Veblen, Commons, and the Modern Corporation: Why Management Does Not Fit Economics

Thibault Le Texier

March 2012

Abstract

From the late eighteenth century, economics revolved largely around the market. At the end of the nineteenth century, the everyday activities of developing corporations modified the usual field of economic investigations. Nevertheless, economists were slow off the mark and seemed reluctant to give a proper place to this new player in their theoretical schemes. Thorstein Veblen and John Commons offered the first comprehensive history of the modern business firm. Little interested in the anatomy of the corporate leviathan, they rather analysed its double-sided spirit, both pecuniary and industrial. By doing so, they cast important thoughts on the business firm as an institution to be taken into account by economists. Yet, they failed to shift economic theory from its prevailing market orientation.

Introduction: theorizing or not the business firm

Until the end of the nineteenth century, economics did not really deal with the *business firm*. There were attempts to grasp the economic consequences of the manufacturer and the factory and to theorize the entrepreneur. Cantillon, Say, and Marx acknowledged the social influence of industrial leaders' ideas and undertakings. Members of the German historical school such as Gustav von Schmoller analysed at length the birth and growth of the business enterprise, but they were more historians than economists. None of these thinkers proposed a theory of the business firm. The institutions economists focused on until the end of the nineteenth century were the market, currency, and the State.

When the large business corporation appeared from the 1840s, the economists logically understood it within the analytical schemes they had developed during the preceding century. This framework proved useful to understand capitalist entrepreneurs' logic, market structures, and profit-oriented behaviours. But it felt short of grasping the dynamics of the managerial rationality embodied in the modern business corporation. It is precisely because of this epistemological foundation that twentieth-century management did not fit economics. The science of organisation and the science of market rest upon contradictory premisses, as Veblen and Commons asserted it.

The business firm is the vehicle of these two rationalities: on the one hand the *capitalist* rationality, which is structured upon the notions of market, exchange, capital and profit; and on the other hand the *managerial* rationality, which revolves around the principles of control, organization, and efficiency. Being a science of market, economics was, and largely remains, ill-equipped to grasp this second dimension. Marshall failed to tie these two logics together. Veblen and Commons were the first to fully take into account the business firm in their economic theories. Nevertheless, if they cast important thought on the business firm growing control over society, they did not acknowledge the constitution of managers into a distinct

class nor free the managerial rationality from the pecuniary logic. In that sense, even the foremost thinkers of the business firm of the early twentieth century could not make management fit economics.

Understanding the business firm from a market perspective

In the eighteenth century, political economy understood production and consumption from the triple standpoint of land, labour, and capital, with the market tying these factors together. Until the end of the nineteenth century, economics dealt, in addition, with salaries, finance, banking, prices, wealth, surplus, profit, taxation, exchanges, currency, and value, but it hardly touched on the business enterprise, with the exception of a few attempts to grasp the economic consequences of the invention of the manufacturer or to apprehend the role of the entrepreneur. Turgot and Cantillon cast important thoughts on these matters.

When the enterprise – understood as a formal institution rather than a temporary "adventure" – appeared in political economic treaties, it was under the form either of 1) a *family* affair, 2) a *commercial* affair, or 3) a *state* affair; and thus it was analysed under the categories either 1) of brotherhood, honesty, tradition and care, 2) of profit, exchange and capital, or 3) of sovereignty, trade balance and influence. For the early economists, the enterprise carried no rationality of its own.

The *market,* much more than the business corporation, was the central institution of the rising economic science. In the eighteenth century, the economists defined the commercial world as a system of physical exchanges rated in money and carried on through markets. For Adam Smith, the division of work, resulting from the proliferation of exchanges, was submitted to market rationality. He dealt in a rather cursory way with the inescapable question of tasks coordination. For Smith and many of his followers, the market coordinated and organized work, the city rather than the factory being the principal means of grouping workers

together and providing businesses with customers. As he noted, “the most insignificant trades carried on in towns have accordingly, in some place or other, been incorporated”. On the other hand, “the inhabitants of the countryside, dispersed in distant places, cannot easily combine together. They have not only never been incorporated, but the corporation spirit has never prevailed among them” (Smith, 1776: 132 and 133). In 1894 still, John Hobson depicted “the town as an industrial structure” and noted that “the market, not the industry, is the true term which expresses the group of organically related businesses” (Hobson, 1894: 341 and 30). Neooclassical economists similarly considered production as a form of exchange. Until the end of the nineteenth century, whether they envisioned the division of tasks or their coordination, economists thought of the market as the main instrument for organizing production and consumption.

According to the classical and neoclassical economists, and particularly the laissez-faire school, individuals spontaneously and rationally react to the competitive system by forming transitory patterns of action. Thus the proto-business corporation is just an abstract and small dot in the market place, producing commodities to be sold in the market by combining production elements whose prices are fixed in other markets. In their economic foreground stands the individual, be they the owner or worker.

The *entrepreneur* himself remained a secondary character of eighteenth and nineteenth centuries treatises on political economy. Smith referred to him sporadically, and Ricardo did not even mention him. Jean-Baptiste Say painted him in somewhat vague, terms, as someone who risks a capital in the hope of making a profit. John Stuart Mill, who refused to limit political economy to the study of exchanges, gave him his first great role. According to the liberal economists of the English school and to Marx in their wake, the captain of industry is a pure capitalist. For Schumpeter, still, “a society is called capitalist if it entrusts its economic process to the guidance of the private businessman.” (Schumpeter, 1946: 189). To him, this

entrepreneur is less the trained administrator of an existing concern than the born creator of novelties.

Say, Fourier, Proudhon, Saint-Simon, Marx and Comte each recognized the social influence of the captains of industry and their enterprises. But Marx was the only one to incorporate thoughts on management into his economic theory. As he noted it, it was not an economist but the doctor Ure who first recognized “that not the industrial capitalists, but the industrial managers are ‘the soul of our industrial system’” (Ure, 1835, quoted in Marx, 1867a: 454). Following his lead, and quoting him abundantly, Marx described the constitution of this new class of workers, born from “the separation of the intellectual powers of production from the manual labour” (Marx, 1867c: 462). He further noticed “that the labor of superintendence, entirely separated from the ownership of capital, walks the streets. It is, therefore, no longer necessary for the capitalist performs the labor of superintendence himself” (Marx, 1867c: 455). Nevertheless, Marx continuously submitted the logic of management to the capitalist rationality. To him, management is capitalist *per se*. Under the capitalism regime “there are only two classes [...], the working class disposing of their labour-power, and the capitalist class owning the social means of production and the money” (Marx, 1867c: 488). Far from constituting a class in themselves, the managers belong to the first but operate on behalf of the second. “This command, noted Marx, is an attribute of capital, although the individual capitalist can in his turn hand over its implementation to specialised workers, who nevertheless represent capital and the capitalist over against the army of workers” (Marx, 1975: 262). That is, “the labor of superintendence and management, as Marx called it, arising out of the antagonistic character and rule of capital over labor” (Marx, 1867c: 454), is nothing but a the function of capital. In spite of his declaration, Marx remained closer to Smith than to Ure.

At the end of the nineteenth century, most economists visualised the concept of the emerging business corporation with such conceptual tools as private property, value, capital, investment, credit, cost, profit, entrepreneurship, the price system and market competition. That is, they thought of it as a capitalist institution. For them, as Mitchell put it, economics was “the science of business” (Mitchell, 1916: 141) gathering “more or less elaborate studies of the logic of pecuniary institutions” (Mitchell, 1969: 784).

The first economist who tried to synthesise the organizing side of the firm and the price system was Alfred Marshall. And he failed, to put it bluntly. Marshall recognized that organisation played an important role in the coordination of divided tasks. He identified the division of labour between management and manual work as “the kernel of the modern economic problem” (Marshall, 1890: 39). He also treated a little problems of imperfect competition. But looking at industry in 1890 he saw no separation between owners and managers, with the exception of some rare public joint-stock companies. To him businessmen, otherwise called *undertakers* or *entrepreneurs*, have a definite function within the corporation: they “bring together the capital and the labour required for the work; they arrange or ‘engineer’ its general plan, and superintend its minor details” (*Ibid*: 244). Moreover, “the superintendence of labour is but one side, and often not the most important side of business work” (*Ibid*: 248). To him the entrepreneur must therefore be a capitalist more than a manager, and these two functions seem to be independent from one another. That being so, Marshall added organization as a fourth factor of production to the three traditionally considered by economists, but this fourth element seems less integrated with this original scheme of thought and more tacked on, as a way of inducing its constituent parts to become dynamic and changing. Under the heading of *organisation*, Marshall developed a broad and loose range of ideas, from the plasticity of human resources and working arrangements to the stimulating effect of mechanisation on standardization, and from the

centralization of industries in particular locations to large-scale production. In his 1919 work, *Industry and Trade*, he remained mostly interested in the idea that “the growth of giant businesses exerts on the relative demands for capital and for labour, and on the character of the work required of labour” (Marshall, 1919: 848). But on the whole, as Gardiner Means sums it up, Marshall “did not try to introduce the big modern corporation into his analysis” (Means, 1962: 28). When he discussed corporations, it was as an exception to his rule on the life cycle of firms. He never quoted either Veblen or Commons and did not seem to have read them.

In their defense, most of eighteenth and nineteenth century economists knew the big firm only under the particular traits of the Colonial company. In the 1880s, business executives, like economists, were absorbed in problems of markets and prices rather than of management. By that time, there were more fishermen in England than engineers and surveyors (English census of 1891, quoted in Hobson, 1894: 71). Even at the time Marshall wrote the *Principles*, the bulk of the British manufacturing companies were sole ownerships or partnerships.

Moreover, it was not in Europe but in the United States that railway companies’ innovations in corporate finance raised issues of financial manipulation, providing information to shareholders, insider dealing, the formation of trust funds, the role of investment bankers, the basis of corporate capitalization, conflicts of interest between different classes of owners and creditors, which caught Veblen’s attention. Yet, Marshall's works difficulty for integrating the problematic of organisation within the land-labor-capital framework proves that if the economists of the Victorian age overlooked the growth of the business enterprise (Veblen, 1925: 52-53), it is also, and perhaps primarily, because they were intellectually ill-equipped to discern these transformations.

Veblen's and Commons's breakthrough

Thorstein Veblen and John Commons were the first economists to fully grasp the double rationality of the firm, and more specifically of the financially-networked *corporation.* They were neither classical nor socialist economists, but in a three-fold minority: firstly, they did not follow the mainstream of classical and neoclassical economists; secondly, they were American, at a time when economics was mainly European; thirdly, they drew extensively from social sciences instead of looking toward mathematics. Precisely, can we assume, it is because they used psychology, sociology, anthropology, and law, because they witnessed the profound transformation of American institutions at the end of the nineteenth century, and because they did not seek to ground their theories in objective, measurable and mathematically-expressable facts, that Veblen and Commons could explore the black box of the business and investigate the complexities of institutions.

Thorstein Veblen was the first economist to notice that the business had become, at the beginning of the twentieth century, "the master institution of civilised life" (Veblen, 1923: 86), and to propose a theory for it. As his foremost interpreter noted, such a theory "was to be Veblen's main concern after his re-entrance into academic halls in 1891" (Dorfman, 1915: xv). Indeed, he wrote the history of enterprises from the hunter-gatherer to the banker capitalist, unveiling its logic and showing its effects, its nature, its technical character, its relationship to markets, and its influences over habits of mind, cultures and institutions. Using the tools of sociology, ethnology, and history, he conceived the modern enterprise as a *system of beliefs* and the locus of a sharp divide between the logic of business and industrial rationality.

John Commons, who we might call his main successor for this corporate insight, used law to build up his own theory of the business corporation as a system of rules. Going back to the

manorial system and focusing on *transactions*, he disentangled the legal intricacies and the mental evolutions which have made its existence possible.

Veblen's work had been very much in vogue, and Commons's work subsequently became a landmark for many economists and labour relations students after his death. They directly influenced thinkers such as Wesley Mitchell, Adolf Berle, Gardiner Means, John Kenneth Galbraith, Alfred Chandler, and Douglass North, among many others.

For our authors, far from being an "homogeneous globule of desire and happiness" (Veblen, 1898: 73) freely bargaining on markets the sale and purchase of physical commodities, as Veblen vividly depicted the classical *homo œconomicus*, the human being is, in Commons' terms, "an active person associated with others and participating in and controlled by the practices common to all" (Commons, 1925: 376). Both sustained that, whether in a framework of formal institutions or not, human behavior mostly involves habits and repetitive practices, constrained by beliefs, conventions, social norms, and also increasingly by laws and contracts. As a result, economics could not be confined to catalactics and had to shift "from *laissez-faire* economics to *control* economics" (Commons, 1950: 293). Thus the opposition between institutional and classical economics can be roughly sketched: conflict in lieu of equilibrium; evolutionary processes rather than static settings; collective action instead of self-interested and competing individuals; choices affected by habits, customs and other institutions rather than free and perfectly rational.

Here is Veblen's and Commons's major breakthrough: they were the first economists to analyse the growing *control* of the business corporation over industrial societies. Every business is "a purposeful control over human nature", as Commons stated, but also over the non-human environment (Commons, 1924: 367). With the spread of the business corporation, there is no longer such a thing as nature's harmony, natural law, natural order, or natural

rights. Nature – including *human* nature – has become a set of controllable, manipulable, and modifiable resources.

The modern corporation, insisted Veblen, reduced individuality by *standardising* goods and services, purposes and acts, necessities and conveniences, uses and behaviours, needs and wants, workers and consumers, time and space, quantities and frequencies, and even amusements and diversions (Veblen, 1904, ch. 9). On the shop-floor, he explained, the large, modern industrial organisation required "that the labour force and the labour units be mobile, interchangeable and distributable, in the same impersonal fashion as the mechanical contrivances engaged are movable and distributable" (*Ibid*: 326).

One of main form of control exercised by the business corporation was and remains control over labour through division and standardisation of tasks, rewards, punishment, and wages. Due to the increasingly fierce competition and the subsequent necessity of cutting costs, the businesses sought to make labour more efficient. Scientific management was the most widely accepted answer in America and in Europe. Minute division of labour, specialisation, mechanisation, time and movement study, piece-rates: in order to multiply efficiency, Commons noted, even "the psychology of the workman is analyzed and experimented upon as accurately as the chemistry of the different kinds of coal" (Commons, 1913: 73). Both Veblen and Commons looked upon the Taylor movement with interest and often with enthusiasm (Commons, 1921).

The business corporation also gained control over its economic environment. The logical outcome of free enterprise was not competition but *administered prices*, *oligopoly*, or *monopoly*. According to Veblen, "the endeavour of all such enterprises that look to a permanent continuance of their business, is to establish as much of a monopoly as may be" (Veblen, 1904: 54). Berle, Means, and Galbraith made this idea one of their stock in trade. According to the former, "the result of great corporations fighting each other is either

consolidation, or elimination of one of the units, or acceptance of a situation in which the place of each is approximately respected" (Berle, 1954: 45-46). The American State actively contributed to this centralization of corporate powers.

Markets remained of course a necessary means of coordinating businesses, but thanks to the achievements of marketing they could be discovered, created, and stimulated; in a word, they can be managed. "The basic principle of a willing buyer and seller, Commons stated, was being violated by the emergence of large-scale corporations" (Commons, 1936: 243). We find here what is to become Alfred Chandler's famous theme: "The modern business enterprise took the place of market mechanisms in coordinating the activities of the economy and allocating its resources" (Chandler, 1977: 1). The means for controlling markets are, for instance, a corporation's immaterial capital, those intangible assets which Veblen and Commons called "good-will" and which comprise "such things as established customary business relations, a reputation for upright dealing, franchises and privileges, trade-marks, brands, patent rights, copyrights, exclusive use of special processes guarded by law or by secrecy, exclusive control of particular sources of materials" (Veblen, 1904: 139). According to Veblen's and Commons's heir John K. Galbraith too, the corporation "must exercise control over what is supplied. It must replace the market with planning" (Galbraith, 1967: 27). That is, the peaceful coordination of billions of products, activities and human beings seems to require social attitudes to be accommodated to the corporations' needs.

If any responsible corporation strives to hold sway over resources, production, conception, invention, and distribution, it also tries to anticipate demands and forecast consumption behaviours. Public behaviour must therefore be made predictable, but also modifiable. Industry has to produce goods, but also desires. Control over consumption patterns involves conditioning through advertising. By the 1920s, *publicity engineers* had so developed their practice "that the fabrication of customers can now be carried on as a routine operation, quite

in the spirit of the mechanical industries and with much the same degree of assurance as regards the quality, rate and volume of the output" (Veblen, 1923: 306). Like *marketing*, *advertising* can be seen an development of managerial rationality.

The corporation also gained influence over the the modern cultural situation by spreading a corporate ethos which mixed commercial standards and a "matter-of-fact outlook" (Veblen, 1919: 178). As Mitchell noted, such a transition of a nation to the factory system implies a lot of voluntary changes: "New methods of building and sanitation have to be learned. New means of communication to be established. Land has to be taken for new uses and familiar privileges altered. New bases of power grow up and must be recognized. Population has to be educated in order to learn how to live under new conditions" (Mitchell, 1967: 103).

The modern corporation also sought to influence society through the *lobbying* of the main political parties. As Commons remarked as early as 1896, the lobby "is coincident with the very recent growth of large private corporations. It is organized by them" (Commons, 1896: 45). He latter demonstrated how American legislatures soon wither in the face of private corporations with public functions and unexampled resources. During the twentieth century, Galbraith showed that industrial interests also usurped landed interests within the Parliaments of industrial democracies.

The *Technocratic movement*, whose leaders. Henry Gantt, Howard Scott and Stuart Chase had listened to or read Veblen and had managed to catch his careful attention, further advocated the scientific organisation of society according to the industrial logic (Dorfman, 1935: 454 and sq.). Far from opposing this idea of a scientifically designed social control, American institutionalism relied on it until the the end of World War II (Rutherford, 2011).

Veblen's and Commons's missed opportunity

Veblen and Commons both recognized the capitalist nature of the modern corporation. Industry, as Veblen continuously asserted , “is managed by businessmen for business ends” (Veblen, 1914: 351). As such, rather than the creature of the engineer, it is the direct descendant of the merchant’s and the entrepreneur’s concerns and the child of the pecuniary culture which arose out of the money economy. In such an economy, as Mitchell pictured it, “economic activity takes the form of making and spending monetary incomes” (Mitchell, 1913: 21). The daily use of money has disciplined most of the population into accounting for prices, figures, paces, sizes, numbers, and costs, turning each wage-earner and consumer into a profit-sensitive accountant.

Veblen and Commons both admitted that, mainly as a result of the necessities of credit to finance the integration of large-scale corporations, modern “American capitalism is Banker Capitalism, instead of the former Merchant Capitalism or Employer Capitalism” (Commons, 1934: 890). Absentee ownership had left many industries under the control of Wall Street. The larger use of credit system had not only changed the nature of capitalism, it had also spread its message. “The modern corporation, asserted Commons, has diffused capitalism throughout large masses of people by building up a system of stocks and bonds, of savings banks and insurance companies, and millions of people who, under the old Marxian theory, would have been expropriated, have become themselves members of the propertied and capitalist class” (Commons, 1919: 193). During the eighteenth and nineteenth centuries, this pecuniary logic disseminated throughout American society.

Besides this “business metaphysics”, as Veblen calls it, our two authors recognized that a second rationality is also driving the modern corporation, and took full account of this conflicting bipolar nature of the modern business concern: striving for profit *and* for efficiency, it is both market-oriented *and* internally-directed.

On the whole, the relationships between the industrial and the pecuniary logic were never fully thought through by these authors who portrayed them alternatively as conflicting or as cross-fertilizing each other, according to the needs of the demonstration. Veblen recognized that this industrial rationality of the firm was serving its pecuniary ends, but also underlined that owners, bankers, and salesmen had become kinds of engineers themselves. Commons also identified a contradiction between those two functions he borrowed from Veblen. To him, "the going plant is a producing organization furnishing a service to the public, but the going business is a bargaining organization obtaining prices from the public. One is the exact reverse of the other" (Commons, 1924: 182). Mitchell, "the foremost intellectual heir of Veblen" (Dorfman, 1949: 455), also inherited from him this bipolar scheme, and thus differentiated sharply between making goods and making money (cf. Mitchell, 1923). But like Veblen, he soothed the tension by asserting that these two highly rationalized phases of economic activity "have definitely systematized relations to each other. For the carefully ordered complex of activities connected with making goods is itself subordinated to the carefully ordered plans for securing profit-balances upon the ledgers" (Mitchell, 1910: 199).

For Veblen and Commons, this second form of rationality is less *managerial* than *mechanical*, *technological* and *industrial*. Its aims are purely productive. On the contrary, rather than being focused on material *efficiency*, management is a matter of *controlling* and *organising* human as well as non human resources.

Besides, Veblen and Commons failed to take account of the deep transformations involved in the broader role played by managers at the turn of the century. Between 1880 and 1920, the engineering profession has grown in United States from 7,000 to 136,000 (US Bureau of the Census, 1943: table 8 p.111, quoted in Layton, 1962: 70). The hundreds of managers' clubs, associations, reviews, conferences, university courses and corporate schools which sprouted

up during these years attest to the fast and astonishing structuring of this social group. A clerical, white collar class, had arisen (Zunz, 1990).

Observing the practice of absentee ownership and the fast-growing complexity of manufacturing, Veblen accurately concluded that, between workmen and businessmen, "a professional class of 'efficiency engineers' is coming into action" who will "take over the functions assigned in economic theory to the 'entrepreneur'" (Veblen, 1914: 222-223). Nevertheless, he did not acknowledge the wide latitude of power they were gaining over the owners of the stock, maintaining, even after the efficiency craze and the tremendous success of scientific management, that managers "have not drawn together into anything like a self-directing working force" (Veblen, 1921: 70). For sure, there was no such thing in America as a "soviet of technicians." But Veblen obviously underrates managers' class-consciousness – perhaps because of this "dichotomizing moralism," as David Riesman called it, which made him recast the Marxian opposition between unified capital and unified labour (Riesman, 1953: 80).

As for him, Commons considered that managers are between "capital" and "labour" and that the problem of banker capitalism was that management was only responsible toward capital while it also had to be responsible toward labour. Yet, Commons did not recognize managers as a possible third body between employers and employees. This third actor could be the judge or the State or any kind of public authority, but ideally there was none.

Conclusion: twentieth century economics remains market-oriented

As Schumpeter put it, "the owner-managed firm survived much better in economic theory than it did in actual life" (Schumpeter, 1954: 859). Indeed, in the twentieth century the cognitive schemes centred around the market continued to structure the bulk of the theories of the business corporation, in spite of its drastic change.

For instance, according to the human capital theories developed by Gary Becker, Theodore Schultz or Sherwin Rosen, each individual must consider himself as an owner-managed firm endowed with capital that he or she must invest judiciously. These authors conceptualised only the external face of the corporation, as a mechanism for allocating resources and costs operating upon markets, and left its managerial rationality in the dark. Ideally, for Gary Becker "persons investing in human capital can be considered 'firms' that combine such capital perhaps with other resources to produce earning power" (Becker, 1964: 115-116). In such a perspective, gift, trust and love are matters of costs, interests and benefits. For most of nineteenth century thinkers, children had to be cared for and managed. Becker rather discussed " the demand for children," "the price of children," "the value of children," and "the cost of children" (Becker, 1981: 135-144). His whole human capital theory stood as a problem of investing resources in order to maximise profit, not as a problem of organising resources in order to maximize efficiency.

Even authors labelled "institutionalists" such as Ronald Coase, Armen Alchian, Harold Demsetz, Michael Jensen or Oliver Williamson walked along this path. According to their theories, the business enterprise is understandable from a market point of view, as a nexus of contracts connecting individuals, as a substitute for using the market, or as an economic agent strictly striving for profits. For these authors, if there are businesses rather than nothing, and if they adopt such a shape and size, it is essentially down to costs. To them the pecuniary logic remained the very key to understanding the soul of the business enterprise.

Veblen's and Commons's breakthrough has not been a revolution. Even after the rise of the business corporation, economics as a whole continues to develop as a science of markets. The mental foundations laid down by the classical economists have become a kind of intellectual path dependency which economics has largely followed hitherto.

Bibliography

BECKER G. 1993 [1964]. *Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education*, Chicago: University of Chicago Press

BECKER G. 1991 [1981]. *A Treatise on the Family.* Enlarged ed. Cambridge, Mass.: Harvard University Press

CHANDLER A. Jr. 1977. *The Visible Hand: The Managerial Revolution in American Business*, Cambridge: Cambridge University Press

COMMONS J. 1896. *Proportional Representation*, New York, Boston: T. Y. Crowell & co.

COMMONS J. 1913. *Labor and Administration*, New York, The Macmillan company

COMMONS J. 1921. "Faith in People." in COMMONS J. and Others. *Industrial Government.* New York: The Macmillan Company: 13-25

COMMONS J. 1957 [1924]. *The Legal Foundations of Capitalism*, The University of Wisconsin Press

COMMONS J. 1925. "Law and Economics." *The Yale Law Journal* 34(4): 371-382

COMMONS J. 1934. *Institutional Economics: Its Place in Political Economy*, New York: Macmillan co.

COMMONS J. 1936. "Institutional Economics." *American Economic Review* 26(1): 237-249

COMMONS J. 1970 [1950]. *The Economics of Collective Action*, with a biographical sketch by S. Perlman ; manuscript ed., introduction and supplemental contributed by K. H. Parsons, New York: Macmillan

DORFMAN J. 1939 [1915]. "Introduction." in VEBLEN T. *Imperial Germany and the Industrial Revolution*, New York: The Vikings Press,

DORFMAN J. 1961 [1935]. *Thorstein Veblen and his America*. With new appendices. New York: A.M. Kelley

DORFMAN J. 1949. *The Economic Mind In American Civilization, Vol. III, 1865-1918.* New York: The Viking Press

GALBRAITH J. 2007 [1967]. *The New Industrial State.* Princeton: Princeton University Press

HOBSON J. 1901 [1894]. *The Evolution of Modern Capitalism: A Study of Machine Production.* London: W. Scott; New York : C. Scribner's Sons

LAYTON E. 1962. "Veblen and the Engineers." *American Quarterly* 14(1): 64-72

MARSHALL A. 1920 [1890]. *Principles of Economics.* 8th edition. London: Macmillan

MARSHALL A. 1923 [1919]. *Industry and Trade: A Study of Industrial Technique and Business Organization; and of Their Influences on the Conditions of Various Classes and Nations.* London: Macmillan

MARX K. 1975. *Economic Manuscripts of 1861-63, A Contribution to the Critique of Political Economy*, published in *Marx & Engels Collected Works: Volume 30*. Translated by R. Dixon et al. London: Lawrence & Wishart

MARX K. 1909 [1867a]. *Capital: A Critique of Political Economy, Vol. III. The Process of Capitalist Production as a Whole.* Edited by F. Engels; translated from the first German edition by E. Untermann. Chicago: Charles H. Kerr and Co.

MARX K. 1913 [1867b]. *Capital: A Critique of Political Economy, Vol. II. The Process of Circulation of Capital*, Edited by F. Engels; translated from the first German edition by E. Untermann. Chicago: Charles H. Kerr and Co.

MARX K. 1906 [1867c]. *Capital: A Critique of Political Economy, Vol. I, Part I: The Process of Capitalist Production*, Edited by F. Engels; translated from the first German edition by E. Untermann. Chicago: Charles H. Kerr and Co.

MEANS G. 1962. *The Corporate Revolution in America: Economic Reality vs. Economic Theory.* New York: Crowell-Collier

MITCHELL W. 1910. “The Rationality of Economic Activity II,” *The Journal of Political Economy* 18(3): 197-216

MITCHELL W. 1970 [1913]. *Business Cycles.* New York: B. Franklin

MITCHELL W. 1916. “The Role of Money in Economic Theory,” *The American Economic Review* 6(1): 140-161

MITCHELL W. 1923. “Making Goods and Making Money.” Reprinted in MITCHELL W. 1950. *The Backward Art of Spending Money.* New York: Augustus M. Kelley: 137-148

MITCHELL W. 1967. *Types of Economic Theory. From Mercantilism to Institutionalism*, *vol. 1*, Ed. with an introd. by J. Dorfman, New York: A. M. Kelley

MITCHELL W. 1969. *Types of Economic Theory. From Mercantilism to Institutionalism, vol. 2.* Edited with an introd. by J. Dorfman. New York: A. M. Kelley

RIESMAN D. 1953. *Thorstein Veblen: A Critical Interpretation.* New York: Scribner

RUTHERFORD M. 2011. *The Institutionalist Movement in American Economics, 1918-1947: Science and Social Control.* Cambridge: Cambridge University Press

SCHUMPETER J. 1946. “Capitalism.” Reprinted from *Encyclopaedia Britannica* IV: 801-807. In SCHUMPETER J. 1989. *Essays on Entrepreneurs, Innovations, Business Cycles and the Evolution of Capitalism.* Edited by R. V. Clemence; with a new introduction by R. Swedberg. New Brunswick, N.J.: Transaction: 189-210

SCHUMPETER J. 1994 [1954]. *History of Economic Analysis.* Edited from manuscript by E. B. Schumpeter; with a new introduction by M. Perlman. New York: Oxford University Press

SMITH A. 1869 [1776]. *An Inquiry Into the Nature and Causes of the Wealth of Nations.* Vol. 1. Oxford: Clarendon Press

URE A. 1835. *The Philosophy of Manufactures, or an Exposition of the Scientific, Moral and Commercial Economy of the Factory System of Great Britain, t.I.* London: Charles Knight

US BUREAU OF THE CENSUS. 1943. *Sixteenth Census, Population. Comparative Occupational Statistics for the United States, 1870-1940.* Washington, D.C.: Government Printing Office

VEBLEN T. 1898. “Why is Economics not an Evolutionary Science.” *The Quarterly Journal of Economics* 12, in VEBLEN T. 1919. *The Place of Science in Modern Civilization and Other Essays.* New York: Huebsch: 56-81

VEBLEN T. 1927 [1904]. *The Theory of Business Enterprise.* New York: Scribner

VEBLEN T. 1918 [1914]. *The Instinct of Workmanship and the State of the Industrial Arts.* New York: B. W. Huebsch

VEBLEN T. 1919. *The Vested Interests and the Common Man: “The Modern Point of View and the New Order.”* New York: B. W. Huebsch,

VEBLEN T. 1921. *The Engineers and the Price System.* New York: B. W. Huebsch

VEBLEN T. 1923. *Absentee Ownership and Business Enterprise in Recent Times: the Case of America.* New York: B.W. Huebsch

VEBLEN T. 1925. “Economic Theory in the Calculable Future.” *American Economic Review* 15(1): 48-55

ZUNZ O. 1990. *Making America Corporate, 1870-1920*. Chicago; London: University of Chicago press