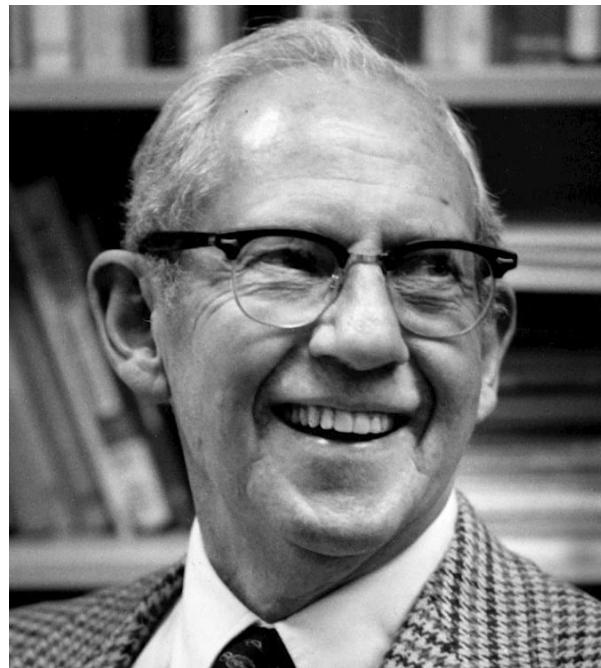


George Joseph Stigler: An Economist Who Studied Industrial Structures and Public Regulations

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George Joseph Stigler, a preeminent economist who by his scholarly research, was awarded the Economic sciences prize in 1982. According to “George J. Stigler—Facts”, the Nobel Foundation recognized his achievements in announcing the prize motivation “for his seminal studies of industrial structures, functioning of markets and causes and effects of public regulation.” The Foundation identified the benefits of his scholarly work as, “Fundamental contributions to the study of market processes and the analysis of the structure of industries.”

“George J. Stigler—Biographical”, providing considerable information regarding Stigler’s life presented in this essay, reports that he was born on January 17, 1911, in Renton, Washington, United States. Renton is a suburb of Seattle. He died on December 1, 1991, in Chicago, Illinois. The son of immigrant parents, he attended the University of Washington earning his baccalaureate degree in 1931. Upon completion of his undergraduate studies, he attended Northwestern University in Evanston, Illinois, located twelve miles north of downtown Chicago. Stigler earned his Master of Business Administration (MBA) in 1932. He began his doctoral studies at the University of Chicago in 1933, eventually earning his Ph.D. in economics in 1938. Stigler’s doctoral thesis focused on the history of both neoclassical production and distribution theories during the 1870 to 1915 period and was subsequently published (Stigler 1941) in book form as *Production and Distribution Theories: The Formative Period*. During Stigler’s time as a doctoral candidate, three highly regarded economists were on the faculty: Frank Hyneman Knight, his dissertation advisor; Jacob Viner; and Henry Calvert Simons. His student colleagues included W. Allen Wallis and Milton Friedman (Economic Sciences Laureate 1976). Stigler collaborated with Friedman, true to their classical liberalism perspective, expressing their views that rent controls are a harmful rather than beneficial measure to alleviate the housing shortage of 1946 (Friedman and Stigler 1946).

Knight (Ph.D., Cornell University, 1916) served on the University of Chicago faculty and taught Friedman, Stigler and James McGill Buchanan, Jr. (Economic Sciences Laureate 1986). He is credited as

one of the founders of the Chicago School of economic thought. During Knight's time, the School's perspective was consistent with the neoclassical school of economic thought promoting monetarism in lieu of Keynesian theory. Subsequently, in the mid-1970s, the Chicago School adopted the thinking of the new classical macroeconomics underpinned by the rational expectations concept. Knight received numerous accolades by renowned economists including Friedrich August von Hayek (Economic Sciences Laureate 1974), Paul Anthony Samuelson (Economic Sciences Laureate 1970) and Wesley Clair Mitchell (a scholar of business cycles and the inaugural director serving in that capacity from 1920 to 1945 at the National Bureau of Economic Research). Stigler was influenced by Viner (Ph.D., Harvard University, 1922), a highly regarded Canadian economist, who pursued scholarly research on developing economic models of a business enterprise, international trade theory and the history of economic thought. Henry Simons, a protégé of Knight, developed anti-trust and monetarist models that influenced faculty perspectives and lead to the development of the Chicago School of economic thought.

Stigler, upon earning his doctoral degree, accepted an appointment at Iowa State College (later renamed Iowa State University) in 1936. Theodore William Schultz (Ph.D., University of Wisconsin-Madison, 1930) served as Stigler's department chair. Schultz was recognized as one of the two economic sciences laureates in 1979 for his pioneering economic development research in the context of the problems of developing countries ("Theodore W. Schultz—Facts"). Stigler joined the University of Minnesota faculty in 1938. While on the faculty, he was granted a leave of absence to contribute to the United States World War II effort by working at the Statistical Research Group (SRG) located at Columbia University. At SRG, he conducted empirical research for the Manhattan Project which had as its mission to develop the atomic bomb (Pirie 2019). In 1942, SRG at Columbia University was founded by Harold Hotelling ("Economics at Columbia", History of Economic Thought) and funded by the Applied Mathematics Panel of the National Defense Research Committee, Office of Scientific Research and Development. Hotelling (Ph.D., Princeton University, 1924) was a mathematical statistician and economic theorist who was a prolific scholar contributing to the advancement of both disciplines. The SRG provided statistical methods and operations research support to the United States government to advance its war effort.

Stigler returned to his faculty position after the war ended. He then accepted a faculty appointment at Brown University for one year (1946-1947) before relocating to Columbia University in 1947. He continued on the faculty of Columbia until 1958. Stigler was on a leave of absence during his last year at Columbia spending his time at the Center for Advanced Study in Behavioral Sciences (CASBS). CASBS was founded in 1954 at Stanford University in Palo Alto, California; its mission is to provide "a place where great minds confront the critical issues of our time, where boundaries and assumptions are challenged, where original interdisciplinary thinking is the norm, where extraordinary collaborations become possible, and where innovative ideas are in pursuit of intellectual breakthroughs that can shape our world." ("About CASBS - The Mission", Center for Advanced Study in the Behavioral Sciences). His colleagues at CASBS included Kenneth Arrow (Economic Sciences Laureate 1972), Milton Friedman (Economic Sciences Laureate 1976) and Robert Solow (Economic Sciences Laureate 1987). In 1958, Stigler joined the University of Chicago faculty. In 1963, Stigler was named the Charles R. Walgreen Distinguished Service Professor of American Institutions. He founded the Center for the Study of the Economy and the State in 1977. Stigler was designated emeritus status in 1981.

Stigler's interest in economics led him to explore many fields within the discipline. He was affiliated with the National Bureau of Economic Research (NBER) serving on the research staff for a period of approximately thirty years beginning in the mid-1940s. His scholarship initially was in the context of service industries as he developed the first total factor productivity measure (Stigler 1947a). The measure is calculated by dividing the aggregate output as the numerator by the aggregate inputs as the denominator. Subsequently, he conducted independent and collaborative research under the auspices of NBER sponsorship on such topics as capital, prices and rates of return. NBER identifies 75 writings by Stigler ("George Stigler", Explore Research. *National Bureau of Economic Research*). The National Bureau of Economic Research (NBER) is headquartered in Cambridge, Massachusetts and has a branch office in New York

City. It was founded in 1920 and “is a private, non-profit, non-partisan organization dedicated to conducting economic research and to disseminating research findings among academics, public policy makers, and business professionals” (About the NBER”, *The National Bureau of Economic Research*). Numerous NBER affiliated economists have been awarded the Nobel Memorial Prize in Economic Sciences since 1969 (“William D. Nordhaus and Paul N. Romer Win Nobel Prize for Work on Innovation, Climate, and Economic Growth”, *The National Bureau of Economic Research*).

Stigler’s scholarly research, upon his completion of his doctoral studies, displayed his early interest in price theory and led to his eventual publications on the topic. He viewed price theory from a neoclassical framework using a comprehensive approach examining the general topic from myriad perspectives. His interest in price theory was not short-lived; his scholarly research efforts began in the 1940s and continued through the 1980s. Fundamentally, price theory recognizes that the consumers’ benefits for possessing the good or service is equal to the sellers’ marginal costs resulting in the optimal market price. This optimal market price represents the equilibrium point whereby the total supply is purchased by the consumers. This dynamic relationship is influenced by varying prices for inputs as well as varying demand levels.

His work, empirical in nature, examined rigid prices found in the oligopolistic sectors. Stigler, in his article, credits previous collaborative research done by Hall and Hitch (1939) as well as the independent examination by Sweezy (1939). Stigler devotes his article to the two topics of 1) “the pure theory of the kinky demand curve” and 2) “the degree of correspondence between the price patterns implied by the theory and the observed price patterns in oligopolistic industries” (1947b, p. 432). Stigler concludes that kinked demand models are not predictive in nature but rather explanatory regarding observed data points. He attributes the sticky prices to collusion and regulatory inefficiencies among other causes.

Stigler considered the aspect of information available for the consumer to determine prices for goods and services. Information represents an economic good as it is scarce and an individual acquiring the information incurs a cost and gains a benefit. Information is also asymmetrical; typically, the supplier possesses more information than the acquirer. His realization regarding the phenomenon of varying prices for a particular good or service when economic theory would advance the understanding that only one price would exist piqued his interest. Stigler presented the sales price ranges for a particular automobile and for anthracite coal to illustrate his point that information is a valuable resource wielding economic power when executing the purchase decision. He concludes his paper (1961) with the caution that the “understanding of economic life will be incomplete if we do not systematically take into account” (p. 224) pricing information. Price represents a critical component of the purchase decision in a market economy and serves as a valuable resource to inform market participants what and for whom to produce as well as the market’s supply and demand levels. Stigler extended his research regarding the value of information for economic decision making to the context of the labor market. His scholarship regarding varying wage rates and the economic value of understanding wage differentials was presented in “Information in the Labor Market”, (1962). The empirical findings presented in the article argued that information possessed about labor markets is considered capital yielding higher wage rates for successful applicants compared to those applicants not possessing the information.

Stigler continued to conduct scholarly research on price theory from myriad perspectives in his multi-year investigations. He presented a series of five books starting with *The Theory of Competitive Price* in 1942 and completing the project in the publication of *The Theory of Price* (4th edition) in 1987. The 1942 textbook publication examined price theory under the conditions of perfect competition. His second book, *The Theory of Price* (1946), although after presenting substantially the material in the first book, continues into new territory examining price theory considering imperfect competition, multiple products and capital theory. His third book, *The Theory of Price* (1952) offered his critical commentary built on the foundation that scarcity represents the primary consideration for addressing economic problems. Stigler’s fourth book, *The Theory of Price* (1966) advanced the work of Coase (Economic Sciences Laureate 1991) who wrote “The Problem of Social Cost” (1960). Coase’s work was the beginning of subsequent research to identify the economic impact of laws. Stigler introduced Coase’s work in his book and offered his thoughts

regarding the ramifications of such research. Stigler's fifth book, *The Theory of Price* published in 1987, presented the issues central to the allocation of resources and the establishment of prices.

Stigler turned his attention to the concept of block-booking which became a case tried in the United States Supreme Court. Block-booking occurs when a supplier sets a combined price for two goods and demands that the buyer purchase the undesired good or service in addition to the desired good or service. The Supreme Court ruled in favor of the extension of monopoly argument to ban block-booking as a violation of the Sherman Act. The Act was the first antitrust act passed by Congress in 1890. It was a "comprehensive charter of economic liberty aimed at preserving free and unfettered competition as the rule of trade" ("The Antitrust Laws", Federal Trade Commission). Stigler (1963) presented his disagreement in an article. His reasoning was that the seller can collect an equal amount of revenue by the inherent market power to establish a higher price for the seller's underpriced desired good and a lower price for its overpriced undesired good resulting in no revenue difference compared to the block-booking arrangement.

Concurrent with Stigler's research concerning price theory, he began, in the 1960s, to investigate the issues regarding government regulation. He presented his findings in his usual clear and direct writing style in two highly regarded articles. Stigler presented his first research investigation on the topic of regulation with Claire Friedland, his co-author. They reported, in an article (1962), their finding that regulations of utility prices had only a small marginal effect on the prices charged to the utility customers. They established that research could extend beyond a theoretical, qualitative presentation to uncover the regulatory effect empirically. The argument was presented that a documented approach using a quantitative methodology was preferable. He thought the issue was so significant that he expounded on the subject during his presidential address to the American Economic Association in 1964. Stigler was convinced that the power of the state may either benefit or harm industry sectors. He recognized that in some cases particular interest groups may encourage regulation as a strategic initiative to gain a more profitable outcome.

Stigler's second highly regarded article was his single-authored publication, "Public Regulation of the Securities Market" (1964). In the article, he examined state regulation in the context of the securities industry. Stigler found that the establishment of the Securities and Exchange Commission on June 6, 1934, did not affect, subsequently, the investors' returns for new stock issues compared to the outcomes prior to its establishment.

Stigler's classic article, "The Theory of Economic Regulation" (1971), was published to explain further his thinking regarding state regulation of enterprises. The paper addressed the application of state resources and power for the economic benefit of industries and occupations. His work regarding the issues associated with regulations is supported by empirical evidence. The state's regulatory process may either assist or harm industry sectors; its efforts may be either encouraged or discouraged by the lobbying efforts of special interests. Stigler identified the three crucial objectives that scholarly efforts should attain regarding regulation research:

- the identification of recipients who either benefit from imposed regulations or are harmed by such actions;
- the regulatory requirements; and
- the impact of the regulations on the allocation of resources in the marketplace.

Regulation is considered in terms of "capture theory." Special interests will lobby decision makers in an attempt to influence the regulatory requirements. If successful, the resultant regulations will enable the state's coercive powers to support the enterprises and occupations of those they represent. Companies "capture" the regulatory agency resulting in laws limiting, if not abolishing, competition. The article, "The Theory of Economic Regulation" (1971), presented the view that an industry may seek regulation structured for its benefit. Stigler firmly thought that state regulation of enterprises was detrimental to consumers as it contributed to companies gaining monopoly power. The stated objective that regulatory bodies are intended to support the public (consumers') interests resulted in the unintended outcome that the regulators were "captured" by the interest of industries and occupations who spend considerable funds to

advance their wishes. Many individuals, serving in a government regulatory capacity, have senior professional experience in the industry or occupations which are subject to regulation. Further, it is not unusual after their government service that they return to their former occupations.

Stigler's self-acclaimed continuing interest in the topic, history of economics, is readily evident when reviewing his published writings. He lamented that the topic had lost favor during the past decades while his interest intensified. Stigler's first major work presenting economic history, his doctoral dissertation, offered the history of neoclassical production and distribution theories. Upon the invitation of the Senate of the University of London, Stigler's *Five Lectures in Economic Problems* (1949) were presented at the London School of Economics and Political Science and were entitled:

- Lecture 1: The Economists and Equality;
- Lecture 2: Monopolistic Competition in Retrospect;
- Lecture 3: The Classical Economics: An Alternate View;
- Lecture 4: The Mathematical Method in Economics; and
- Lecture 5: Competition in the United States.

Stigler compiled fourteen of the previous essays he had written about economic history and presented his work in *Essays in the History of Economics* (1965). The essays were offered on a variety of historical economic topics including, for example, utility theory and the Fabian Society. Utility theory views individual preferences, identified by the consistent rank ordering of choices, as indicative of behavior. Different individuals will possess different preferences. Thus, different individuals have different utility functions. The Fabian Society, named after the Roman General Fabius, was formed in 1884 embracing a socialist perspective. The Fabian Society's demise may be attributed to two substantive reasons. One, the British Labour Party, founded in 1900, became a force in national politics during the 1920s. Two, the Fabian Society's support for the Soviet Union during the 1930s ("The Fabian Socialists", *The History of Economic Thought*). Among Stigler's many published works on the history of economics, his article, "Does Economics Have a Useful Past?" (1969), has been cited numerous times and has provoked critical commentary by many highly regarded economists including Milton Friedman (Economic Sciences Laureate 1976).

Indeed, Stigler's interest in economic history is readily apparent when reading his Nobel Memorial Lecture. The informative and extensive presentation addressed four critical topics prior to his concluding statement. The topics are: (1) Prescientific Economics: Mercantilism; (2) Economic Science: The Environmental View; (3) The Omniscient Scholar?; and (4) The Continuity of Scientific Change. Stigler concludes his speech by offering his assessment that the scholarly search for new ideas is an essential element in the advancement of the economics discipline. He specifies that, "The great fascination of scientific endeavor, however, is precisely in the speculative pursuit of new ideas that will widen the horizon of our understanding of the world" (Stigler 1982).

Stigler was a co-founder of the Mont Pèlerin Society, which was established in 1947. Friedrich August von Hayek (Economic Sciences Laureate 1974) was the driving force; Milton Friedman and Frank Knight were the other co-founders. The Mont Pèlerin Society held its inaugural meeting at Mont Pèlerin in Switzerland April 1-10, 1947. Hayek was the primary individual who organized the meeting and invited others to attend. The members have included scholars, senior government officials and journalists. Hayek served as the first president from 1947 to 1961. Subsequent presidents have served two-year terms. Friedman, who attended the inaugural meeting, served as president from 1970 to 1972. Stigler was president from 1976 to 1978. The Society, consisting of a membership that includes classical liberals who oppose socialism, indicates "Its sole objective was to facilitate an exchange of ideas between like-minded scholars in the hope of strengthening the principles and practice of a free society and to study the workings, virtues, and defects of market-oriented economic systems" ("A Short History of the Mont Pèlerin Society"). In all, eight economists since 1969 who were awarded the Nobel Memorial Prize in Economic Sciences were affiliated with the Society ("Notable Members: Nobel Prize Winners").

Stigler believed in service to the economics profession. He was revered as a teacher and esteemed as a colleague. Two of Stigler's notable doctoral students were Jacob Mincer and Thomas Sowell. Mincer (Ph.D., Columbia University, 1957) was a native of Poland who survived the World War II prison camps and subsequently emigrated to the United States. He was instrumental in the scholarly development of modern labor economics. Mincer served as the Joseph L. Buttenwieser Professor of Economics and Social Relations at Columbia University. Mincer became a colleague of Stigler at the National Bureau of Economic Research. Thomas Sowell (Ph.D., University of Chicago, 1968) earned his M.A. at Columbia University (1959) and knew of Stigler. He chose to study for his doctorate under Stigler at the University of Chicago. His scholarly pursuits include social policy and decision-making. He considers both classical and Marxian economics perspectives. Hayek (Economic Sciences Laureate 1974) praised Sowell's intellect and scholarship when reviewing (1981) his book, *Knowledge and Decisions* (1980).

By his own admission, Stigler intentionally avoided university administrative duties. However, in addition to the work at the Statistical Research Group at Columbia University, he served in various governmental roles. The United States Attorney General appointed Stigler as a member, from 1954 to 1955, of the National Committee to Study the Antitrust Laws. He was appointed as the chair, from 1960 to 1961, of the Federal Price Statistics Review Committee. Also, he served as a member of the Blue Ribbon Panel of the Department of Defense (1969-1970) and vice chair of the Securities Investor Protection Corporation (1970-1973). In addition to the federal appointments, he served at the state level as co-chair of the Blue Ribbon Telecommunications Task Force, Illinois Commerce Commission (1990-1991).

Stigler was recognized for his many important accomplishments and contributions that advanced the understanding of economics. A selected list of his awards, honors and memberships is found at Appendix A. He was a firm believer that scholarly research and theory development should be data driven. Stigler espoused his view and based on his professional reputation influenced other economists to substantiate their theory development grounded on empirical support. He was a voracious reader and exceptional thinker who employed sound judgment to understand and communicate his perspective regarding economic issues. Stigler wrote about 70 "Commentaries" which were reviews of books written by other economists. Most of these "Commentaries" were published in refereed journals; some were published in leading newspapers. Additionally, a considerable amount of his work was published as refereed notes and proceedings. His papers are archived at the University of Chicago Library ("Archives of two giants of economics donated to UChicago Library"). A selected list of his publications is found at Appendix B.

REFERENCES

A Short History of the Mont Pèlerin Society. About MPS. The Mont Pèlerin Society. <https://www.montpelerin.org/about-mps/>.

About CASBS - The Mission. Center for Advanced Study in the Behavioral Sciences. <https://casbs.stanford.edu/about/about-us>.

About the NBER. *The National Bureau of Economic Research*. <https://www.nber.org/info.html>.

Archives of two giants of economics donated to UChicago Library. *UChicago News*. <https://news.uchicago.edu/story/archives-two-giants-economics-donated-uchicago-library>.

Coase, Ronald H. 1960. The Problem of Social Cost. *The Journal of Law and Economics*. Volume III:1-44.

Economics at Columbia. History of Economic Thought. <http://www.hetwebsite.net/het/schools/columbia.htm>.

Friedman, Milton and George J. Stigler. 1946. *Roofs or Ceilings? The Current Housing Problem*. The Foundation for Economic Education. Inc. New York: Irvington-on-Hudson.

George J. Stigler—Biographical. NobelPrize.org. Nobel Media. <https://www.nobelprize.org/prizes/economic-sciences/1982/stigler/biographical>

George J. Stigler. Explore Research. *The National Bureau of Economic Research*. https://www.nber.org/people/george_stigler?page=1&perPage=50.

George J. Stigler—Facts. NobelPrize.org. Nobel Media. <https://www.nobelprize.org/prizes/economic-sciences/1982/stigler/facts/>

Hall, Robert L. and Charles J. Hitch. 1939. Price Theory and Business Behaviour. *Oxford Economic Papers* (2):12-45.

Hayek, Friedrich A. 1981. The Best Book on General Economics in Many a Year. *Reason*. December.

Notable Members: Nobel Prize Winners. The Mont Pèlerin Society. <https://www.montpelerin.org/notable-members/>.

Pirie, Madsen. 2019. George Stigler, Nobel Laureate. Adam Smith Institute. October 20. <https://www.adamsmith.org/blog/george-stigler-nobel-laureate>.

Sowell, Thomas. 1980. *Knowledge and Decisions*. New York: Basic Books.

_____. 1941. *Production and Distribution Theories: The Formative Period*. New York: Macmillan.

_____. 1942. *The Theory of Competitive Price*. New York: Macmillan.

_____. 1946 1952/1966/1987. *The Theory of Price*. New York: Macmillan.

_____. 1947a. *Trends in Output and Employment*. New York: National Bureau of Economic Research.

_____. 1947b. The Kinky Oligopoly Demand Curve and Rigid Prices. *Journal of Political Economy* 55(5):432-44.

_____. 1949. *Five Lectures in Economic Problems: Five Lectures delivered at the London School of Economics and Political Science on the invitation of the Senate of the University of London*. London: Longmans, Green and Company, Ltd.

_____. 1961. The Economics of Information. *Journal of Political Economy* 69(3):213-225.

_____. 1962. Information in the Labor Market. *Journal of Political Economy* 70(5), Part 2: Investment in Human Beings, 94-105.

_____. 1963. United States v. Loew's Inc.: A Note on Block-Booking. *The Supreme Court Review* 163:152-157.

_____. 1964. Public Regulation of the Securities Market. *The Journal of Business* 37(2):117-142.

_____. 1965. *Essays in the History of Economics*. Chicago: University of Chicago Press.

_____. 1969. Does Economics Have a Useful Past? *History of Political Economy* 1(2):217-230.

_____. 1971. The Theory of Economic Regulation. *The Bell Journal of Economics and Management Science* 2(1):3-21.

_____. 1982. The Process and Progress of Economics. Nobel Memorial Lecture. December 8.

_____. and Claire Friedland. 1962. What Can Regulators Regulate? The Case of Electricity. *The Journal of Law and Economics* 5:1-16.

Sweezy, Paul M. 1939. Demand Under Conditions of Oligopoly. *Journal of Political Economy* 47(4):568-573.

The Antitrust Laws. Federal Trade Commission. <https://www.ftc.gov/tips-advice/competition-guidance/guide-antitrust-laws/antitrust-laws>.

The Fabian Socialists. The History of Economic Thought. <https://www.hetwebsite.net/het/schools/fabian.htm>.

Theodore W. Schultz—Facts. NobelPrize.org. Nobel Media. <https://www.nobelprize.org/prizes/economic-sciences/1979/schultz/facts/>

William D. Nordhaus and Paul N. Romer Win Nobel Prize for Work on Innovation, Climate, and Economic Growth. *The National Bureau of Economic Research*. https://www.nber.org/nobel_nordhaus_romer.html#:~:text=2018%20Nobel%20Prize&text=William%20D.,Nobel%20Prize%20in%20Economic%20Sciences.

APPENDIX A

SELECTED AWARDS, HONORS AND MEMBERSHIPS

- Fellow (1957-1958), Center for Advanced Study in Behavioral Sciences (CASBS), Stanford University
- Fellow (1963), American Statistical Association
- President (1964), American Economic Association
- Fellow (1971-1991), Hoover Institution, Stanford University
- Editor (1972-1991), *Journal of Political Economy*
- Member (elected) (1975), (United States) National Academy of Sciences
- Founding Member and President (1976-1978), Mont Pèlerin Society
- President (1977), History of Economics Society
- Founder and Director (1977-1991), Center for the Study of the Economy and the State, University of Chicago
- Awarded (1982), Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel
- Recipient (1987), (United States) National Medal of Science

APPENDIX B

SELECTED PUBLICATIONS

Becker, Gary S. and George J. Stigler. 1974. Law Enforcement, Malfeasance, and Compensation of Enforcers. *Journal of Legal Studies*. 3(1):1-18.

Blank, David M. and George J. Stigler. 1957. *The Demand and Supply of Scientific Personnel*. National Bureau of Economic Research, Inc.

Boulding, Kenneth E. and George J. Stigler. (eds.) 1952. *Readings in Price Theory*. Homewood, Illinois: Richard D. Irwin, Inc.

Friedman, Milton and George J. Stigler. 1946. *Roofs or Ceilings? The Current Housing Problem*. The Foundation for Economic Education, Inc. New York: Irvington-on-Hudson.

_____. 1937. The Economics of Carl Menger. *Journal of Political Economy*. 45(2):229-250.

_____. 1937. A Generalization of the Theory of Imperfect Competition. *Journal of Farm Economics*. 19(3):707-717.

_____. 1938. Social Welfare and Differential Prices. *Journal of Farm Economy* 20(3):573-586.

_____. 1939. Limitations of Statistical Demand Curves. *Journal of the American Statistical Association* 34(207):469-481.

_____. 1939. Production and Distribution in the Short Run. *Journal of Political Economy* 47(3):305-327.

_____. 1940. Notes on the Theory of Duopoly. *Journal of Political Economy* 48(4):521-541.

_____. 1941. *Production and Distribution Theories: The Formative Period*. New York: Macmillan.

_____. 1942. The Extent and Bases of Monopoly. *American Economic Review* 32(2):1-22. Part 2, Supplement, Papers Relating to the Temporary National Economic Committee.

_____. 1942. *The Theory of Competitive Price*. New York: Macmillan.

_____. 1943. The New Welfare Economics. *American Economic Review* 33(2):355-359.

_____. 1945. The Cost of Subsistence. *Journal of Farm Economics* 27:303-314.

_____. 1946/1952/1966/ 1987. *The Theory of Price*. New York: Macmillan. [(1952) 2nd edition. (1966) 3rd edition. (1987) 4th edition.]

_____. 1946. The Economics of Minimum Wage Legislation. *American Economic Review*. 36(3):358-365.

_____. 1946. Labor Productivity and Size of Farm: A Statistical Pitfall. *American Journal of Agricultural Economics* 28(3):821-825.

_____. 1946. Professor Lester and the Marginalists. *American Economic Review* 37(1):154-157.

_____. 1946. Domestic Servants in the United States, 1900-1940. National Bureau of Economic Research, Inc.

_____. 1947. The Kinky Oligopoly Demand Curve and Rigid Prices. *Journal of Political Economy* 55(5):432-449.

_____. 1947. *Trends in Output and Employment*. New York: National Bureau of Economic Research.

_____. 1947. Notes on the History of the Giffen Paradox. *Journal of Political Economy*. 55(2):152-152.

_____. 1947. Stuart Wood and the Marginal Productivity Theory. *Quarterly Journal of Economics* 61(4):640-649.

_____. 1949. A Survey of Contemporary Economics. *Journal of Political Economy*. 57(2):93-105.

_____. 1949. *Five Lectures in Economic Problems: Five Lectures delivered at the London School of Economics and Political Science on the invitation of the Senate of the University of London*. London School of Economics and Political Science. London: Longmans, Green and Company, Ltd.

_____. 1949. A Theory of Delivered Price Systems. *American Economic Review* 39(6):1144-1159.

_____. 1950. The Development of Utility Theory I. *Journal of Political Economy* 58(4):307-327.

_____. 1950. The Development of Utility Theory II. *Journal of Political Economy* 58(5):373-396.

_____. 1950. *Employment and Compensation in Education*. National Bureau of Economic Research.

_____. 1950. Monopoly and Oligopoly by Merger. *American Economic Review* 40(2):23-34.

_____. 1951. The Division of Labor is Limited by the Extent of the Market. *Journal of Political Economy*. 59(3):185-193.

_____. 1952. *The Theory of Price*. 2nd edition. New York: Macmillan.

_____. 1952. The Ricardian Theory of Value and Distribution. *Journal of Political Economy* 60(3):187-207.

_____. 1953. Sraffa's Ricardo. *American Economic Review* 43(4):586-599.

_____. 1954. The Early History of Empirical Studies of Consumer Behavior. *Journal of Political Economy*. 62(2):95-113.

_____. 1954. The Economist Plays with Blocs. *American Economic Review* 44(2):7-14.

_____. 1954. Schumpeter's History of Economic Analysis. *Journal of Political Economy*. 62(4):344-345.

_____. 1955. The Nature and Role of Originality in Scientific Progress. *Economica* 22(88):293-302.

_____. 1955. Mergers and Preventive Anti-Trust Policy. *Pennsylvania Law Review*. 54 U. PA. L. Rev. 176, 181.

_____. 1955. *Business Concentration and Price Policy*. National Bureau of Economic Research, Inc.

_____. 1956. Industrial Organization and Economic Progress. In: L. D. White (ed.), *The State of the Social Sciences*. Chicago: University of Chicago Press.

_____. 1956. The Statistics of Monopoly and Merger. *Journal of Political Economy*. 64(1):33-40.

_____. 1956. *Trends in Employment in the Service Industries*. National Bureau of Economic Research, Inc.

_____. 1957. Perfect Competition, Historically Contemplated. *Journal of Political Economy*. 65(1):1-17.

_____. 1958. Ricardo and the 93 Per Cent Labor Theory of Value. *American Economic Review*. 48(3):357-367.

_____. 1958. Economies of Scale. *Journal of Law and Economics* 1(1):54-71.

_____. 1958. The Goals of Economic Policy. *Journal of Business* 18(2):283-292. [(1975). *The Journal of Law and Economics* 18(2):283-292.]

_____. 1959. Bernard Shaw, Sidney Webb and the Theory of Fabian Socialism. *Proceedings of American Philosophical Society* 103(3):469-475.

_____. 1959. The Politics of Political Economists. *The Quarterly Journal of Economics* 73(4):522-532.

_____. 1960. Prometheus Incorporated: Conformity or coercion? (Benjamin Franklin Lectures), In: Robert E. Spiller (ed.), *Social Control in a Free Society*. Philadelphia: University of Pennsylvania Press.

_____. 1960. The Influence of Events and Policies on Economic Theory. *American Economic Review* 50(2):36-45.

_____. 1961. The Economics of Information. *Journal of Political Economy* 69(3):213-225.

_____. 1961. Administered Prices and Oligopolistic Inflation. *Journal of Business* 35:1-1.

_____. 1962. The Intellectual and the Marketplace. Selected Papers, no. 3. Chicago: University of Chicago Graduate School of Business.

_____. 1962. Information in the Labor Market. *Journal of Political Economy* 70(5): Part 2: Investment in Human Beings, 94-105.

_____. 1962. The Chicago School of Economics: Comment. *Journal of Political Economy* 70(1):70-71.

_____. 1962. Henry L. Moore and Statistical Economics. *Econometrica* 30(1):1-21.

_____. 1962. The Tenable Range of Functions of Local Government. In: Edmund S. Phelps (ed.), *Private Wants and Public Needs: Issues Surrounding the Size and Scope of Government Expenditure*. New York: WW Norton.

_____. 1962. Administered Prices and Oligopolistic Inflation. *Journal of Business* 35(1):1-13.

_____. 1962. Marshall's Principles after Guillebaud. *Journal of Political Economy* 70(3):282-286.

_____. 1963. *Capital and Rates of Return in Manufacturing Industries*. Princeton: Princeton University Press.

_____. 1963. Archibald versus Chicago. *Review of Economics and Statistics* 30(1):63-64.

_____. 1963. *The Intellectual and the Market Place and Other Essays*. Glencoe: Free Press. [(1964). he Intellectual and the Marketplace. *Transaction* 1:11-12.]

_____. 1963. United States v. Loew's Inc.: A Note on Block-Booking. *The Supreme Court Review* 163:152-157.

_____. 1963. *Capital and Rates of Return in Manufacturing Industries*. Princeton: National Bureau of Economic Research, Inc. Princeton University Press.

_____. 1964. [Professor Stigler Revisited]: Comment. *Journal of Business* 37:414.

_____. 1964. A Theory of Oligopoly. *Journal of Political Economy* 72(1):44-61.

_____. 1964. Public Regulation of the Securities Market. *The Journal of Business*.37(2):117-142.

_____. 1964. The Tactics of Economic Reform. Selected Papers, no. 13. Chicago: University of Chicago Graduate School of Business.

_____. 1964/1975. *The Citizen and the State: Essays on Regulation*. Chicago: University of Chicago Press

_____. 1965. The Economist and the State. *The American Economic Review* 55(1/2):1-18.

_____. 1965. *Essays in the History of Economics*. Chicago: University of Chicago Press.

_____. 1965. The Dominant Firm and the Inverted Umbrella. *Journal of Law and Economics* 8:167-172.

_____. 1965. Textual Exegesis as a Scientific Problem. *Economica* 32(128):447-450.

_____. 1965. The Formation of Economic Policy. In: *Current Problems in Political Economy*. Paul L. Morrison Lectures in Political Economy. Greencastle: Depauw University.

_____. 1966. The Economic Effects of the Antitrust Laws. *Journal of Law and Economics* 9:225-258.

_____. 1966. *The Theory of Price*. 3rd edition. New York: Macmillan.

_____. 1967. Imperfections in the Capital Market. *Journal of Political Economy* 75(3):287-292.

_____. 1967. The Economics of Conflict of Interest. *Journal of Political Economy* 75(1):100-101.

_____. 1968. Price and Non-Price Competition. *Journal of Political Economy* 76:149-149.

_____. 1968/1983. *The Organization of Industry*. 1st Edition: Homewood: Richard D. Irwin. 2nd Edition: Chicago: University of Chicago Press.

_____. 1969. Alfred Marshall's Lectures on Progress and Poverty. *Journal of Law and Economics* 12(1):181-183.

_____. 1969. Opportunity Cost of Marriage: Comment. *Journal of Political Economy* 77(5):863.

_____. 1969/1979. Why Have the Socialists Been Winning? (1969: Ordo 30, Festschrift for F. A. von Hayek) (1979: 30 Ordo: Jahrbuch für die Ordnung von Wirtschaft und Gesellschaft 61).

_____. 1969. Does Economics Have a Useful Past? *History of Political Economy* 1(2):217-230.

_____. 1970. Director's Law of Public Income Distribution. *Journal of Law and Economics* 13:1-10.

_____. 1970. The Optimum Enforcement of Laws. *Journal of Political Economy* 78(3):526-536.

[(1974). In: *Essays in the Economics of Crime and Punishment*, pp. 55-67. National Bureau of Economic Research, Inc.]

_____. 1971. The Theory of Economic Regulation. *The Bell Journal of Economics and Management Science* 2(1):3-21.

_____. 1971. Modern Man and his Corporation. Selected Papers, no. 39. Chicago: University of Chicago Graduate School of Business.

_____. 1971. Smith's Travels on the Ship of State. *History of Political Economy* 3(2):265-277.

_____. (1975). In: Andrew S. Skinner and Thomas Wilson (eds.), *Essays on Adam Smith*, pp. 237-246. Oxford: Clarendon Press.]

_____. 1972. The Law and Economics of Public Policy: A Plea to the Scholars. *Journal of Legal Studies* 1(1):1-12.

_____. 1972. The Adoption of Marginal Utility Theory. *History of Political Economy* 4(2):442-468.

_____. 1972. Economic Competition and Political Competition. *Public Choice* 13:91-106.

_____. 1972. The Commission on Financial Structure and Regulation: Its Organization and Recommendations: Discussion. *Journal of Finance* 27(2):340-41.

_____. 1973. General Economic Conditions and National Elections. *American Economic Review* 63(2):160-167.

_____. 1973. In Memoriam: Frank Knight as Teacher. *Journal of Political Economy* 81(3):518-520.

_____. 1973. Regulation: The Confusion of Means and Ends. In: R. Landau (ed.), *Regulating New Drugs*. Chicago: University of Chicago Press.

_____. 1973. A Sketch of the History of Truth in Teaching. *Journal of Political Economy* 81(2):491-495.

_____. 1974. Free Riders and Collective Action: An Appendix to Theories of Economic Regulation. *The Bell Journal of Economics* 5(2):359-365.

_____. 1974. Henry Calvert Simons. *Journal of Law and Economics* 17(1):1-5.

_____. 1975. Determinants of Participation in Presidential Elections: Comment. *Journal of Law and Economics* 18(3):743-744.

_____. 1975. The Effects of Economic Policies on Votes for the Presidency: Some Evidence from Recent Elections: Comment. *The Journal of Law and Economics* 18(3):801-802.

_____. 1975. *The Citizen and the State: Essays on Regulation*. Chicago: University of Chicago Press.

_____. 1975. The Intellectual and His Society. In: Richard Selden (ed.), *Capitalism and Freedom: Problems and Prospects*, pp. 311-321. Charlottesville: University Press of Virginia.

_____. 1975. Buyer's Prices, Seller's Prices, and Price Flexibility: Reply. *American Economic Review* 65(3):526-526.

_____. 1976. Do Economists Matter? *Southern Economic Journal* 42(3):347-354.

_____. 1976. The Xistence of X-Efficiency. *American Economic Review* 66(1):213-216.

_____. 1976. The Successes and Failures of Professor Smith. *Journal of Political Economy* 84(6):1199-1213.

_____. 1977. The Conference Handbook. *Journal of Political Economy* 85(2):441-444.

_____. 1978. The Literature of Economics: The Case of the Kinked Oligopoly Demand Curve. *Economic Inquiry* 16(2):185-204.

_____. 1978. Wealth and Possibly Liberty. *Journal of Legal Studies* 7(2):213-217.

_____. 1979. Babbage on Monopoly Price. *Journal of the History of Economic Thought* 1(1):16-16.

_____. 1980. An Introduction to Privacy in Economics and Politics. *Journal of Legal Studies* 9(4):623-644.

_____. 1981. A Historical Note on the Short Run: Marshall and Friedman. *Journal of the History of Economic Thought* 2(2):13-14.

_____. 1982. The Economists and the Problem of Monopoly. *American Economic Review* 72(2):1-11.

_____. 1982. *The Economist as Preacher, and Other Essays*. Chicago: University of Chicago Press.

_____. 1982. The Process and Progress of Economics. Nobel Memorial Prize Lecture. (1983). Nobel Lecture: The Process and Progress of Economics. *Journal of Political Economy* 91(4):529-545.]

_____. 1983. *The Organization of Industry*. Chicago: The University of Chicago Press.

_____. 1983. The Literature of Economics: The Case of Berle and Means. *Journal of Law and Economics* 26(2):237-268.

_____. 1984. Economics—The Imperial Science? *Scandinavian Journal of Economics* 86(3):301-313.

_____. 1984. History of Economics Society Distinguished Fellow. *Journal of the History of Economic Thought* 5(1):5-6.

_____. 1985/1988/2003. *Memoirs of an Unregulated Economist*. New York: Basic Books. Chicago: University of Chicago Press.

_____. 1985. The Origin of the Sherman Act. *Journal of Legal Studies* 14(1):1-12.

_____. 1986. *The Essence of Stigler*. Kurt R. Leube and Thomas Gale Moore (eds.). Stanford: Hoover Institution Press.

_____. 1987. *The Theory of Price*. 4th edition. New York: Macmillan.

_____. 1988. Palgrave's Dictionary of Economics. *Journal of Economic Literature* 26(4):1729-1736.

_____. (ed.). 1988. *Chicago Studies in Political Economy*. Chicago: University of Chicago Press.

_____. 1990. Ricardo or Hollander? [Ricardian Growth Theory: A Resolution of Some Problems in Textual Interpretation]. *Oxford Economic Papers* 42(4):765-768.

_____. 1991. Charles Babbage. *The Journal of Economic Literature* 29(3):1149-1152.

_____. 1992. Law or Economics? *Journal of Law and Economics* 35(2):455-468.

_____. and Claire Friedland (1962). "What Can Regulators Regulate? The Case of Electricity", *Journal of Law and Economics*. 5(62): 1-16.

Stigler, George J. and Claire Friedland. 1971. Profits of Defense Contractors. *American Economic Review* 61(4):692-694.

_____. 1975. The Citation Practices of Doctorates in Economics. *Journal of Political Economy* 83(3):477-507.

_____. 1979. The Pattern of Citation Practices in Economics. *History of Political Economy* 11(1):1-20.

Stigler, George J. and Gary S. Becker. 1977. De Gustibus non-Est Disputandum. *American Economic Review* 67(2):76-90.

Stigler, George J. and James K. Kindahl. 1970. *The Behavior of Industrial Prices*. National Bureau of Economic Research, Inc.

_____. 1973. Industrial Prices, as Administered by Dr. Means. *American Economic Review* 63(4):717-721.

Stigler, George J. and Paul A. Samuelson. 1963. A Dialogue on the Proper Economic Role of the State. *Selected Papers, no.7*. Chicago: University of Chicago Graduate School of Business.

Stigler, George J. and Robert A. Sherwin. 1985. The Extent of the Market. *Journal of Law and Economics* 28(3):555-585.

Stigler, George J., Stephen M. Stigler and Claire Friedland. 1995. The Journals of Economics. *Journal of Political Economy* 103(2):331-359.

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