Example of the Sugar Trust." Chicago Tribune, February 16.

Cicilline , David N. 2018. "Cicilline Introduces Journalism Competition and Preservation Act." Congressman David Ciciline. Congressman David Ciciline. March 7. Accessed March 11,

2018. https://cicilline.house.gov/press-release/cicilline-introduces-journalism-competition-and-preservation-act.

Connor, Jhon M, and Robert H Lande. 2012. "Cartels as Rational Business Strategy: Crime Pays." Cardozo Law Review (Cardozo Law Review) 34: 429.

Cooter, Robert, and Tomas Ulen. 2007. Law & Economics. Vol. 5th. Pearson Addison Wesley.

CPI. 2016. "Chile: Regulator accuses Walmart, Cencosud of Price Fixing." Competition Policy International. Competition Policy International. January 6. Accessed March 31, 2017. https://www.competitionpolicyinternational.com/chile-regulator-accuses-wal-mart-cencosud-of-price-fixing/.

Cushman , Fiery. 2016. "The Psychological Origins of the Doctrine of Double Effect." Criminal Law and Philosohy: Special Issue the Means Principle (Springer) 763.

Dana, Wm. F. . 1903. "The Supreme Court and the Sherman Anti-Trust Act." Harvard Law Review (The Harvard Law Review Association) 16 (3): 178-185.

Darley, John M., and Charles W. Huff. 1990. "Heightened damage assesment as a resukt of the intentionality of the damage-causing act." British Journal of Social Psychology (The British Psychological Society) 29: 181-188.

De Roover, Raymond. 1951. "Monopoly Theory Prior to Adam Smith." The Quarterly Journal of Economics 65 (4): 496.

Dill, James B. 1901. Trusts: Their Uses and Abuses Abstracts From the Address of James B. Dill of New York City, Before the Merchants Club of Chicago Illinois, With Various Resulting Editorial Comments and Discussion Relative to Combinations, Their Advantages, Disadvantages, Dangerous Tendencies, Remedies, Etc. New York, New York: Registration and Trusts Company.

Dodd, Samuel C.T. 1893. "The Present Legal Status About Trusts." Harvard Law Review (The Harvard Law Review Association) 7 (3): 157-169.

—. 1888. Their Uses and Abuses, With a History of The Standard Oil Trust. New York: George F. Nesbitt & Co.

Ellickson, Robert C. 1986. "3Of Coase and Ca le: Dispute Resolution Among Neighbors in Shasta County." Stanford Law Review (Yale Law School) 38: 670.

Federal Trade Commission. 2018. Guide to Antitrust Laws, Dealing With Competitors, Price FIxing. Washington D.C., November 24. https://www.ftc.gov/tips-advice/competition-guidance/guide-antitrust-laws/dealings-competitors/price-fixing.

Ferretti, Fred. 1984. "Cabbage Patch Kids: Born For Adoption At a Price ." The New York Times, January 16: 1.

Foot, Philippa. 2001. "Morality, Action and Outcome." In The Doctrine of Double Effect Philosophers Debate a Controversial Moral Principle, by P.A. Woodward, 69. Notre Dame, Indiana: University of Notre Dame Press.

Friedman, Lawrence M. 2001. A History of American Law. New York: Touchstone.

Graham, Jesse, Jonathan Haidt, Sena Koleva, Matt Motyl, Ravi Iyer, Sean P. Wojcik, and H. Peter Ditto. 2013. "Moral Foundations Theory: The Pragmatic Validity of Moral Pluralism." Advances in Experimental Social Psychology (Academic Press) 47: 55-130.

Greenberg, Brad A. 2011. "The News Deal: How Price Fixing and Collusion Can Save the News Paper Industry - And Why Congress Shoul Promote It." UCLA Law Review (UCLA Law School) 59 (414): 56-58.

Greene, Joshua. 2015. "Beyond Point-and-Shoot Morality: Why Cognitive (Neuro)Science Matters for Ethics." Law and Ethics of Humans Rights (De Gruyter) 9 (2): 9.

Greene, Joshua. 2014. "The Cognitive Neuroscience of Moral Judgment and Decision Making." In The Cognitive Neurosciences, Fourth Edition, by Michael S. Gazzaniga and George R. Mangun, 1016. London: MIT Press.

Greene, Joshua, and Jonathan Haidt. 2002. "How (and where) does moral judgment work? ." TRENDS in Cognitive Sciences (Elsevier) 6 (12): 519.

Greene, Joshua, Brian R. Sommerville, Nystrom E. Leigh, Jhon E. Darley, and Jonathan D. Cohen. 2001. "An fMRI Investigation ofEmotional Engagement in Moral Judgment." Science (American Association for the Advancement of Science) 293: 2107.

Gury, Joanne Petro. 1852. Compendium Theologiae Moralis. Vol. 4. Paris: Perisse.

Habermas, Jurgen. 1962. The Structural Transformation of the Public Sphere. Translated by Thomas Burger. Cambridge, Massachusetts: The MIT Press.

Haidt, Jonathan. 2001. "The Emotional Dog and Its Rational Tail: A Social Intuitionist Approach to Moral Judgment." Psychological Review (American Psychological Association) 108 (4): 817.

Haidt, Jonathan, and Fredrik Bjorklund. 2008. "Social Intuitionists Answer Six Questions About Morality." In Moral Psychology The Cognitive Science of Morality: Intuition and Diversity, by Walter Sinnott-Armstrong, 181. Cambridge, MA: MIT Press.

Hammond, Scott D. 2000. Detecting and Deterring Cartel Activity Through An Effective Leniency Program. Department of Justice. November 21-22. https://www.justice.gov/atr/speech/detecting-and-deterring-cartel-activity-through-effective-leniency-program.

Hastorf, Albert H., and Hadley Cantril. 1954. "They Saw a Game: A Case Study." The Journal of Abnormal Psychology (American Psychological Association) 49 (1): 129-134.

Hauser, Marc, Fiery Cushman, Fiery Young, R. Kang-Xing, and Jhon Mikhail. 2007. "A Dissociation Between Moral Judgments and Justifications." Mind and Language (Wiley Humanities Festival.) 22 (1): 7.

Iyer, Ravi, Spassena Koleva, Jesse Grahan, Peter Ditto, and Jonathan Haidt. 2012. "Understandinf Libertarian Morality: The Psychological Dispositions of Self-Identified Libertarians." Plos One (Public Library of Science) 7 (8): 1-23.

John, R. Richard. 2017. "Propietary Interest: Merchants, Journalists, and Antinomonopoly in the 1880's." In Media Nation: The Political History of News in Modern America, by J. Bruce Schulman and E. Julian Zelizer, 1-35. Philadelphia: University of Penssylvania Press.

Justice, The United States Department of. 2015. Criminal Enforcement Trends Charts Through Fiscal Year 2015. The United States Department of Justice. December 11. Accessed December 12, 2016. https://www.justice.gov/atr/criminal-enforcement-fine-and-jail-charts.

Kahneman, Daniel. 2011. Thinking Fast and Slow. Ferrar, Straus and Giroux.

Kahneman, Daniel, and R. Cass Sunstein. 2005. "Cognitive Psychology of Moral Intuitions." In Neurobiology of Human Values Research and Perspectives in Neurosciences, by Jean-Pierre Changeux, Wolf Singer, Antonio Damasio and Yves Christen, 91-106. Heidelberg: Springer-Verlag.

Kahneman, Daniel, Jack L Knetsch, and Richard Thaler. 1986. "Fairness as a Constraint of Profit Seeking: Entitlements in the Market." The American Economic Review (American Economic Association) 74 (4): 729-730.

Knobe, Joshua. 2003. "Intentional Action and Side Effects in Oridinary Language." Analysis 63: 190-193.

Knobe, Joshua. 1997. "The Folk Concept of Intentionality." Journal of Experimental Social Psychology (Elsevier on behalf of the Society of Experimental Social Psychology) 33: 107-108.

Kohlberg, Lawrence. 1969. Stage and Sequence: The Cognitive-Developmental Approach to Socialization. Edited by David A. Goslin. Chicago, Illinois: Rand McNally.

Kohlberg, Lawrence, Charles Levine, and Alexandra Hewer. 1983. Moral Stages: A Current Formulation and Response. Basel, Switzerland: Karger.

Langholm, Odd. 2006. "Monopoly and Market Irregularities in Medieval Economic Thought." Journal of the History of Economic Thought (Routledge) 28 (4): 395-97.

Lerner, Melvin J. . 1980. The Belief In A Just World A Fundamental Delusion. Boston, MA: Springer.

Letwin, William L. 1956. "Congress and the Sherman Antitrust Law: 1887-1890." The University of Chicago Law Review (The University of Chicago Law Review) 23 (2): 221-258.

Letwin, William L. 1954. "The English Common Law Concerning Monopolies." The University of Chicago law Review (The University of Chicago) 21 (3): 355.

Lloyd, Henry Demarest. 1881. "The Story of a Great Monopoly." The Atlantic Monthly A Magazine of Literature, Science, Art and Politics, March: 317-334.

Luther, Martin. 1903. Concerning Christian Liberty . Lutheran Publication Society.

Mangan, Joseph T. 1949. "An Historical Analysis of the Principle of Double Effect." Theological Studies (Society of Jesus in the United States) 43.

Marquis, Donald B. 2001. "Four Versions of Double Effect." In The Doctrone of Double Effect Philosophers Debate a Controversial Moral Principle, by P.A. Woodward, 157. Notre Dame, Indiana: University of Notre Dame .

Mikhael, Jhon. 2007. "Universal Moral Grammars: Theory Evidence and the Future." Trends in Cognitive Science (Elsevier) 11 (4): 145.

Miranda Montecinos, Alejandro. 2008. "El Principio del Doble Efecto y su Relevancia en el Razonamiento Juridico." Edited by Pontificia Universidad Católica de Chile. Revista Chilena de Derecho 35 (3): 485-519.

OECD, Organisation for Economic Co-operation and Development. 2011. Policy Roundtables Promoting Compliance With Competition Law - 2011. DAF/COMP(2011)20, Policy Roundtables, Organisation for Economic Co-operation and Development, Paris: Organisation for Economic Co-operation and Development, 376.

Orne, Martin T. 1962. "On The Social Psychology of the Psychological Experiment: With Particular Reference To Demand Characteristics And Their Implications." Social Psychology of the Psychological Experiment (American Psychological Association) 776-778.

Patterson, George S. 1897. "The Case of the Trans-Missouri Freight Association." University of Pennsylvannia Law Review (The University of Pennsylvannia) 45: 307.

Peritz, Rudolph J.R. 1996. Competition Policy in America, 1888-1992 History, Rhetoric, Law. New York, New York: Oxford University Press.

Posner, Richard. 1979. "The Chicago School of Antitrust Analysis." University of Pennsylvania Law Review (University of Pennsylvania Law Review) 127 (4): 928.

—. 1999. The Problematics of Moral and Legal Theory. London: The Belknap Press of Harvard University Press.

Rajiv, Vaidyanathan, and Aggarwal Praveen. 2003. "Who is the Fairest of them all? An Attributional Approach to Price Fairness Perceptions." Journal of Business Research (Elsevier) 56: 453-463.

Rapsher, W. M. 1888. "Dangerous Trusts." The North American Review (University of Northern Iowa) 146 (378): 5.
Robbennolt, Jennifer K., and Valerie P. Hans. 2016. The Psychology of Tort Law. New York: New York university Press.
Roth, Alvin E. 2007. "Repugnance as a Constraint on Markets." Journal of Economic Perspectives (American Economic Association) 21 (3): 37-58.
Royzman, Edward B., and Jonathan Baron. 2002. "The Preference for Indirect Harm." Social Justice Research (Spriger) 15 (2): 178.
Seamans, Robert, and Feng Zhu. 2014. "Responses to Entry in Multisided Markets: The Impact of Craiglist on Local News Papers." Managment Science (INFORMS) 60 (2): 490.
Sepulveda, Monse. 2016. "Chileans boycott supermarkets to fight corruption." Waging Nonviolence People Powered News & Analysis. Waging Nonviolence People Powered News & Analysis. January 13. Accessed March 31, 2017. http://wagingnonviolence.org/2016/01/chileans-boycott-supermarkets-to-fight-corruption/.
Sherman, John. 1890. Speech of Honorable John Sherman of Ohio Delivered in the Senate of the United States, Firday March 21, 1890. Washington, D.C.: Washington; [s.n.].
Stephan, Andreas. 2017. "An empirical evaluation of the normative justifications for cartel criminalisation." Legal Studies (The Journal of the Society of Legal Scholars) 1-26.
Stephan, Andreas. 2008. "Survey of Public Attitudes to Price Fixing and Cartels Eforcement in Britain." Competition Law Review 123-145.
Stephan, Andreas. 2015. "Survey of Public Attitudes to Price Fixing in the UK, Germany, Italy and the USA." Center for Competition Policy (CCP) Working Paper 15-8 (Center for Competition Policy (CCP)) 11.
Stephan, Andreas. 2015. "Survey of Public Attitudes to Price Fixing in the UK, Germany, Italy and the USA." Center for Competition Policy (CCP) Working Paper 15-8 (Center for Competition Policy (CCP)) 11.
Stocking, George W., and Myron W. Watkins. 1951. Monopoly and Free Enterprise. New York: Lord Baltimore Press.
Stucke, Maurice E. 2006. "Morality and Antitrust." Columbia Business Law Review (Columbia University Press) 443 (1): 102-105.
Tajfel, Henry, and John Turner. 1979. In The social psychology of intergroup relations, by William G. Austin and Stephen Worchel, 33-47. Monterey, California: Brooks/Cole Pub. Co.
The New York Times. 1888. "Another Large Trust A Monopoly Which is Thirty Years Old." The New York Times, February 13: 1.
—. 1888. "Are Trusts a Mere Bugbear." The New York Times, June 26.
—. 1900. "Bryan Talks to Farmers Discusses the Evil of Trusts and Danger of Impreialism, Hates Trusts, Good or Bad, Non-Producers of Weath Are Producers of Laws - Roosevelt Should Go Home and Attend to Ice Trust." The New York Times, October 3.
—. 1899. "Demands Laws Againts Trusts To The Editor of the New York Times." The New York Times, August 7.
—. 1888. "Only For Fair Profit Combinations of Clothes Wringer Makers - A Chemical Syndicate." The New York Times, February 26: 1.
—. 1888. "Prices and Prosperity." The New York Times, March 11.
—. 1902. "Senator Beveridge on Advantages of Trusts - Combinations Are Necessary To Meet Modern Requirements - Opens Utah Campaign By Denying That They Are Fostered By Tariff." The New York Times, September 12.

—. 1888. "Sweets That Grow Dear The Producer And Buyer Squeesed For Tribute, Wealth Pouring into the Sugar Trust How It Affects The Interest of The Dear Public." The New York Times, Januaeary 29.
—. 1888. "The "Trust" Problem." The New York Times, February 20.
—. 1888. "The Copper Ring and the Senate Tariff Bill." The New York Times, November 30.
—. 1888. "The Foes of Competition Trusts And Other Combinations The Growth of Monopolies and Pools - Graduates of the Standard Oil School of Political Economy - Operations of the Sugar Trust - The Steel Rail Ring - Tribute Exacted From the Farmers." The New York Times, February 20: 1.
—. 1888. "The People Suing A Trust." The New York Times, August 10.
—. 1888. "The Proposed Stove Trust." The New York Times, February 5: 1.
—. 1888. "The Proposed Stove Trust Reasons Given For Its Formation - The Plan Outlined." The New York Times, February 5: 1.
—. 1888. "The Trust Problem." The New York Times, February 20: 1.
—. 1899. "Thinks Trusts Not Illegal Member of The Industrial Commission Says They Cheapen Production and Benefit the People." The New York Times, July 4.
—. 1902. "Why He Left Sugar Trust." The New York Times, December 15.
Thomson, Judis Jarvis. 1985. "The Trolley Problem." The Yale Law Journal (The Yale Law Journal Company) 94 (6): 1395.
Thumala, María Angélica . 2018. "Civil Indignation in Chile." In The Civil Sphere in Latin America, by Jeffrey Alexander and Carlo Tognato, 66-92. Cambridge University Press.
Tyler, Tom. 2006. Why People Obey The Law. Princeton, New Jersey: Princeton University Press.
United States Senate, Subcommitte on Antitrust, Competition Policy and Consumer Rights, Committe in the Judiciary. 2013. Oversight of the Enforcement of Antitrust Laws. April 16. Accessed 12 10, 2016. https://www.gpo.gov/fdsys/pkg/CHRG-113shrg98754/pdf/CHRG-113shrg98754.pdf.
Universidad Adolfo Ibáñez, CADEM, and Centro de Estudios Horizontal . 2015. Segundo Estudio Sobre Libre competencia: “Salvando al capitalismo de los capitalistas. Survey, Universidad Adolfo Ibanez & CADEM, Santiago de Chile: CADEM.
Universo, El. 2016. "Chilenos no compraran en supermercados para protestar por subida de precios." El Universo. El Universo. January 10. Accessed March 31, 2017. http://www.eluniverso.com/noticias/2016/01/10/nota/5338651/chilenos-no-compraran-supermercados-protestar-subida-precios.
Waked, Dina I. 2016. "Adoption of Antitrust Laws in Developing Countries." Journal of Law, Economics & Policy (George Mason University Press) 12 (2): 38.
Waldmann, Michael R., Jonas Nagel, and Alex Wiegmann. 2012. "Moral Judgment Chapter 19." In The Oxford Handbook of Thinking and Reasoning, by Keith J. Holyoak and G. Robert Morrison, 364. Neew York, New York: Oxford University Press.
Werden, Gregory J, and Marilyn J Simon. 1987. "Why Price Fixers Should go to Prison." Antitrust Bulletin (Federal Legal Publications Inc.) 933.
Werden, Gregory. 2009. "Sanctioning Cartel Activity Let the Punishment Fit The Crime." Euoropean Competition Journal (Routledge) 5 (1): 19-20.
Whelan, Peter. 2013. "Cartel Criminalization and the Challange of Moral Wrongfulness." Oxford Journal of Legal Studies (Oxford University Press) 33 (3): 559-561.
Wood, Henry. 1888. "The Bugbear of Trusts." The Forum, July 1: 584.

Young, Liane, and Rebecca Saxe. 2011. "When Ignorance os no excuse: Different roles for intent across moral domains." Cognition (Elsevier) 120: 202-214.

Zarkada-Fraser, Anna, and Martin Skitmore. 2000. "Decisions with Moral Content: Collusion." Construction Management and Economics (Taylor & Francis) 109.

APPENDIX A: LOGISTIC REGRESSION PFAS FIRST/EXPERIMENTS FIRST

1. The results of a logistic regression for each group that presented the PFAS first and second are reported as a way to check for the presence of EDE's. The results suggest that when experiments are presented first lower effect sizes are obtained in the PFAS. Though, the main effect maintains. In other words, there is a demand effect that itself does not have a big effect size.

Table 13. Moral Judgment of Price Fixing Dual Entitlement H1[49]
Dependent Variable – Price Fixing (Fair)

	Odds Ratio Std. Err.	PFAS First Odds Ratio Std. Err.	Experiments First Odds Ratio Std. Err.
H1- Consumers will judge price fixing as more unfair when the new price increases the businesses' profits	0.07 * (0.02)	0.07* (.037)	0.06* (0.03)
PFAS	0.85* (0.02)	0.87* (0.04)	0.82* (.037)
Politics Issues			
Conservative	0.51 (0.43)	1.03 (1.20)	0.23 (0.33)
Independent	0.40 (0.27)	0.56 (0.51)	0.23 (0.26)
Economic Issues			
Conservative	2.06 (1.29)	2.36 (1.97)	1.88 (2.05)
Independent	6.11* (3.60)	11.3* (10.9)	4.39 3.64
Social Issues			
Conservative	1.87 (1.14)	1.08 (0.90)	4.05 (4.20)
Independent	0.56 (0.37)	0.63 (0.66)	0.29 (0.30)
Gender	0.82 (0.24)	0.87 (0.35)	0.73 (0.33)
Age	0.99 (0.01)	0.97 (0.01)	0.99 (0.02)
Intercept	4.71 (2.91)	5.40 (4.51)	6.09 (6.20)
Model Statistics			
N	301	148	153
Pseudo R-Squared	0.278	0.226	0.371
Likelihood Ratio Chi-Square	116.24*	46.34*	78.53*
Correctly Classified	76.08%	76.35%	79.08%

[49] The asterisk means statistical significance less than or equal to the 5% level.

Table 14. Moral Judgment of Price Fixing Dual Entitlement H2[50]
Dependent Variable – Price Fixing (Fair)

	Odds Ratio Std. Err.	PFAS First Odds Ratio Std. Err.	Experiments First Odds Ratio Std. Err.
H2- Consumers will judge price fixing as less unfair when a cost increasing event occurs beyond the business control and the new price only maintains the previous profit.	4.59 * (1.32)	7.40* (3.17)	3.140* (1.34)
PFAS	0.84* (0.02)	0.84* (0.03)	0.82* (0.03)
Politics Issues			
Conservative	1.00 (0.74)	0.27 (0.32)	2.88 (3.17)
Independent	1.46 (0.85)	0.58 (0.51)	4.16 (3.88)
Economic Issues			
Conservative	1.07 (0.59)	3.62 (3.06)	0.38 (0.33)
Independent	1.69 (0.88)	5.97 (5.36)	0.53 0.39
Social Issues			
Conservative	0.86 (0.49)	1.30 (1.07)	0.56 (0.48)
Independent	0.54 (0.31)	0.55 (0.48)	0.46 (0.38)
Gender	1.00 (0.28)	1.28 (0.48)	0.66 (0.27)
Age	1.00 (0.01)	0.99 (0.01)	1.00 (0.01)
Intercept	0.72 (0.40)	0.40 (0.32)	1.58 (1.40)
Model Statistics N	300	147	153
Pseudo R-Squared	0.18	0.207	0.2345
Likelihood Ratio Chi-Square	74.63*	41.53*	48.05*
Correctly Classified	71.33%	71.43%	76.47%

[50] The asterisk means statistical significance less than or equal to the 5% level.

Table 15. Moral Judgment of Price Fixing Double Effect Theory H3[51]

Dependent Variable – Price Fixing (Fair)

	Odds Ratio Std. Err.	PFAS First Odds Ratio Std. Err.	Experiments First Odds Ratio Std. Err.
H3- Consumers will judge price fixing less harshly when a third-party benefit from the new price increase of the businesses' profits.	27.2 * (13.0)	27.9* (20.4)	31.3* (21.3)
PFAS	0.79* (0.03)	0.81* (0.05)	0.77* (0.04)
Politics Issues			
Conservative	0.75 (0.74)	1.71 (2.41)	0.38 (0.57)
Independent	0.44 (0.37)	1.23 (1.49)	0.15 (0.20)
Economic Issues			
Conservative	0.63 (0.46)	0.37 (0.41)	1.01 (1.03)
Independent	2.23 (1.75)	0.78 (1.02)	3.46 3.76
Social Issues			
Conservative	2.97 (2.17)	2.84 (2.82)	3.02 (3.61)
Independent	2.72 (2.16)	2.87 (3.12)	5.75 (7.56)
Gender	0.75 (0.27)	0.95 (0.49)	0.56 (0.32)
Age	0.99 (0.01)	0.99 (0.02)	0.99 (0.02)
Intercept	0.31 (0.22)	0.23 (0.23)	0.49 (0.55)
Model Statistics N	222	102	120
Pseudo R-Squared	0.34	0.293	0.4147
Likelihood Ratio Chi-Square	106.29*	41.48*	68.77*
Correctly Classified	77.93%	79.41%	81.67%

[51] The asterisk means statistical significance less than or equal to the 5% level.

Table 16. Moral Judgment of Price Fixing Double Effect Theory H4[52]

Dependent Variable – Price Fixing (Fair)

	Odds Ratio Std. Err.	PFAS First Odds Ratio Std. Err.	Experiments First Odds Ratio Std. Err.
H4-. Consumers will judge price fixing as more unfair when the firm's involvement is direct.	1.65 (0.56)	1.27 (0.62)	2.52 (1.34)
PFAS	0.85* (0.02)	0.88* (0.04)	0.796* (0.04)
Politics Issues			
Conservative	1.10 (1.05)	0.48 (0.65)	2.06 (3.37)
Independent	1.31 (0.95)	1.77 (1.76)	0.74 (0.96)
Economic Issues			
Conservative	1.39 (1.04)	1.12 (1.17)	2.54 (3.31)
Independent	1.92 (1.12)	1.37 (1.28)	4.06 3.58
Social Issues			
Conservative	0.74 (0.48)	1.91 (1.90)	0.32 (0.36)
Independent	0.89 (0.62)	1.37 (1.28)	0.66 (0.72)
Gender	0.10 (0.34)	0.63 (0.32)	2.06 (1.15)
Age	1.00 (0.01)	0.98 (0.02)	1.03 (0.25)
Intercept	0.91 (0.63)	2.39 (2.38)	0.22 (0.25)
Model Statistics N	194	91	103
Pseudo R-Squared	0.142	0.097	0.247
Likelihood Ratio Chi-Square	36.77*	11.62	34.51*
Correctly Classified	65.98%	61.54%	72.82%

[52] The asterisk means statistical significance less than or equal to the 5% level.

Table 17. Moral Judgment of Price Fixing Double Effect Theory H5[53]

Dependent Variable – Price Fixing (Fair)

	Odds Ratio Std. Err.	PFAS First Odds Ratio Std. Err.	Experiments First Odds Ratio Std. Err.
H5-. Consumers will judge price fixing as more unfair when the firm intends to harm consumers	0.16* (0.06)	0.13* (0.08)	0.11* (0.06)
PFAS	0.85* (0.02)	0.87* (0.04)	0.80* (0.04)
Politics Issues			
Conservative	0.83 (0.85)	0.31 (0.45)	1.63 (2.63)
Independent	0.95 (0.76)	2.57 (2.95)	0.27 (0.38)
Economic Issues			
Conservative	2.12 (1.64)	1.52 (1.74)	3.46 (4.10)
Independent	2.58 (1.67)	1.75 (1.82)	5.67 5.53
Social Issues			
Conservative	0.78 (0.58)	4.00 (1.90)	0.25 (0.31)
Independent	1.07 (0.83)	4.61 (1.25)	1.15 (1.38)
Gender	1.10 (0.39)	1.55 (1.01)	1.43 (0.81)
Age	1.00 (0.01)	0.99 (0.02)	1.02 (0.02)
Intercept	2.11 (1.49)	2.61 (2.64)	1.56 (1.81)
Model Statistics N	194	91	103
Pseudo R-Squared	0.232	0.190	0.343
Likelihood Ratio Chi-Square	60.15 *	22.72	47.86*
Correctly Classified	75.26%	70.33%	78.64%

[53] The asterisk means statistical significance less than or equal to the 5% level.

Table 18. Moral Judgment of Price Fixing Judgment of Type of Product or Service H7[54]

Dependent Variable – Price Fixing (Fair)

	Odds Ratio Std. Err.	PFAS First Odds Ratio Std. Err.	Experiments First Odds Ratio Std. Err.
H7 - People will judge price fixing more harshly the more expensive the good or service	1.23 (0.39)	1.46 (0.66)	0.11 (0.06)
PFAS	0.74* (0.03)	0.76* (0.05)	0.73* (0.04)
Politics Issues			
Conservative	0.21 (0.17)	0.16 (0.20)	0.33 (0.15)
Independent	0.36 (0.24)	0.42 (0.37)	0.15 (0.22)
Economic Issues			
Conservative	1.38 (0.79)	2.88 (2.33)	0.47 (0.45)
Independent	1.57 (0.97)	2.61 (2.17)	1.17 1.21
Social Issues			
Conservative	3.46 (2.27)	2.45 (2.16)	6.72 (7.28)
Independent	2.85 (1.96)	1.89 (1.76)	6.51 (7.75)
Gender	0.81 (0.25)	1.00 (0.42)	0.60 (0.30)
Age	0.99 (0.01)	0.98 (0.01)	1.00 (0.02)
Intercept	0.28 (0.18)	0.23 (0.20)	0.33 (0.38)
Model Statistics N	301	148	153
Pseudo R-Squared	0.237	0.171	0.3479
Likelihood Ratio Chi-Square	81.38*	29.32*	59.67*
Correctly Classified	79.07%	81.08%	84.97%

[54]The asterisk means statistical significance less than or equal to the 5% level.

Table 19. Moral Judgment of Price Fixing Judgment of Type of Product or Service H8[55]

Dependent Variable – Price Fixing (Fair)

	Odds Ratio Std. Err.	PFAS First Odds Ratio Std. Err.	Experiments First Odds Ratio Std. Err.
H8 - People will judge price fixing more harshly the more inelastic the demand is for the good or service.	0.69 (0.21)	0.71 (0.29)	0.68 (0.35)
PFAS	0.77* (0.03)	0.78* (0.04)	0.77* (0.04)
Politics Issues			
Conservative	0.61* (0.13)	0.06* (0.04)	0.49 (0.58)
Independent	0.20* (0.13)	0.19 (0.17)	0.05 (0.08)
Economic Issues			
Conservative	2.83 (1.65)	3.54 (2.95)	2.13 (1.93)
Independent	1.31 (0.82))	0.79 (0.71)	2.00 1.91
Social Issues			
Conservative	3.74* (2.40)	6.38* (5.82)	1.56 (1.48)
Independent	4.67* (3.17)	7.23* (7.14)	7.65 (9.46)
Gender	1.07 (0.32)	1.75 (0.71)	0.40 (0.21)
Age	0.96 (0.01)	0.97 (0.01)	0.94 (0.02)
Intercept	0.78 (0.48)	0.63 (0.49)	1.94 (2.24)
Model Statistics			
N	301	148	153
Pseudo R-Squared	0.216	0.199	0.2762
Likelihood Ratio Chi-Square	75.29*	37.77*	41.83*
Correctly Classified	76.74%	72.97%	83. 66%

[55] The asterisk means statistical significance less than or equal to the 5% level.

Table 20. Moral Judgment of Price Fixing Judgment of Type Product or Service H9 & 11[56]

Dependent Variable – Price Fixing (Fair)

	Odds Ratio Std. Err.	PFAS First Odds Ratio Std. Err.	Experiments First Odds Ratio Std. Err.
H9 - People Like Me	2.83* (0.46)	2.55* (0.54)	3.63* (1.04)
H11 - Bad People	0.96 (0.20)	0.68 (0.20)	1.70 (0.67)
PFAS	0.74* (0.03)	0.75* (0.04)	0.77* (0.04)
Politics Issues			
Conservative	0.12* (0.11)	0.18 (0.26)	0.05 (0.07)
Independent	0.24* (0.17)	0.19 (0.20)	0.21 (0.26)
Economic Issues			
Conservative	2.58 (1.68)	4.80 (4.78)	1.30 (1.42)
Independent	3.03 (2.07)	0.58 (0.69)	3.04 3.21
Social Issues			
Conservative	2.76* (1.88)	0.77 (0.75)	18.3* (20.1)
Independent	1.10* (0.75)	0.70 (0.77)	1.37 (1.51)
Gender	0.99 (0.01)	1.32 (0.60)	1.00 (0.53)
Age	0.96 (0.01)	0.97 (0.01)	0.98 (0.02)
Intercept	0.06 (0.05)	0.09 (0.11)	0.02 (0.03)
Model Statistics			
N	301	148	153
Pseudo R-Squared	0.4036	0.355	0.510
Likelihood Ratio Chi-Square	167.30*	72.80*	106.1*
Correctly Classified	80.07%	79.05%	85.62%

[56] The asterisk means statistical significance less than or equal to the 5% level.

APPENDIX B: PFAS & CORRELATION COEFFICIENT

The results of the PFAS instrument score is presented before and after the experimental vignettes using correlation coefficient.

Table 21. Means Moral Foundation Subscales & Price Fixing Attitude Scale

Scenario	PFAS First			Experiments First		
	Fairness Mean	PFAS Mean	Correlation Coefficient Value (r)	Fairness Mean	PFAS Mean	Correlation Coefficient Value (r)
H1 - Consumers will judge price fixing as more unfair when the new price increases the businesses' profits	2.1	-1.97	-0.29*	1.86	1.61	0.56*
N	76			80		
H1Control – Price Fixing does not increase business profits.	3	0.72	-0.18*	3.09	0,60	0.34*
N	72			73		
H2 - Consumers will judge price fixing as less unfair when a cost-increasing event occurs beyond the business's control and the new price only maintains the previous profit.	3.0	-0.44	-0.26*	2.86	1.18	0.47*
N	74			74		
H2 Control - Price Fixing with cost-increasing and the new price increase the previous profit.	2.28	-0.89	-0.43*	2.49	1.07	0.53*
N	73			79		
H3 - Consumers will judge price fixing less harshly when a third-party benefit from the new price increase of the businesses' profits	3.02	1.02	-0.45*	3.04	1.52	-0.42*
N	42			48		
H3 Control - Price fixing benefits firms profits with the price increase	1.91	-1.96	-0.31*	1.95	1.30	-0.70*
N	60			72		
H4 - Consumers will judge price fixing as more unfair when the firm's involvement is direct.	2.70	0	-0.49*	2.37	2.37	-0.63*
N	48			61		
H4 Control – Price Fixing Indirect (Business Association)	2.67	-0.27	-0.22*	2.70	2.70	-0.26*
N	43			54		
H5 - Consumers will judge price fixing as more unfair when the firm intends to harm consumers.	2.23	0.23	-0.25*	2.61	1.71	-0.76*
N	26			49		

Table 22. Means Moral Foundation Subscales & Price Fixing Attitude Scale

Scenario	PFAS First			Experiments First		
	Fairness Mean	PFAS Mean	Correlation Coefficient Value (r)	Fairness Mean	PFAS Mean	Correlation Coefficient Value (r)
H1 - Consumers will judge price fixing as more unfair when the new price increases the businesses' profits	2.1	-1.97	-0.29*	1.86	1.61	- 0.56*
N	76			80		
H1Control – Price Fixing does not increase business profits.	3	0.72	-0.18*	3.09	0,60	- 0.34*
N	72			73		
H2 - Consumers will judge price fixing as less unfair when a cost-increasing event occurs beyond the business's control and the new price only maintains the previous profit.	3.0	-0.44	-0.26*	2.86	1.18	- 0.47*
N	74			74		
H2 Control - Price Fixing with cost-increasing and the new price increase the previous profit.	2.28	-0.89	-0.43*	2.49	1.07	- 0.53*
N	73			79		
H3 - Consumers will judge price fixing less harshly when a third-party benefit from the new price increase of the businesses' profits	3.02	1.02	-0.45*	3.04	1.52	- 0.42*
N	42			48		
H3 Control - Price fixing benefits firms profits with the price increase	1.91	-1.96	-0.31*	1.95	1.30	-0.70*
N	60			72		

Table 23. Means Moral Foundation Subscales & Price Fixing Attitude Scale H1

Scenario	PFAS First			Experiments First		
	Fairness Mean	PFAS Mean	Correlation Coefficient Value (r)	Fairness Mean	PFAS Mean	Correlation Coefficient Value (r)
H4 - Consumers will judge price fixing as more unfair when the firm's involvement is direct.	2.70	0	-0.49*	2.37	2.37	-0.63*
N	48			61		
H4 Control – Price Fixing Indirect (Business Association)	2.67	-0.27	-0.22*	2.70	2.70	-0.26*
N	43			54		
H5 - Consumers will judge price fixing as more unfair when the firm intends to harm consumers.	2.23	0.23	-0.25*	2.61	1.71	-0.76*
N	26			49		
H5 Control - Price fixing with unharmful intention	2.87	-0.27	-0.44*	2.70	1.51	-0.26*
N	65			54		
H7 - People will judge price fixing more harshly the more expensive the good or service.	2.03	-1.14	-0.50*	1.91	1.23	-0.60*
N	82			82		
H7 Control - Low price product	1.95	-0.06	-0.40*	1.98	1.01	-0.68*
N	66			71		
H8- People will judge price fixing more harshly the more inelastic the demand is for the good or service.	1.97	-1.32	-0.28*	1.74	1.48	-0.37*
N	71			83		
H8 Control – Demand for product elastic	2.03	-0.05	-0.51*	1.92	0.71	-0.73*
N	77			70		

Table 23(Cont). Means Moral Foundation Subscales & Price Fixing Attitude Scale H1

Scenario	PFAS First			Experiments First		
	Fairness Mean	PFAS Mean	Correlation Coefficient Value (r)	Fairness Mean	PFAS Mean	Correlation Coefficient Value (r)
H9 & H11 – Tattoo stores price fixing	2.53	-0.8	-0.52*	2.52	0.75	-0.82*
N	75			74		
H9 & H11 Control – Hair salons price fixing	2.21	-0.52	-0.45*	2.08	1.48	-0.62*
N	73			79		

APPENDIX C: IRB NOTICE OF APPROVAL

OFFICE OF THE VICE CHANCELLOR FOR RESEARCH

Office for the Protection of Research Subjects
805 W. Pennsylvania Ave., MC-095
Urbana, IL 61801-4822

Notice of Approval: Amendment 03

August 24, 2018

Principal Investigator	Robert Lawless
CC	Carlos Delvasto
Protocol Title	*Moral Institutions about Market Collusion*
Protocol Number	17280
Funding Source	Unfunded
Review Type	Exempt Category 2
Amendment Requested	Updating protocol to now collect data on Amazon Mechanical Turk using a new survey that builds on the previous surveys
Status	Active
Risk Determination	No more than minimal risk
Approval Date	August 24, 2018

This letter authorizes the use of human subjects in the above protocol. The University of Illinois at Urbana-Champaign Institutional Review Board (IRB) has reviewed and approved the research study as described.

Exempt protocols are approved for a five year period from their original approval date, after which they will be closed and archived. Researchers may contact our office if the study will continue past five years.

The Principal Investigator of this study is reponsible for:

- Conducting research in a manner consistent with the requirements of the University and federal regulations found at 45 CFR 46.
- Requesting approval from the IRB prior to implementing modifications.
- Notifying OPRS of any problems involving human subjects, including unanticipated events, participant complaints, or protocol deviations.
- Notifying OPRS of the completion of the study.

UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN
IORG0000014 • FWA #00008584
217.333.2670 • irb@illinois.edu • oprs.research.illinois.edu