

ANTITRUST: DISCUSSION OF IDEAS AMONG LEGISLATORS AND WHO HAS TO FOLLOW THE LAW

XVIe colloque Charles Gide. 14-16 abril 2016 Strasbourg, France

Author: Ana Rosado. Complutense University of Madrid, Spain

arosado@ucm.es

Abstract

The internalization of market transactions was the strategy of the majority of American companies at the end of the nineteenth century in order to increase the productivity and to reduce costs. Until 1880 the biggest American firms internalized suppliers and since 1890 included distribution, at the same time, the entrepreneurs amassed impressive fortunes. As a result the problem of trust became a moral issue, supported by the fact that society wealth has been transferred from customers to richest men. In this context a few debates took place among the American economists: first, a theoretical debate referred to prevention of monopolization of industry; second debate about the convenience of reform of the institutions and the origins of the FTC, and finally the control of economy by states. In this paper we tried to shade light about the economic arguments for and against to restrain the power of big American companies.

Keywords: Antitrust, American History of Economic Thought, Markets Imperfections, Competition and Law.

JEL code: B-21; K-21; D-43

I. INTRODUCTION

At the end of the XIX century American firms shaped their structure into multidivisional companies and some of them became trusts. Many authors began to be worried about the size that these companies had reached; one of these authors was John Bates Clark. Indeed, he gave his name to the prelude price for the Nobel Prize for Economics. The argument of Clark was the loss of welfare which customers have to bear due to the fact that companies controlled the market, and the price; Jeremiah Jenks, Richard Ely and others made similar arguments. On the other hand companies' counter-argument was, and even is today, that they need a market large enough to achieve economies of scale.

In this paper we tried to analyze American business history, and what the politicians believe about the cartelization of companies, and how they looked for economic arguments in order to restrain their power; vice versa could be considered as well. As far as we know the economy tries to solve any social problem and big companies have become a problem for American society since 1880. Controversy about big business occurred from the end of the nineteenth century until the New Deal, the significant consequence of which was the achievement in 1914 of the Clayton Act and Federal Trade Commission. Academic and political conflict survived for decades and became a framework of control of the free market known as guidelines.

First debate was focused on monopoly prevention and evidences in courts, the second is about the possibility of States to control big companies and the last debate concerns the necessity of reforms in the American competition law. These theoretical arguments could be considered as the prelude of American antitrust, in fact, Jenks and Clark mixed diverse economic conceptions as economies of scale, market power, abuse, control of raw materials, etc. with the intention to explain all companies' behaviour under one analytical framework worthwhile for any kind of business, industries, distribution companies and so on. Ely's early and continued insistence upon the fact that mere size does not give sufficient advantage to be the basis of a lasting monopoly, and that where there is such monopoly there must be

some definite source of monopoly power. Clark's thesis was the only power for evil possessed by most of the trusts was the power of predatory competition. Companies, never agreed with state control, counter-attacked using their own arguments; being George Gunton the most important economist on their side.

An important economist among others such as Jeremiah Jenks and John Bates Clark mixed diverse economic conceptions such as economies of scale, market power, abuse, control of raw materials, etc. with the intention of explaining all companies' behaviour under one analytical framework suitable for any kind of business, industries, distribution companies and so forth. Economists tried to help policy makers by giving them a framework, at the same time that courts were solving trials analyzing every small detail of the case. On the intention to help policy makers to reduce the "biggest" problem Frederick Hayek pointed out this issue some years later: "Maybe an economist could have a misconception about the nature of the economic problem of society" (Hayek 1948, pp 78). On the other hand, Judges¹ applied the criteria of "rule of reason" solving every trial by considering particular business situations, such as industry, the market, geographic raw materials origin, etc. Not in vain did they realize that there is a lot of money at stake. Policy makers for regulation were already dismayed at the focus of prosecution on small firms and associations, "the court's new rule of reason appeared to weaken the potential for future prosecution of giant trusts. For business managers, on the other hand, the enunciation of the rule of reason implied a slight retreat by the court but also a new unpredictability as to which business practices were permissible and which not" (McCraw 1984, pp. 115).

The preliminary conclusion of this paper could be that prevention of monopolies won the battle against the prima facie of evidences of monopolization, and the American congress passed the FTC act in 1914, considered as the main institution to control big American companies, the reform of the system was loud and clear.

¹ See Wyman Bruce, 1911, Control of the market, a legal solution of the trust problem, or Young Allyn A. 1911, Sherman Act and the New Anti-Trust Legislation: I, II and III parts.

II. HISTORICAL BACKGROUND

Alfred Chandler in his seminal book, *The visible hand*, describes the transformation of the biggest American companies at the end of the nineteenth century; focusing on managerial questions and railway companies, Chandler shows how other companies changed their way of growing following the railways' knowhow. He stresses: "These strategies involved the allocation of much more capital and personnel and affected the economic lives and activities of many more Americans than did the investment decisions of any other type of nineteenth-century business firm" (Chandler 1977, pp. 147). The laissez-faire political philosophy ruled the American way of business and "These, whetted by an incredibly rich soil, checked by no institutions or laws, would determine the pattern of American destiny" (Josephson 1934, pp. 27).

Chandler wrote that "With big business almost non-existent at the end of the 1870's, these integrated enterprises came to dominate many of the nation's most vital industries within less than three decades" (Chandler 1977, pp. 285). Following the law of "survival of the fittest" (Josephson 1934, pp. 37) these companies coordinated the flow of goods through the processes of manufacture creating a new way of production known as mass production. One consequence of mass production was that becoming a pioneer in the methods of mass production in steel', Carnegie for instance, as John D. Rockefeller had done in petroleum, quickly accumulated one of the largest fortunes the world had ever seen². Those millionaires represented less than 0.0001 of 1 percent of America's population, but they controlled 20 percent of the nation's wealth³. The internalization of activities ended when: "they administered the flow from the suppliers of raw materials through all the processes of production and distribution to the retailer or ultimate consumer" (Chandler 1977, pp. 283). By 1900 in many mass production industries the factory, works, or plant had become part of a much larger enterprise and by 1917 the integrated industrial enterprise had become the most powerful institution in American business and, indeed, in the entire

²Chandler A., 1977, *The visible hand*, pp. 269

³ McNeese, T., 2009, *The robber barons*, pp. 97

American economy. By then, also, leading American industries and the economy as a whole had taken on their modern shape.

The natural evolution of companies was to control oligopolistic pricing through formal associations, and later in order to be as self-sufficient as possible, and companies “new strategy, in turn, led to an even more costly competition in building and buying capital facilities” (Chandler 1977, pp. 170). George Stigler said that competition was the basic form of market organization for classical economists, but “in the nineteenth century, however, this was only a minor and sporadic charge” (Stigler 1957, pp. 4).

The internalization of more market transactions was the strategy of the majority of American companies at the end of the nineteenth century in order to increase productivity and reduce costs. Until 1880 the biggest American firms internalized suppliers of inputs and from 1890 onwards included distribution of consumer goods in the United States, at the same time, the builders of the new retailing enterprises amassed impressive fortunes⁴; railways allowed these businesses to become nationwide ones.

The efforts of state legislatures before 1887 to intervene and to regulate traffic rates precipitated confused and truly anarchic conditions; the consequence of this unregulated system was “a strenuous contest for the market, of anarchic, individual appetite and money-lust, of ruinous competition conducted with more terrible instruments than before, out of which a few giant industrialists arose” (Josephson 1934, pp. 172). The business of distribution claimed for legislation to protect wholesalers and small retailers from the mass retailers’ price competition. January 14, 1890, Senator John Sherman reported from the finance committee a vague but peremptory statute to make trade competition compulsory. Its first section declared that every “contract, combination or conspiracy in restraint of trade, or commerce among the several states or foreign nations is hereby declared to be

⁴Chandler A., 1977, *The visible hand*, pp 237

illegal”⁵. Indeed, until the passage of the Sherman Antitrust Act in 1890, horizontal combination did not violate federal law, and until the 1880’s only ill-defined and difficult to enforce concepts of common law provided any legal restraint to the formation of such cartels. In the 1880’s a few states passed antimonopoly laws. It was, however, not until the Supreme Court handed down its decisions on the Sherman Act that effective legal action could be taken against nationwide combinations in restraint of trade⁶. Technically they are oligopolies more than monopolies.

At the end of the Civil War in 1865, monopolies or trusts were almost non-existent in the EEUU, but that was not the case at the end of the century. Monopoly ruinous⁷ is an old terminology used in UK at the middle of the nineteenth century in order to explain the iron and coal trade; at the end of the century and at the other side of the Atlantic Ocean the terminology used was “the problem of trust”. In the United States, traditionally and following the common-law, it was judges who resolved disputes about business. That means states have to hold economic trials; when firms became corporations the wide scope of his markets rose, at the same time, business practices began to be considered abusive by the general public. Naomi Lamoreaux wrote about this time that: “After a brief flurry of antitrust activity in the 1880’s and 1890’s, state initiatives waned, and the locus of policy shifted of necessity to the federal government” (Lamoreaux1985, pp. 163). As a result the Sherman Law was passed and it has been in force since 1890.

The primary impact and importance of the Sherman Act was that it granted and recognized that same power alongside the size of the federal government. Now, the federal authorities were empowered to enforce the same principles of business

⁵ Sherman Law, Section 3. Trusts in Territories or District of Columbia illegal; combination a felony

⁶ Chandler A., 1977, *The visible hand*, pp 316.

⁷ In 1843 a pamphlet was written by an Iron Man, which was entitled monopoly ruinous and subtitled: the present condition of the iron and coal trades, showing the operation of the corn laws and other injurious restrictions, and the advantages which would result from the operation of free trade principles.

that such states had been granted long before⁸. After 1893 very few railroad men considered government regulation as a more practical method than system-building for controlling competition.

So, we analyzed the economic debates that took place at this time among the most important American economists. The theoretical debate referred to prevention of monopolization of industry and the second debate about the control or economic intervention by states and finally the convenience of reform of the institutions, and the origins of the FTC. Essentially, the battle was won for those believers in the goodness of the state regulating economic activity, namely Richard Ely, Jeremiah Jenks and John Commons, though John Bates Clark should be considered as a member of this group despite the fact he disagreed about regulation. We included discordant voices as well, Allyn Young or George Gunton. The leader of American economic knowledge at the end of the nineteenth century was J. S. Mill, who believed in justified State intervention. The economic theory resulting from this background must find the way to justify the intervention more than the intervention in itself. As a result the problem of trust became a moral issue, supported by the fact that society's wealth has been transferred from customers (middle class) to the richest men in the country by the meaning of price control. Then wealth is not the precise problem but distribution among social classes was, it being the core of Clark, Richard Ely, Frank Taussig's thoughts.

III. DEBATES

Prevention v.s. Evidences.

At the end of the nineteen century and the beginning of the twenty century, the mere idea to prevent the way to do fair business was considered, at least as rejected, by the American business man. Who had the moral power to tell them how to do their activities? Just it was considered as "acceptable" a correction of their agreements

⁸McNeese, T. 2009, *The robber barons and the Sherman Anti-trust Act : reshaping American business*, pp. 89.

(contracts, etc.) when a court said that there was unfair. Just in case of a trial, evidences are the unique demonstration of a bad behaviour and then, that precise way of business should be reconsidered. Undoubtedly, the American president was on the side of prevention, and FTC Act passed in 1914.

The theoretical pillar of prevention was more than disputable, let me explain, whether firms became big companies, they have a quite control over final price of goods. That, in a natural way, leads us to consider that industrial concentration and price control walk together. Economist expend hours in a theoretical demonstration of concentration (analytically is the topic of the second section of this paper) is an evil, altogether, market prices were controlled by big companies. Whereas big companies insisted that market prices going down during this period, precisely economies of scales and save of cost because of integration of activities in a biggest and productive company. The line of economic thought which we pay attention to in this paper maintains that no one big company should take advantage of society, by means of appropriation of wealth through controlling market prices. And the only way to control prices is by exercising some kind of monopoly⁹.

Monopoly prevention has to do with protecting the public interest when big corporations sell products at a price over the competitive market price. Which is the target of the majority of economists considered in this paper, for instance, Richard Ely's argument was about selling at a loss, and sources of monopoly were John Commons' ideas. Probably Ely saw that prices fall down and he interpreted that companies sell at a loss, he never thought that economies of scale explain such price behaviour. John Bates Clark despite he knew the price behaviour in the industry and how prices fall down because of economies of scales, proposed the prevention of monopoly, while Jeremiah Jenks, thought that monopolies always put prices up. Frank W. Taussig gives to the courts the task to prevent monopolization, and probably some kind of profits control. Allyn Young was in favor of regulation because he believed in State as a good judge of economic activity. On the other hand

⁹ That is the Stigler's line of thought, monopoly or oligopoly could be maintained because of the control of some raw material, or any other barrier to entry.

Bruce Wyman argued that monopoly behaviour must be regulated by the State to tend toward an equality of fortunes among citizens. Following this line of thought Thorstein Veblen in 1904 wrote that the popular sentiment does not at all uniformly accept decisions of the courts in disputes between property rights and naked money making and he concluded that “this may be due in part to their not realizing how essential a foundation of law, order, and common welfare these principles of natural liberty are” (Veblen 1904, pp. 95).

The discordant voice come from George Gunton, he argued that if commodity prices fall so real wages rise and then wealth is transferred to the working class, from 1860 to 1891, the purchasing power of a day’s work was increased slightly over 72 per cent.¹⁰ Henry Ford in his book entitled *My Life and Work* used the same argument¹¹. Under the point of view of Gunton the intervention of states in the economic activity should be unnecessary because the natural course of time reaches the social equilibrium, and that was the idea supported by the American business man knew as Robber Barons.

Concentration is necessary for the industrial development¹², otherwise large capitals should be impossible to accumulate in order to enlarge any company, and get economies of scale and diminish the prices. Even in the case that one man has money enough to afford this kind of business the risk which must be taken discourage the venture, Gunton wrote: “such large capitals would be absolutely impossible without the cooperation of the great capitalists” (Gunton 1899, pp. 33), big companies reduce the cost of production and served the community more cheaply, and “Trusts have obtained their industrial supremacy either by improving the quality or lowering the price of the commodities they furnish” (Gunton 1899, pp. 36). The problem began when the size of a company is such bigger to allow the control of the prices, both, prices’ suppliers or inputs and market price for customers.

¹⁰ Gunton, G. 1899, *Trust and the public*, pp. 74

¹¹ Ford, H., 2002. *My Life and Work*, pp. 51

¹² Gunton, G. 1899, *Trust and the public*, pp. 35

The “prevention” of monopolies seems to be an ethical recommendation to maintain free competition. Ely's early and continued insistence upon the fact that mere size does not give sufficient advantage to be the basis of a lasting monopoly, and that where there is such monopoly there must be some definite source of monopoly power. Clark's thesis was that the only power for evil possessed by most of the trusts was the power of predatory competition. Jenks has a political interest in the “prevention” of monopolizing activities, because Jenks said that the trusts immediately put prices up. John Commons explained monopolies as the difference between economic power and property power. He explored the field where economy linked with law; his arguments lay in the fact that regulation never impedes economic activity. The argument of Gunton was hold on in the fact that “we find that from 1860 to 1890 the average purchasing power of the same wages was increased 236 per cent or more than four times as much as those of the non-trust corporations” (Gunton 1899, pp. 40). The article include a table which shows the percentage of increase of the purchasing power of weekly wages in cotton-seed oil, sugar refined, freight New York and Chicago, telegraph messages and petroleum refined; to conclude that the trusts analyzed have shared the gain with the community by giving lower prices and better service, all such contribute to improvement of society, finally he wrote “it would be absurd to condemn legitimate industrial organizations for the misconduct of uneconomic combinations” (Gunton 1899, pp. 41).

The contra-argument was developed by Richard T. Ely, he made empirical analysis of market behaviour, focused on series prices, and his argument is clear: “Monopoly means substantial unity of action on the part of one or more persons engaged in some kind of business which gives exclusive control, more particularly, although not solely, with respect to price” (Ely 1900, pp.14). The argument needs to define precisely the law of monopoly price as follows: “The monopolist has the power of withholding supplies or of furnishing the supplies irregularly and that power enables him to break down competition” (Ely 1900, pp.96). But a monopolist could raise or lower the price. This is the power of monopoly, and Ely found one of the first scientific problems incapable of solution. Curiously he wrote about that in a

footnote, the limits of the power to control prices are found in the resources of monopolist, and then opponents never will have an opportunity¹³.

The Ely hypothesis about monopolist prices deserves consideration, because he really saw that industrial prices are low during his analysis period. As Chandler pointed out, the natural monopoly price behaviour should be a rise due to the market power exercised by the monopolist¹⁴, the argumentation of this contradiction should be that the monopolist sells at a loss, and this was the Ely's idea. And the theoretical idea could be that a monopolist behaves that way to expel competitors, taking advantage of his economies of scale in production. This is the only way to put everything together; otherwise Ely would have to change his mind. The relevant issue is that belief came to be "predatory pricing"¹⁵ and was used for decades in American courts as bad business behaviour led several companies to have to pay penalties or change their business strategy to sell their goods establishing a price which could never be considered predatory in courts. However Clark thought that the trust's natural response to competition should be to lower prices in a market cheaper than competitors, because of economies of scale. This point is the cornerstone of the Gunton's argumentation, the oil's prices analyzed show a reduction of the average yearly price from around 30 cents in 1863, to around 5 cents in 1898. The railroad corporations were able to reduce the price from 2.21 cent a mile to ship a ton of merchandise in 1873 to 0.753 cent in 1898.

Gunton's argument established the theory that on efficiency is the main goal of corporations and competition is the best way to reach it; and the bigger the companies the lower will be the prices paid by customers. Then, the wealth of a nation is directly connected with the size of his companies. John Bates Clark never questioned the efficiency criteria, but Clark's argument was that the monopolist with high economies of scale may be able to adopt a price-limiting strategy, setting prices

¹³ Ely, R. 1900, *Monopolies and Trusts*, pp. 98.

¹⁴ Chandler, A., 1977, *The visible hand*, pp. 316

¹⁵For more information, Giocoli, N., 2014, "Games judges don't play: predatory pricing and strategic reasoning in U.S. antitrust". *Supreme Court Economic Review*, vol. 20

low enough to deter entry, although above the competitive price; and this argument would be used some years later by Joe Bain within *Barriers to new competition* (1956) and could be considered as the first strategic analysis in economics as well.

In the same line of thought to prevent monopolies, F. W. Taussig understood, as Clark did, that concentration in the control of great industrial, banking, and transportation enterprises finally leads to an oligarchy over great stretches of the industrial field¹⁶. Besides, the old legislation is, by its nature, difficult to enforce and then tradition fails to work for the general good. Taussig knew classical economic theory and he noticed that “competitors must be faced and that it is good policy to keep profits within limits that will not tempt newcomers” (Clark [1888] 1973, pp. 462), in other words, control by big companies should not leave the industry unattractive for non-incumbents. Taussig linked economic theory with law, to be precise with the power of courts to restrain the economic power of big companies:

“The summary control over trustees by courts of equity would prevent overreaching of the owners by these trustees. It was an ingenious device but, as it proved, one to which the courts refused to give the expected legal solidity” (Taussig 1911, pp. 451)

Taussig’s economic argument to confront the “economies of scale” theory, the main argument used by industrials to legitimate trust, was:

“Still more important is the fact that as large-scale production spreads the number of individual establishments diminishes and the entry of new competitors grows increasingly difficult. The attempts at combination become more persistent and ingenious and the efficacy of a policy of non-interference becomes more uncertain” (Taussig 1911, pp. 450)

On the other side, John Commons said that monopolies were “personal privileges, not property ownership” (Commons [1924] 1995, pp. 56). He argued that

¹⁶ Clark, J. B. [1888] (1973), *Big business economic power in a free society*, pp. 456.

doing business in the Marshall sense leads to companies increasing their goodwill, considered by Commons as a privilege in that it is a differential advantage over competitors, at the same time that it yields a larger profit on the investment, the point of competition lay in the fact that customers and rate of profits fluctuate both with general business conditions and with the rise and fall of goodwill. “Goodwill cannot properly be capitalized for rate regulation. It is an asset depending on expected service. The more precise method, consistent with the nature of goodwill, is to adopt a sliding scale of price and profits” (Commons [1924] 1995, pp. 213) and this is the heart of Commons’ regulation of private business proposal.

George Gunton defended that “The difference between trusts and ordinary corporations was not economic, but legal. The trust is a formal merging of a number of corporations or firms under one management, which holds the property in trust for its original owners giving certificates for their respective claims” (VV.AA. 1900, pp. 276). George Gunton was a professor at Rockefeller’s Chicago University as it used to be called: he was always in favor of industrial combinations, or “trusts” (as named recently). Gunton is the standard bearer of economies of scale as an argument to allow companies to combine as much as they like. He wrote in 1888 about ‘the economic aspect of trust’ in order to explain the advantages of combination to the society where they are installed, and argued against their detractors. Using poor theoretical tools but plenty of empirical information Gunton’s pamphlets deserve consideration.

John Bates Clark made a more theoretical analysis of supply and demand and introduced the measure of utility, and the axiom commonly accepted by economist: “There cannot be two prices for one commodity in the same market at the same time. This fact is fundamental” (VVAA 1900, pp. 275). He used the neoclassical analysis of utility in order to explain that market price should be calculated using demand, not only industrial costs; probably he is looking at a price higher than the competitive price because of customer preferences we can even assume that Clark does not count monopoly privileges as costs but income due to the monopoly, and they raise the price too; in any case, the market price increases the monopoly profits. Clark’s

unique theoretical contribution is to suggest that a single seller can be deterred from monopoly pricing when the threat of entrants disciplines the incumbent monopolist to price reasonably competitively¹⁷. The moral part of his reasoning includes the necessity to know more about profits: “It needs to be definitely known what profits are, and who earns them; and again how large they are, and who actually gets them” (Clark [1888] 1973, pp. 35). The Gunton’s answer to this question was “profits are the legitimate reward of capitalistic enterprise, but they must be obtained by exploiting nature through improved methods, not by exploiting the community through higher prices” (Gunton 1899, pp. 43); at the same time he wrote that “where large corporations prevail that wages are highest and employment most continuous” (Gunton 1899, pp. 232).

The argument held by Clark about how a trust competes lies in the assumption that the small competitor is in a position to beat a trust in a contest of cut-throat competition, if only the trust were compelled to make its low prices uniform for all customers, with losses proportionate to the capital. This idea, widely accepted for decades, lately called predatory competition, has been finally kept out of antitrust legislation because the opposite argument which said that keeping prices higher than the competition price is attractive for new incumbents finally won the battle in courts.

As a way of conclusion, the debate about prevention concluded a draw, the main argument of main authors for prevention was the control of prices by corporations, while Gunton show that prices were reduced by economies of scale, and the necessity of largest capital to reach these economies of scale justified the bigness of the companies. Any other argument looking at moral consideration, as corporations’ high profits should be topic for another paper. Edward Bemis of the Bureau of Economic Research put a question to Mr Havemeyer, the President of the American Sugar Refining Company, Bemis asked: you do, in fact, control the product and price in the United States? To which Mr Havemeyer replied: “we

¹⁷ Leonard T. C., 2003, “A Certain Rude Honesty”: John Bates Clark as a Pioneering. Neoclassical Economist”, pp. 541

undoubtedly do” (VV.AA. 1900, pp. 397). That was the point, the price behaviour become the unique indicator of markets wealth. In order to refute the hypothesis of price behaviour, the American government began to collect information about market prices, in order to have as much data as possible about prices; this was the “source” of data used by George Stigler and Joe Bain during the forties to support their own hypothesis.

The state control over corporations

The second debate in this paper is about the social consensus to give the American Federal State the capacity of control big companies. Prevent concentration will be considered as State control, that means, some State, even the federal, should be able to control how big a company became, and forced the firm to reduce its size, or broken it in parts.

Politicians in favor of State control of corporation won the battle besides the honorable fight made by Robber Barons, the American most important entrepreneurs at these days. Indeed, since 1914 Federal Trade Commission is in force. According to Josephson, “government in its weakness conferred the right of local administration upon the great proprietors in the provinces, or else permitted them to usurp these rights (by seizure) which then (by usage) became “legal.” In this way there arose the “dukes,” “barons” and other “nobles” of the Middle Ages¹⁸. The business agreements, private or public, in railroads¹⁹, oil²⁰ and steel had been maintained in utter secrecy, according to common law ever since Queen Elizabeth’s time, some of these agreements could be considered a form of “conspiracy” in trade²¹. Whereas the Common Law, since the time of Elizabeth, had condemned Monopoly or Conspiracy

¹⁸ Josephson M., 1934, *Robber Barons*, pp. 63

¹⁹ William Z. Ripley, from Harvard University and an authority in this field, estimates conservatively that three-fifths of the cost of the railroads was originally borne by government, some \$707,000,000 in cash, \$335,000,000 in land.

²⁰ Rockefeller had a legend of “Machiavellian” guile and relentlessness with which he has always negotiated as the prince of oil.

²¹ Josephson M., 1934, *Robber Barons*, pp. 93

in trade, for the survival of its peasants and laborers in bad times, the 1873-1874 American winter was one of extreme suffering in food, clothing and medical attendance a “responsibility which was completely rejected as a feudal relic by the new barons of eighteenth-and nineteenth-century industrialism” (Josephson 1934, pp. 140) Townsend collected their thoughts “We are not politicians or public thinkers; we are the rich; we own America; we got it, God knows how” (Townsend 1911, pp. 149) and this was the mood of American society at the end of the nineteenth century.

How big a company could be?, it depends on transaction cost²², but until the Coase’s article was published, the debate about contracts, agreements, etc. which allows the companies grow up was tough. Under the assumption that any contract includes the abuse of a big company above smallest companies; States must to help the firms and the control or regulation over big corporations should be justified. The point could be what happens if the agreement is not peer, one part win at the expense of the other.

The argument of the advocate of American big companies was: “In periods of prosperity to give to capital liberal profits, to laborers higher wages and to the public better and cheaper goods” (Gunton 1899, pp. 144), and it is not convenient at all the state intervention. Gunton wrote later: “The trust must learn that after all the public, as consumer, competitor and lawmaker, is the real and final master of the situation” (Gunton 1899, pp. 204); in other words big corporations like to be judged because of “immoral” behaviour in the market, not because they are big.

Theoretically, John Bates Clark believed that the Darwinian evolution theory explained the economic evolution of companies, thus firm’s decision to grow by means of combinations, agreements, mergers, etc., should be “accepted, studied and probably regulated” (Clark [1888] 1973, pp. 11). In the manner of Mill’s infant companies theory which accepted a provisional help of State for new entrepreneurs J. B. Clark delimited precisely when -early stages of their growth- and why -because initial difficulties of the system are great-. But the relevant point is “The repressive

²² Coase, R. 1937, The Nature of the Firm.

policy may then, for a time, succeed; but it must be at the cost of social backwardness and economic loss” (Clark [1888] 1973, pp. 11). Clark knew the relevance of economies of scale in making industry competitive and he said “True monopoly means stagnation, oppression, and what has been called a new feudalism, while consolidation without monopoly means progress, freedom, and a constant approach to industrial democracy” (Clark [1907] 1915, pp. 1372). Clark thought that monopoly is synonymous with protection because “the only free competition in a “live and let live” fashion is between many small producers, and this type disappears, never to return, with the coming of the hundred-million-dollar corporation” (Clark and Clark [1912] 1914, pp. 168). This idea matched perfectly with the belief in Darwinian evolution theory, as Morgan said “The “struggle” denoted new and violent forms of competition which had replaced the older style behaviour of prices being determined amicably in the market place. For John Bates Clark, one of the younger group of economists, the outcome of the process was the survival of the fittest firm - fittest here denoting the strongest (rather than in evolutionary biology, the most fitted for a given environment - and the failure of the weaker firms)²³

The influence of Mill in Clark’s thought reaches the argument of international trade beyond the infant industry theory. Clark believed in the protection of national infant companies against foreign producers until the domestic industry could achieve a sufficient advantage. This is an old argument first supported in *The control of trust* (1901) but precisely defined later in *Economic theory* (1907),

“If the natural price of an article is based on the cost of making it in the United States, and if that is twenty per cent higher than the cost in a foreign country, a duty of twenty per cent will place the American product and the foreign product on an equal basis. The American maker will not be driven from his market until he begins to charge an abnormally high price” (Clark [1907] 1915, pp. 1352).

²³ Morgan M., 1993b, “Competing Notions of “competition” in late nineteenth-century American Economics”, pp. 7

But this is not the case of monopoly, because protecting a monopoly in any industry means that “the trust shall be enabled to sell a portion of its goods abroad at one price and the remainder at home at a much higher price” (Clark [1907] 1915, pp. 1356). This proposal leads Clark to claim: “but an essential point is that one means which the trust adopts in order to crush him depends on the existence of great profits in most of its territory; and these would not exist if it were not for the unnecessary and abnormal part of the duty” (Clark [1907] 1915, pp. 1361). This is an interesting point developed by Clark, the question of monopoly is not a domestic issue, it reaches international trade and he probably was thinking of the wider implications of this argument, what would happen with American competitive industries outside? Have they to suffer extra duties in retaliation for American monopolies’ behaviour beyond its borders? These questions are linked with Millian’s demand reciprocity theory. Probably the main indicator of monopolization could be the international price of this product in front of the domestic price; if the price of a product outside was less than the price within the American frontiers, the industry was selling at a loss.

George Gunton refuted Darwin's survival of the fittest. He said that the most efficient company survives and economic efficiency is attained by growing as much as possible. Thus, to cut the growth of companies by state intervention leads them to fail and die. Gunton argued that people, in general, misunderstand competition, for instance, the size of monopoly as a necessary condition to survive and market prices could be reduced because of the economies of scale. Their hypotheses were the following:

“Trusts are indicted as public evils for the following reasons:

- (i) That they tend to build up monopolies and drive small capitalists out of business; (2) That they destroy competition, the great minimizer of profits and equalizer of prices; (3) That they amass fortunes at the expense of the community by increasing the price of commodities; (4) That they tend to build up an oligarchy which

controls legislation in its own interest against that of the community”
(Gunton 1888, pp. 387).

Gunton’s point of view about these issues was, effectively, that monopolies drive the smallest firms out of business, but concentration of capital (technically tools and machinery) is always a synonym of efficiency. That improves society’s wealth because prices are falling because of the economies of scale in production. About equalization of prices and profits Gunton said that the competition between corporations reduces the profits to a closer margin, and about the prices he identifies them as the cornerstone of competition, also his empirical analysis shows that combination’s prices over time have been falling during the analyzed period, Gunton noticed that some prices rise. “This is true of all artificial monopoly, it is especially true of government monopoly” (Gunton 1888, pp. 398). Regarding the last issue, concerning the creation of an oligarchy which controls legislation, Gunton answered with respect to American industrial managers: “These men have not developed the qualities of statesmanship. They have developed simply the capacity of an industrial manager” (Gunton 1888, pp. 404) Allyn Young was another discordant voice in this debate, his argument is clear, while monopoly would be considered as an entity to control prices and expel rivals, then: “Whatever the economic advantages of monopoly per se may be, there will be little question of the soundness of the policy which would attempt to deprive it of its power for evil in these two particulars” (Young 1915, pp. 213). Clearly he complained that the American policy at this time was in favor of regulation, any opposite argument is totally rejected, even though he introduced a new concept in the debate on monopoly, from his point of view monopolization should be analyzed as well as the attempt to monopolize, Young wrote:

“It does not refer to conscious efforts to get rid of the limitations which competition sets upon one's ability to buy and sell at such prices and on such terms as one pleases. The elimination of competition through the absorption or crippling of competing

establishments becomes the direct and primary object, and the methods used are adapted to this end” (Young 1915, pp. 215).

Technically Young introduced the question of whether monopoly should be prevented or not. Probably Young was thinking that the State and the regulation required by his contemporaries could keep a close eye upon economic activity. Young developed ideas ahead of his time, and they were extremely useful in American antitrust activity.

Following the same line of thought, Taussig understood that concentration in the control of great industrial, banking, and transportation enterprises finally leads to an oligarchy over great stretches of the industrial field²⁴. Taussig knew classical economic theory and he noticed that “competitors must be faced and that it is good policy to keep profits within limits that will not tempt newcomers” (Taussig 1911, pp. 462), in other words, control by big companies should not leave the industry unattractive for new incumbents. Taussig’s conclusion was based on the necessity of public control, despite the traditional political agencies not having proved adequate to deal with these giants. He wrote “from a stage when power in public personages was feared and assumptions of control by the state was deemed dangerous” (Taussig 1911, pp. 470).

And the only way to prevent this behaviour is to claim government intervention in order to “impose a limit on the raising of prices” (Clark and Clark [1912] 1914, pp. 59) Bruce Wyman, professor of economics at Harvard at 1911, differentiated natural monopoly²⁵, regulated by law, from virtual monopoly, where the capital invested must be sunk at the risk of failure in this one market, etc., and really it deterred competition. It is a third category of monopoly called true economic monopoly which could be created by factors such as the cost of the plant, the large scale of production, etc. Jenks didn’t know how to manage these factors, but Wyman solved the issue by considering any kind of monopoly as: “There is real danger to

²⁴ Taussig F. W., 1911, *Principles of economics*, pp. 456.

²⁵ More information in Mosca M., 2008, “On the origins of the concept of natural monopoly”

society calling for regulation by the State” (Wyman 1911, pp 186). The relevant issue that Wyman smoked out was that American society demanded regulation and courts gave in to society’s requests. Wyman said “the Supreme Court has therefore promised us that we are to have the rule of reason henceforth in enforcing the anti-trust law” (Wyman 1911, pp 238) finishing the sentence with a questionable argument: “The Supreme Court has never decided against any combination which the great majority of people have not felt deserved its fate” (Wyman 1911, pp 238).

As well as Clark, Jenks thought that a commission or an inspector could help to control a trust, especially after a financial crisis as 1907’s was. Jenks said that the conditions of the 1907 crisis justified the government intervention, within the industry a commission or an inspector could ensure that rules should be respected. Jenks was not in favor of the idea of direct public management of industry, just price control in order to prevent monopolies. “Simply fixing the limits of competition within standards of honesty and efficiency of service” (Jenks 1907, pp. 17)

The core of his thoughts is clear:

“On the whole the government probably needs to extend its control especially over the larger companies, unless their managers take the public more fully than now into their confidence. In every case our final appeal is to common sense, good judgment, and an unselfish regard for the public welfare” (Jenks 1907, pp. 20)

The importance of Jenks as an economist is his active role in changing the American framework of competition. In 1899-1901 Jeremiah Jenks was an expert adviser and scholar for the United States Industrial Commission on investigation of trusts and industrial combinations in the United States and Europe; which was a United States government body in existence from 1898 to 1902; it was set up by President William McKinley to investigate railroad pricing policy, industrial concentration, and the impact of immigration on labor markets, and make recommendations to the President and Congress. By 1898-1900, he was acting, as well, as a principal adviser to New York Governor Theodore Roosevelt, especially in

matters of corporations and corporation law²⁶. Jenks was particularly active in the movement to expand federal authority. He also helped to draft the Hepburn bill of 1907, which aimed to expand the regulatory powers of the Commissioner of Corporations²⁷. Jeremiah Jenks also sat on the four-man committee headed by John Bates Clark which drafted a preliminary version of the 1914 Clayton Antitrust Act.

Keeping in mind that they are all Americans²⁸, which means some special point of view, antitrust focused on helping courts to solve anti-competition trials; this view contrasts with the European vision of competition, more theoretically analyzed. At this time, we are only interested in the American debate about the convenience of state intervention in economy and markets. In order to understand this argument, we describe and confront the reasoning of Gunton and Young as the discordant voices in this debate. Gunton went further in reasoning, to him the only way to intervention is because “political and social disturbances have tended to create a public sentiment against accumulated capital, per se” (Gunton 1899, pp. 79) Gunton wrote “Any organized effort to use the state against the free development and application of science and organization to industry is a movement against public welfare, against the laborer, against progress and against civilization” (Gunton 1899, pp. 237). No state should have the right to interfere²⁹. On the other side Ely, Clark, Jenks, and finally Commons all believed that big companies control society’s wealth because companies controlled market prices and contracts to each other.

As a result in 1914 the Federal Trade Commission would ask for companies’ information just hearing that competition is not fair. In fact, several years later American Merger Guidelines are focused on the “attempt” as much as “evidence”.

²⁶ Sklar, M., 1988, *The Corporate Reconstruction of American Capitalism, 1890-1916*, pp. 60.

²⁷ Lamoreaux, N. R., 1985, *The Great Merger Movement in American Business, 1895-1904*, pp. 18.

²⁸ For a deeper knowledge of the theoretical and philosophical vision of the American authors see Morgan M., 1993, “Competing Notions of “competition” in late nineteenth-century American Economics”.

²⁹ Gunton, G. 1899, *Trust and the public*, pp. 237.

The reform of Sherman Law

Around the turn of the century and from the beginning of the Theodore Roosevelt administration, the United States showed “The public clamor for action against trusts without destroying consolidation” (Lamoreaux 1985, pp. 169) and the Standard Oil and Tobacco cases led to the convenience of discovering the way to differentiate between “good” trusts and “bad”³⁰. Chandler describes this American time as follows: “In the first decade of the twentieth century, the control of the large corporation was, in fact, the paramount political question of the day” (Chandler 1977, pp. 497).

After that the 1900 conference³¹ no one conclusion was acceptable about trusts was that they are evils which easily appear, what shall we do about the trusts? The commissioner agreed about: direct public regulations of the trusts; restrict the right of incorporation in the case of all industries which are not, like railroads, of a quasi-public character; very intelligent people believe that the only way ultimately of treating the trusts in an adequate manner is for all of us to join it, by public ownership; and finally more legislation.

The resulting 1907 Hepburn bill made provision for voluntary registration with the Commissioner of Corporations (in the Department of Commerce and Labor) of firms involved in interstate commerce. Naomi Lamoreaux noticed that companies submitted information about the corporation's organization, proceedings, contracts, and financial condition; She pointed out that: “the Hepburn bill threatened to expose the nation to the unfettered power of big business and to concentrate power to a dangerous degree in the executive” (Lamoreaux 1985, pp. 172). The bill categorized companies between “reasonable” and “unreasonable”, following the former idea of classifying as “good” and “bad”. The bill was nonetheless defeated in that session of Congress. However, in 1913, Jenks and the Civic Federation proposed a new bill.

³⁰ Young A., 1915, Sherman Act and the New Anti-Trust Legislation: I, pp. 204.

³¹ VVAA., 1900, Chicago conference on trust

The chief provisions of this later proposal were incorporated into the Clayton and Federal Trade Commission Acts passed in 1914³². To get the bill passed was not an easy task, Chandler said “Indeed Roosevelt had to use his great political skill to steer the bill pass the opposition of a large block of senators who had the support of much of the American business community as well as its railroad leaders” (Chandler 1977, pp 175). Roosevelt’s intention was to bring the trusts under the control of the federal government, then set the business world back on a course of true free enterprise and laissez-faire economics. Despite his intentions, Roosevelt never intended to attack and bring down all the nation’s trusts: he believed that trusts were abusing their economic power.

When Theodore Roosevelt left the White House in 1909, the days of trustbusting were not over. His successor, former secretary of war William Howard Taft, also pursued the destruction of the trusts³³. In 1913 President Woodrow Wilson had strong religious convictions but they led him to emphasize the need to bring business and Christianity together. Nonetheless³⁴, Wilson’s platform was called “the regulation of competition” and Roosevelt’s platform, the progressive Party, was “regulated monopoly”³⁵. When the Presidential election was held, Wilson once even remarked extemporaneously that the nation's aggregate wealth was "less important" than its equitable distribution, though this probably was not his settled judgment³⁶ because the analysis of wealth distribution was Clark’s main line of thought. One of the important agents in favor of regulation was Judge Louis D. Brandeis, who served from 1912 until 1916 as Woodrow Wilson’s chief economic adviser and was regarded as one of the architects of the FTC. Above all else, Brandeis exemplified the anti-bigness ethic without which there would have been no Sherman Act, no

³²Brown J. H. 2004, “Jeremiah Jenks: a pioneer of industrial organization?”, pp. 82

³³ McNeese, Tim. 2009. *The robber barons and the Sherman Anti-trust Act : reshaping American business* pp. 101

³⁴Seltzer, A. 1977. “Woodrow Wilson as "Corporate-Liberal": Toward a Reconsideration of Left Revisionist Historiography”, pp. 191.

³⁵McCraw, T. K., 1984, *Prophets of regulation*, pp. 110.

³⁶Seltzer, A. 1977. “Woodrow Wilson as "Corporate-Liberal": Toward a Reconsideration of Left Revisionist Historiography”, pp 191

antitrust movement, and no FTC either³⁷. He focused not on increases in consumer welfare but on decreases in the autonomy of small producers and Brandeis decided that big business could become big only through illegitimate means³⁸.

Title 15 of the United States Code includes the Federal Trade Commission and Clayton Act and it has been in charge since 1914. The Act included the ideas of Jenks and Clark, but not only theirs. Roosevelt's position departed sharply from the approach traditionally taken by courts in applying the common law 'rule of reason'³⁹. The Clayton Act was approved as 'An Act to protect trade and commerce against unlawful restraints and monopolies' and the FTC had and has even today the power of any court of the United States. The Act drafting is clear and convincing; there was no need for a prior demonstration before starting a written testimony to companies. Section 5 describes "Whenever the commission shall have reason to believe that any such person, partnership or corporation has been or is using any unfair method of competition in commerce". The FTC initiates charges in this respect, when notice is given of a hearing upon a day and at a place therein fixed at least thirty days after the service of said complaint⁴⁰. Just the belief of unfair competition is reason enough to ask for written testimony and it is filed in the office of the commission. In cases of disobedience to a subpoena the commission invokes the aid of any court of the United States in requiring the attendance and testimony of witnesses and the protection of documentary evidence. To prevent and restrain any violation of the antitrust acts the FTC took on considerable power; in the event of a company refusing to submit to the commission or to any of its authorized agents, for the purpose of inspection and taking copies, any documentary evidence of such corporation in his possession or within his control, shall be deemed guilty of an offense against the United States⁴¹, and then the corporation shall pay a penalty or

³⁷ McCraw, T. K., 1984, *Prophets of regulation*, pp. 82.

³⁸ Ibid, pp 108.

³⁹ Seltzer, A. 1977. "Woodrow Wilson as "Corporate-Liberal": Toward a Reconsideration of Left Revisionist Historiography", pp. 194.

⁴⁰ FTC, 1916, *Annual Report of the Federal Trade Commission for the fiscal year ended June*, pp. 40.

⁴¹ FTC, 1918, *Annual Report of the Federal Trade Commission*, pp. 43.

the firm could face imprisonment for a term of not more than three years. Such stability on the part of the FTC led to a positive, peaceful time in matters of trusts and the government role in the field of competition, until the New Deal broke the agreement and Liefmann wrote the theoretical article which cast doubt on the previous argument about trusts. In 1915 Robert Liefmann published “Monopoly or Competition as the Basis of a Government Trust Policy” and it became the most relevant theoretical article during the twenties of the past century, mainly because policy makers finally found an economist speaking about the dynamics of markets, which was perfectly convenient for their proposals. Liefmann solved the former debate concerning how perfect competition works and linked with economies of scales, and the monopoly issue. His article analyzed competition as a dynamic question, which means, in the short term, competition: “The advantages of free competition, that supply is better adjusted to demand, that it brings about lower prices to consumers, and so on, have been pointed out so often that it appears unnecessary to enter here into detail concerning them” (Liefmann 1915, pp. 309), but under the Law of the Equalization of Marginal Returns, where the decisive element is the surplus of utility over cost or the return,

“The maximum is brought about by monopoly. This is the chief reason for the fact that competition, pushed to the extreme, becomes monopoly. The climax of competition is monopoly, and all competition is nothing but a striving for monopoly” (Liefmann 1915, pp. 315)

Precise definition of the limits of competition was made by Clark in 1914 and published as a provocative pamphlet entitled “Social justice without socialism”, dedicated to King Edward because the King said “we are all socialists, now”. Clark’s pro-competition outcry is clear “The first thing to be rescued is competition – meaning that healthy rivalry between different producers which has always been the guarantee of technical progress” (Clark 1914, pp. 5) because the behavior of American’s companies is:

“By securing control of raw materials, by selling goods below cost in the territory where a small rival is operating and keeping up the prices everywhere else, by forcing merchants to boycott independent manufacturers, by getting, in spite of laws and commissions, some advantages from railroads, and by other similar practices, they can drive competitors out of business” (Clark 1914, pp. 29).

In consequence, “Monopoly grows as a consequence of certain practices which an efficient government can stop. Favoritism in the charges for carrying goods is one of these practices” (Clark [1907] (1915), pp. 1434) although competition between large corporations gives better results for the public than monopolization because the benefits of the rivalry pass directly to the public lowering the price to be paid. Within this context, Clark argued for the necessity of a reform of the conditions of competition in America; his request gives its fruits when Clark drafts a preliminary version of the 1914 Clayton Antitrust Act. In the same line Taussig thought that besides, the old legislation is, by its nature, difficult to enforce and then tradition fails to work for the general good.

In a nutshell, the consensus about the necessity of a reform in the antitrust law in the turn of the nineteenth century in America was clear. Where ever we look, except the owners of big corporations, the American society agreed about something must to be done and Sherman Law needed to be reformed, as result 1914 Federal Trade Commission started as the American institution competition guarantee.

IV. CONCLUSIONS

Each economist is a son of his time and a slave of his beliefs. In this paper we have the honest plan to write about the American economists at the end of the nineteenth century and the beginning of the twentieth. We try to shed light on how their economic world was changing and how they attempted to explain it under the long shadow of their beliefs. If one human being believes in natural selection, the

crystal of his glasses made him see the market as a fight for survival, by means of growth (because the big fish always ate the smallest) or looking for a scrap of food that no one else took before. In this case, every abuse, or taking advantage of a competitor to win the battle should be considered punishable. As much as we believe in the goodness of the market, we change our look in order to find the failures of markets in other places.

In the same line, if we believe in prevention it matters not which field of knowledge we are speaking about, every simple symptom of illness leads us to start the machinery of prevention; but if we believe in recovery, we will need real proof before writing out a medical prescription. In the economic field, mainly in trusts and monopolies as our field of research, the issue of prevention is linked with the belief of bad or fair behavior of companies within their markets. Let me explain that with an example. If we believe that big companies exploit “per se” customers and competitors, we ask for governmental intervention in order to re-establish fair play (which we believe means lower product prices). If we believe that the burden of proof of bad behaviour in a market should fall to competitors and customers, we ask for regulation or the establishing of clear rules for play. In both cases the welfare dishonest won by the big companies must be returned to the right owners. On the other hand, if we believe in the natural equalization of markets by means of prices, we can barely find a good reason for prevention, and none at all for “prescription”, because time, the long run in economics jargon, made abuses disappear.

The end of the nineteenth century and the beginning of the twentieth century in the United States was a time of great economic debates. Basically, whether economies of scale in the form of concentration in production means market power over contracts with inputs or not, price behaviour is the indicator of market wealth: more competitors tend to lower market prices, fewer new incumbents keep the price as high as possible. This is the prelude of the Structure-Conduct-Performance Paradigm in economics; where Structure is measured by industrial concentration, Conduct was shown through the market prices and the Performance is equal to extra-profits, not from business but from lobbying.

American history shows that the regulatory acts pushed through in the 1930's made the economic system much more legitimate in the eyes of the American people⁴². But this is just the beginning of several regulations in the American economic system regarding competition, called American merger guidelines.

⁴²Mc Graw T. K., 2000, *American business since 1920*, pp. 59

REFERENCES

- Brown, John Howard. 2004. "Jeremiah Jenks: a pioneer of industrial organization?." *Journal of the History of Economic Thought*, 26 (1): pp 69 - 89
- Chandler, Alfred. 1977. *The visible hand*. Cambridge, Mass: Harvard University Press
- Clark, John Bates. [1888] 1973. *Big business economic power in a free society*. New York: Arno press.
- Clark, John Bates. 1900. "Disarming the Trusts." *Atlantic Monthly*, 85 (507): 47–55.
- Clark, John Bates and Clark, John Maurice. [1901] 1914. *The control of trusts*. New York: Macmillan Company
- Clark, John Bates [1907] 1915. *Essentials of Economic Theory as applied to modern problems of industry and public policy*. New York: The Macmillan Company.
- Clark, John Bates. [1914] 1973. "Social justice without socialism." in John Bates Clark, *Big business economic power in a free society*, New York: Arno press
- Coase, Ronald. 1937. "The Nature of the Firm". *Economica*. 4: 386-405.
- Commons, John. [1924] 1995. *Legal foundations of capitalism*. New Jersey: New Brunswick
- De Jong Henry W. and William G. Sheperd (Eds). 2007. *Pioneers of Industrial Organization: How the Economics of Competition and Monopoly Took Shape*. Amherst, USA: Edward Elgar
- DiLorenzo, Thomas J and High, Jack C., 1988. "Antitrust and Competition, Historically Considered." *Economic Inquiry*, 26 (3): 423-435
- Ely, Richard 1900. *Monopolies and Trusts*. London: MacMillan Company
- Ford, Henry. 2002. *My life and work*, available in <http://www.blackmask.com>
- FTC. 1916. *Annual Report of the Federal Trade Commission for the fiscal year ended June*. Washington: Government Printing Office.
- FTC. 1918, *Annual Report of the Federal Trade Commission*. Washington: Government Printing Office.
- Giocoli, Nicola. 2014. "Games judges don't play: predatory pricing and strategic reasoning in U.S. antitrust." *Supreme Court Economic Review*. 21 (1): 271-330
- Gunton, George. 1888. "The Economic and Social Aspect of Trusts." *Political Science Quarterly*. 3 (3): 385-408

Gunton, George. 1899, Trust and the Public, available in <https://archive.org/details/trustsandpublic01guntgoog>

The Outlook. 1899-1913. Available in <http://www.unz.org/>

Hayek, Friedrich. 1948. *Individualism and economic order*. Chicago: The University of Chicago Press.

Jenks, Jeremiah. 1900. *The Trust Problem*. New York: McClure, Philips & co. Also available

http://archive.org/stream/trustproblem00jenkuoft/trustproblem00jenkuoft_djvu.txt

Jenks, Jeremiah. 1907. "The Principles of Government Control of Business." *American Economic Association Quarterly*. 3rd Series, 9 (1). Papers and Discussions of the Twentieth Annual Meeting: 1-20

Josephson, Matthew 1934. *Robber Barons, The great American capitalists 1861-1901*. New York: Harcourt, Brace and Company.

Knight, Frank. [1921] 1948. *Risk, uncertainty and profit*. Boston: New York: Houghton Mifflin Co.

Lamoreaux, Naomi. 1985. *The Great Merger Movement in American Business, 1895-1904*. Cambridge: Cambridge University Press.

Leonard Thomas C. 2003. "A Certain Rude Honesty": John Bates Clark as a Pioneering. Neoclassical Economist." *History of Political Economy*, 35 (3): 521-558.

Liefmann, Robert. 1915, "Monopoly or Competition as the Basis of a Government Trust Policy." *The Quarterly Journal of Economics*. 29 (2): 308-325.

Mason, Edward S. 1937, "Monopoly in Law and Economics." *The Yale Law Journal*, 47 (1): 34-49

McCraw, Thomas K. 1984. *Prophets of regulation*. Cambridge, Mass: Belknap Press of Harvard University Press.

Mc Craw, Thomas K. 2000. *American business since 1920*. Wheeling, Illinois: Harlan Davidson

McNeese, Tim. 2009. *The robber barons and the Sherman Anti-trust Act: reshaping American business*. New York: Chelsea House

- Mill, John Stuart. [1848] 2004. *Principles of Political Economy with Some of Their Applications to Social Philosophy*. Indianapolis/Cambridge: Hackett Publishing Company, Inc.
- Morgan, Mary. 1993. "Competing Notions of "competition" in late nineteenth-century American Economics." *History of Political Economy*. 25 (4): 563-604
- Morgan, Mary. 1994. "Market Place Morals and the American Economists: the Case of John Bates Clark" in Higgling, *Transactors and Their Markets in the History of Economics* (edited with N. De Marchi) Annual Supplement to Volume 26 of History of Political Economy, Durham NC: Duke University Press, pp. 229-252.
- Morgan, Mary and Rutherford, Malcolm. 1998. "American Economics: the Character of the Transformation", in Mary Morgan and Malcolm Rutherford (eds.), *From Interwar Pluralism to Postwar Neoclassicism*. Annual Supplement to Volume 30 of History of Political Economy, Durham NC: Duke University Press, pp. 1-26.
- Mosca, Manuela. 2008. "On the origins of the concept of natural monopoly." *The European Journal of the History of Economic Thought*, XV (2): 317-353.
- Pigou, Arthur. 1920. *The economics of Welfare*. Available in http://files.libertyfund.org/files/1410/0316_Bk.pdf
- Seltzer, Alan L. 1977. "Woodrow Wilson as "Corporate-Liberal": Toward a Reconsideration of Left Revisionist Historiography." *The Western Political Quarterly*. 30 (2): 183-212
- Sklar, Martin J. 1988. *The Corporate Reconstruction of American Capitalism, 1890-1916: The Market, the Law, and Politics*. Cambridge: Cambridge University Press.
- Smith, Adam. 1776. *An inquiry into the nature and causes of the wealth of nations*, London: Printed for W. Strahan; and T. Cadell, in the Strand.
- Stigler, George. 1957. "Perfect competition, historically contemplated." *Journal of Political Economy*, 65(1): 1-17
- Taussig, Frank W. 1911. *Principles of economics*. New York: The Mc Millan Company
- Townsend, Frederick Martin. 1911. *The Passing of the Idle Rich*. Arden city New York: Doubleday. Page & company

Van Hise, Charles 1912. *Concentration and control: a solution of the trust problem in the United States*. New York: The MacMillan Company.

Veblen, Thorstein. [1904] 1999. *The Theory of Business Enterprise*. Available in Blackmask Online.

VV.AA., 1900. *Chicago conference on trust: speeches, debates, resolutions, list of the delegates, committees, etc.* Chicago: The Civic Federation of Chicago

Young, Allyn. 1915. "Sherman Act and the New Anti-Trust Legislation: I." *The Journal of Political Economy*, 23 (3): 201-220

Wyman, Bruce. 1911. *Control of the market, a legal solution of the trust problem*. New York: Moffat, Yard and Co.

Also available at <https://archive.org/details/controlofmarketl00wymaiala>