Evolution of the Corporation in the United States: Stabilization Policies and Vested Interests

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Introduction

Law and the economy co-evolve. The use of the corporate form in the United States for organization of business, particularly manufacturing, beginning with the latter two decades of the nineteenth century was the outcome of the economic circumstances and the laws of that particular time as courts and legislatures endorsed emerging business practices. This period coincided with widening of the market as a result of the westward expansion and the development of a nationwide transportation and communication infrastructure. Corporations engaged in roundabout production for this expanded market relied on finance to manage the uncertainty of revenues and the extended time between production and sale. The consequences of the co-evolution of law, the economy and finance persist into contemporary times.

Although corporations have "persisted for millennia, with roots in the church, local government communes, and early business companies" (Davis 2016, 612), the corporate form was not widely used in the American colonies and would not become widely used in the United States until the latter decades of the nineteenth century. In one of the U.S. Supreme Court's earliest decisions relating to the corporate form, Chief Justice John Marshall stated that a corporation is "an artificial being, invisible, intangible, and existing only in contemplation of law . . . . [I]t possess only the properties which the charter of its creation confers on it" (*Trustees of Dartmouth College v. Woodward*, 17 U.S. 518, 636 (1819)). A corporation did not enjoy the protections under the Constitution

provided to persons under such provisions as the First Amendment and the Fourth Amendment regarding speech and searches. Partnerships were protected because the entity was a group of persons exposed personally to the entire liabilities of the business. The corporation would be bound to operate within the scope of its charter or risk being *ultra vires* (beyond the powers granted by the corporate charter) and subject to having such actions voided. During a period when corporate formation for business purposes occurred infrequently, the character of the corporation as an artificial entity would have little consequence beyond the doctrine of *ultra vires*. This was the corporation as a "franchise-to-be" in the terms of John R. Commons, before a corporation would become a going concern.

The corporate form was not *necessary* for the accumulation of capital for large-scale industrial purposes. Stock issues to obtain capital for manufacturing corporations were rare until the early part of the twentieth century (Lamoreaux and Rosenthal 2005, 33). However, during the merger wave of 1895-1904 the issuance of stock by newly formed corporations or those restructured under New Jersey's liberal general incorporation statute would facilitate the process of acquiring competitors. The corporate form was not *necessary* for limited liability. Although partners in general partnerships were jointly and severally liable personally for all liabilities of the partnership, state legislatures granted limited liability to partnerships meeting certain qualifications. In 1900 more than twice as many manufacturing companies owned by more than one person were organized as partnerships than as corporations (37). Despite the alternatives available for organization of business, the corporation would become the dominant form in the twentieth century with a significant growth in its use beginning in

1880. The corporate form having been unleashed from *ultra vires* by liberal general incorporation statutes would prove to be strategic in the formation of horizontally integrated firms because it would provide liquidity to induce owners of industrial enterprises to transfer their ownership to the new, merged enterprise which used the assets and "goodwill" or expected profitability of the merged entity to issue the stock used to acquire competitors. This was the corporation as a "franchise-to-do" or a "going concern" in the terms of John R. Commons because the corporation "is animated by a common purpose, governed by common rules of its own making, and the4 collective behavior in attaining that purpose we distinguish as a 'going business'" (Commons [1924] 1995, 145)..

"Capitalistic organization of various industries, as opposed to earlier craft organizations, developed with the widening of markets, and the consequent opportunity for mass production and standardization of products" (Mitchell 1949, 72). Industrial production under capitalistic organization would still largely be by enterprises owned individually, by families or by partnerships. Mass production and standardization of products employing the new industrial technologies and the transportation network of railroads would lead to a period of cutthroat price competition and deflation in the latter half of the nineteenth century. The development and increased reliance on the corporate form during this period was more about stabilization of revenues, control over the production process, control over the advancing technology and creating liquidity than about accumulation of capital or limited liability. "At first, stabilization efforts were directed towards the control of the production processes. These efforts finally flowered into the modern holding company which brought both vertical and horizontal integration

to the basic industries of the nation. In more recent years the stabilization program has been extended from the production processes to the realm of finance and monetary arrangements" (Gruchy 1947, 197). To overcome the uncertainty of price competition and its effect on the financial interests extending credit to the corporations, the control exercised by financiers over corporations fostered restrictions on output to achieve "stabilized scarcity" (192).

Business practices directed to stabilizing revenues by restricting the capacity of the modern, mass production industrial corporation would benefit the financial interests engaged in the management of the corporation. These were the "vested interests" identified by Thorstein Veblen as those who hold "a marketable right to get something for nothing" (Veblen [1919] 1969, 100). They were vested by reason of the control which they had historically held over the assets of business and finance. They were propelled into a position of control over the productive assets of the larger industrial system because it "was being organized around a vast complex of financial interrealtions which were dominated by the investment bankers" (Gruchy 1947, 150). This separation of use values from pecuniary values was supported by a recognition of intangible assets, such as the return on investment and the "goodwill" of a business, as legally protected property which emerged from consideration by the U. S. Supreme Court about what property would be protected under the Fourteenth Amendment.

The role of finance in the merger wave of 1895-1904 was fostered by the growth of investment banks which acquired "a controlling position in the economy not only by arranging mergers but also by securing large ownership shares and seats on the boards of directors of newly combined corporations" (Whalen 2001, 812). The growth of

a stock exchange to provide those selling their companies with the means to convert their interests into cash was not the only purpose for finance in this new, concentrated industrial environment. "Extension of roundabout production made finance a more integral and important part of the economy. Thus, as the wider market was served, industry and finance expanded together" (Atkinson and Paschall 2016, 44). This co-evolution will be examined in depth below. With large corporations operating under boards of directors influenced directly by financiers, the focus of the corporation would be on producing pecuniary values – streams of revenue to service debt, cover the costs of production and insure a profit. The development of law which (1) legitimized mergers to reduce cutthroat competition, (2) protected the corporation from economic regulation by reliance on the Fourteenth Amendment and (3) vested the board of directors of a corporation with the predominant role of determining how its funds would be used, would make the corporate form the preferred form for large-scale industrial production. With the growth of corporations and the role of financial interests in the economy, this period would provide the foundation for the financialization of the US economy.

Widening of Market and the Advent of Abundance

The expansion of railroads from 23 miles of track in 1830 to almost 53,000 miles by 1870 was a primary force in widening and integrating the national market in the United States (Atkinson and Paschall 2016, 31). With the widening of the market the expansion of industrial production was required to provide the goods to serve a national market. From the scarcity of product under the handicraft production period the economy evolved to large-scale industrial production and from merchant capitalism to industrial capitalism. The age of abundance replaced the age of scarcity.

Rapid development of large-scale production relied on railroads to bring raw materials to factories and to deliver goods to customers. Cheap and widespread transportation made it possible to serve the continental market (Chandler [1965] 1988, 212). From the end of the Civil War until 1896 the economy of the United States was subject to an extended period of price deflation which was the result of mass production and standardization of products leading to abundance and price competition. Production technologies and an integrated rail transportation system gave rise to expanded production capacity and national price competition (Hake 2007, 38). "Veblen argued that the rise of the modern industrial corporation represented a unique solution to the problem of excess capacity and increased competitive pressures that were ushered in by the creation of industrial society" (37). Thus, the modern corporation was the most important organizational response to changes in business practices in the new industrial society of the 1880s (33) and that modern corporation fostered new concepts of capital (property) (43).

The new capital-intensive firms had high fixed cost to total cost ratios. Thus, such firms had the incentive during periods of cutthroat competition to expand rather than reduce production (Lamoreaux 1985, pp. 31–2). They would seek to cover the fixed cost requirements by maximizing the stream of revenue and not the profit per unit. Such a response to decreased prices could not protect the stream of revenues for all producers. Faced with price competition, the response would take the form of collusion among companies to control prices. The temptations to breach the agreements and the difficulty of enforcing such agreements made consolidation more effective than price

restraint agreements in battling ruinous price competition. The corporate form would contribute to such consolidations.

The railroads themselves were pioneers in the use of the corporate form. Railroads were also the first to face the consequences of expansion. By 1874 the overbuilding of railroads led to cutthroat rate competition (Wilson and Spencer 1950, 340-41). Railroad consolidation was the answer to bringing stability to revenues and the corporate form would facilitate mergers. Several attempts to merge corporations under the guise of long-term leases would be found to be *ultra vires* by state courts and the U.S. Supreme Court (*Camden & A. R. Co. v. May's Landing & E.C.C. R. Co.* 48 N.J.L. 530 (N.J. Supreme Court (1861)); *Pearce v. The Madison and Indianapolis Railroad Company et al.*, 62 U.S. 441 (1858); *Thomas v. Railroad Company*, 101 U.S. 71 (1879)). Later the *ultra vires* doctrine would be applied in similar fashion by state courts to prevent horizontal integration among competitors in several industries.

During most of the nineteenth century corporations were organized under special charters which were legislation specifically creating a particular corporation. While some states, such as Pennsylvania and New York, had adopted general incorporation statutes, most corporations were still formed under special charters. Even when formed under general incorporation laws, the laws themselves imposed limitations on the powers of corporations and often the general incorporation charter would place limits on the powers of the corporation. After the introduction of a liberal general incorporation statute by New Jersey which allowed the formation of corporations for broad purposes and which was quickly followed with similar laws by other states, general incorporation statutes pushed aside the *ultra vires* doctrine as a prevention for mergers.

The Sherman Act of 1890 would be adopted as a tool to resist the efforts among manufacturers to stabilize revenues through price collusion and horizontal integration. The Sherman Act made illegal any contract, combination or conspiracy in restraint of interstate commerce. Thus, the Sherman Act criminalized actions being permitted under state general incorporation statutes. However, the Supreme Court would narrowly define interstate commerce until late in the 1930s (see Atkinson and Paschall 2016, 144-154). The Supreme Court also would read into the Sherman Act the "Rule of Reason." First set forth in the dissent by Justice Edward Douglass White (later to become Chief Justice) in a case regarding an agreement among railroads to fix rates (*United States v. Trans-Missouri Freight Ass'n.*, 166 U.S. 290 (1897)), the Rule of Reason was seen as mitigating the potentially harsh effects of a law which criminalized previously permitted actions. Not unlike the accommodation between the *ultra vires* principle and the financing practices used in interstate commerce in *Bank of Augusta v. Earle*, 38 U.S. 519 (1839), the Supreme Court would soon adopt Justice White's formulation of the Rule of Reason to accommodate monopolies which promoted efficiency. It would be relied on to permit the largest merger to occur in the Unites States at the beginning of the twentieth century with the formation of the United States Steel Corporation.

Abundance and Competition

The resistance of state courts to *de facto* mergers of railroads under the *ultra vires* doctrine was extended to the formation of holding companies or "trusts" in which owners of competing businesses would exchange their interests in their businesses for shares in the trust controlling the former competing firms. In four state court

decisions between 1889 and 1892 the Sugar Trust, the Chicago Gas Trust, the Distillers' & Cattle Feeders' Trust and the Standard Oil Company Trust were dissolved by state courts as *ultra vires* acts by the corporations (*People v. North River Sugar Refining Co.*, 3 N.Y.S. 401 (Cir. Ct., N.Y. County (1889)); *People v. Chicago Gas Trust Co.*, 130 Ill. 268 (Ill. Supreme Ct. (1889)); *State v. Nebraska Distilling Co.*, 29 Neb. 700 (Neb. Supreme Court (1890)); *Ohio v. Standard Oil Co.*, 49 Ohio St. 137 (Ohio Supreme Court (1892)). A New Jersey general incorporation statute allowed such holding companies, eliminating the *ultra vires* argument for corporations organized in New Jersey. Soon thereafter the trusts disapproved by state courts were reorganized as New Jersey corporations.

The *ultra vires* doctrine, closely related to the artificial entity theory announced in the *Trustees of Dartmouth College*, would cease to be a barrier to holding companies and mergers. Instead, those who were concerned that horizontal integration of firms would mean the end of small enterprises under the control of independent craftsmen looked to federal antitrust law under the Sherman Act to deter mergers. The absolute ban which the Sherman Act imposed on agreements in restraint of trade which would have served the purpose of preventing mergers would be ameliorated under a judicial theory of reasonableness read into the Sherman Act and to become known as the Rule of Reason.

As noted above, the Rule of Reason was first articulated in a dissent by Justice Edward Douglass White in the *United States v. Trans-Missouri Freight Ass'n* decision. Likewise, Justice Oliver Wendell Holmes, Jr. in his dissent in *Northern Securities Co. v. United States*, 193 U.S. 197 (1904) would emphasize the importance of a standard of reasonableness to limit the strict liability of the Sherman Act criminalizing

all agreements in restraint of trade, including those which had been permitted under the common law prior to the Sherman Act.

While the Rule of Reason would not save the collusive rate agreement among railroads in *Trans-Missouri Freight Ass'n,* the railroad holding company in *Northern Securities* or the Standard Oil Trust in *Standard Oil Company of New Jersey et al. v. United States*, 221 U.S. 1 (1911), it would allow the consolidation of competitors into the Unites States Steel Corporation. The federal District Court hearing the case brought by the United States Justice Department under the Sherman Act stated that its standard for deciding the case was whether the consolidation of "the several defendant companies in the United States Steel Corporation 'prejudices the public interests by unduly restricting competition or unduly obstructing the course of trade'" (*United States v. U.S. Steel Corporation et al.*, 223 F. 55, 61 (Dist. Ct. D N.J. 1915)). U.S. Steel held substantial positions in markets for steel ingots (54 percent), pig iron (54.8 percent) and structural steel (33 percent) (*U. S. Steel Corporation* 223 F. at 65-7), but the court concluded that the data "show a strong trend away from any monopolistic absorption or trade-restraining control" (*U. S. Steel Corporation* 223 F. at 67). When the District Court dismissed the charges the Justice Department appealed to the Supreme Court where Justice Joseph McKenna stated that "the corporation did not achieve monopoly . . . and it is against monopoly that the statute is directed; not against an expectation of it, but against its realization, and it is certain it was not realized" (*United States v. United States Steel Corporation et al.*, 251 U.S. 417, 444 (1920). Following the lead of Justice Holmes's dissent in *Northern Securities*, the opinion noted both the impressive size of US Steel and that the Sherman Act "does not make mere size an offense . . ." (*United States*

Steel Corporation 251 U.S. at 451). Indeed the opinion proposed that "the tendency and movement to integration, the appreciation of the necessity or value of the continuity of manufacture from the ore to the finished product" favored the consolidation because these were factors of industrial progress (*United States Steel Corporation* 251 U.S. at 442).

The Rule of Reason would not grant all agreements in restraint of trade or attempts to monopolize a free pass. However, it would play a role in the analysis of many practices challenged under the Sherman Act. The Rule of Reason would be found to permit such challenged activities in *United States v. Columbia Steel Co., et al.*, 334 U.S. 495 (1948) where Columbia Steel Company and U. S. Steel Corporation sought to purchase the assets of the Consolidated Steel Corporation, *United States v. E. I. DuPont de Nemours and Co.*, 351 U.S. 377 (1956) where the E. I duPont de Nemours Company was charged with monopolizing the cellophane market, and *National Collegiate Athletic Ass'n v. Board of Regents of the University of Oklahoma*, 468 U.S. 85 (1984) where the University of Oklahoma challenged the NCAA plan for televising college football games. In these cases the Rule of Reason would permit action which might tend to monopolize an industry. While first articulated in 1897 the Rule of Reason continues to have a role in judicial analysis of Sherman Act violations.

Without effective legal resistance to mergers the period between 1895 and 1904 would see more than 1800 firms disappear into mergers (Lamoreaux 1985, 2). The single largest year for firms disappearing into mergers was 1899 when 1,208 firms disappeared and the merger capitalizations totaled $2,262,700,000 (Nelson 1959, 37). "The emergence of the merger movement [1895-1904] is so intricately interwoven with

concurrent developments in the capital markets as to prohibit simple cause and effect explanations" (89). There were three sources of supply of industrial securities during the merger wave: (1) trusts converting to corporations, (2) mergers and (3) owners of companies who wished to liquidate part or all of their interests in their businesses (Navin and Sears 1955, 116). The growth of the market for industrial securities would coincide with a period in which stock issuance would facilitate mergers and markets would provide liquidity to owners of firms disappearing into mergers.

With general incorporation statutes permitting the creation of holding companies and Sherman Act analysis which would take into consideration the potential benefits of agreements in restraint of trade and monopolization, the use of corporations to stabilize pecuniary values would continue during the merger wave of 1895-1904. The issuance of stock based on expectations of profitability of merged enterprises would provide those selling their companies to such enterprises with liquidity. The introduction of finance into this process would also support the importance of secure expectations about profitability of these enterprises. The stability of profits would be built upon horizontally integrated firms which could maintain prices in a deflationary environment. The limited legal resistance to mergers under general incorporation statutes, the Rule of Reason and the protection of the intangible property of the corporation from deprivation by states without due process of law because the corporation was a person for the purposes of the Fourteenth Amendment would shift the selection of the form of business organization to the corporation.

The financiers' interest in stabilization of revenues and profits through mergers placed finance at the center of the formation of corporations. Having invested in

a corporation, the financier expected a stable return on the investment and that expectation would suffer if revenues were depressed by price competition. Finance was necessary for corporations involved in roundabout mass production. The expectation of future returns on the funds committed to production, Commons' concept of futurity, determined how much finance would commit and required that the corporation take such steps as were required to assure that the expectations were fulfilled. If not fulfilled, finance would retract and the business would fail. Thus, financialization would become a controlling influence on the management of corporation.

Character of Corporation in Age of Abundance

In the latter part of the nineteenth century the independence of the corporation from regulation under the *ultra vires* doctrine resulting from general incorporation statutes was further increased by decisions extending the legal definition of property to intangible property and by decisions replacing the artificial character of the corporation (and the power of the incorporating state to regulate the entity's activities) with the concept of the corporation as a person within the scope of the Fourteenth Amendment's protections against deprivation of life, liberty or property without due process of law. Both of these changes in the law governing corporations were promoted by Justice Stephen J. Field appointed to the Supreme Court by President Abraham Lincoln. The Supreme Court was called upon to apply the Fourteenth Amendment, ratified July 9, 1868, to actions by states regulating business in *Slaughter-House Cases*, 83 U.S. 36 (1872) and *Munn v. Illinois*, 94 U.S. 113 (1876). In both decisions, the Supreme Court allowed the regulation and Justice Field dissented arguing that the

protections of the Fourteenth Amendment against deprivation of life, liberty and property included intangible property. The Supreme Court would adopt Field's position in *Chicago, Milwaukee & St. Paul Railway Co. v. Minnesota*, 134 U.S. 418 (1890) expanding the legal definition of property to include intangible property. Likewise, Justice Field would support the position that the corporation was a person instead of an artificial entity and, therefore, protected by the Constitution from state intervention related to regulation of intangible property - prices, wages and profits (*County of San Mateo v. Southern Pacific RR Co.*, 13 F. 722 (Cir. Ct. D. Calif. (1882)); *County of Santa Clara v. Southern Pacific RR Co.*, 18 F. 385 (Cir. Ct. D, Calif. (1883)); *County of Santa Clara v. Southern Pacific Railroad Co.*, 118 U.S. 394 (1886)). These changes in the law regarding corporations would protect the vested interests who were entitled to the return on investment from emerging business practices designed to stabilize revenues and intangible property.

It was in this context of the changing character of the corporation that Commons identified another important change in the law relating to corporations. The change he identified was one which at that time and still today is in conflict with the legal status of the corporation as a person. In *Van Allen v. The Assessors*, 70 U.S. 573 (1865) the Supreme Court determined that the ownership of the assets of the corporation was vested in the entity and was distinct from the interest of the shareholders in their proportionate share of the net profits of the corporation. In his analysis of *Van Allen* Commons noted that this distinction between the ownership of property rights in corporations marked the legal recognition of the corporation as a going concern (a collective entity separate from the individual owners) and the legal recognition that the

going concern owned a going business (Commons [1924] 1995, 174). *Van Allen* also contradicted the later enunciated concept of the corporation as purely a name under which persons held the assets of the business (the "nominalist" entity theory). Nevertheless, the nominalist entity theory came to dominate Supreme Court jurisprudence and continues to do so today.

Katsuhito Iwai offers an explanation for the distinction between the ownership of the corporation's assets and the ownership of the corporation itself. Iwai observes that "an incorporated business firm is composed legally of not one but *two* ownership relations: the shareholders own the corporation as a legal thing and the corporation as a legal person in turn owns the corporate assets. The corporation thus plays a dual role - of 'person' and 'thing' - in the legal system, and it is this person/thing duality that is, I believe, responsible for the 'endlessness' of the corporate personality controversy in the past" (Iwai 1999, 585). Iwai describes the dual ownership relation as one in which the corporation is both the object of ownership (by its shareholders) and the subject of ownership (of the corporate assets) (593). Thus, the corporation is not simply a legal "wrapper" around individuals owners who retain their rights as persons under the law. The corporation is distinctively different from its individual owners for whom it is a "thing" and the object of ownership. It has a legal identity as a "person" only because it is an entity owning property which is not also owned by the shareholders and, therefore, the subject of ownership.

This duality does not support the characterization of the corporation as strictly a nominalist entity representing the direct interests of shareholders as associations of persons as propounded by Justice Field. Like *Van Allen* it interposes the entity of the

corporation between the shareholders and the corporate assets. The actions of the corporation are legally binding upon the corporate assets and for this purpose the corporation is a "legal person". The limited liability which is conferred upon the shareholders for such actions of the corporation is the outgrowth of the object/subject distinction between the ownership of assets as was set forth in *Van Allen*. Nevertheless, recent advocates for a contractual theory of the corporation still embrace the nominalism rooted in the *Santa Clara* decision and which has been imported into current jurisprudential thinking from neoclassical economics (584-85). "In order for a corporation to serve as one of the parties of a contractual relation, it has to be recognized by others as the holder of ultimate rights over some real assets and as the bearer of the ultimate duties associated with their use, independently of its constituent members" (591). Thus, security of expectations of parties entering into transactions with corporations demands the characterization of the corporation as the owner of the assets with rights distinct from the rights of shareholders as persons (the "artificial" entity theory of Chief Justice John Marshall sometimes referred to as the "realist" theory).

The security of expectations of shareholder protection under limited liability rests upon the object/subject ownership distinction. "It would indeed be illogical to reject the legal personality of the corporation and at the same time embrace the limited liability of corporate shareholders. A corporation and its shareholders are two distinct subjects of property rights, and each owes no legal obligation to any contract the other has independently formed with a third party" (591-92). Despite the insight of the Supreme Court to the object/subject distinction in *Van Allen*, the decisions in the *Santa Clara* cases gave support to the substantive due process period of Supreme Court

jurisprudence. It was during this period beginning with the decision in *Allgeyer v. State of Louisiana*, 578 (1897) continuing through *Lochner v. People of the State of New York*, 198 U.S. 45 (1905) and ending with *West Coast Hotel Co. v. Parrish*, 300 U.S. 379 (1937) that the Supreme Court would rely on the corporation as a person under the Fourteenth Amendment and that Amendment's protections against deprivation of life, liberty or property without due process of law repeatedly to set aside state regulation of prices, rates and wages. The personhood of the corporation still distorts regulation of the corporation in such decisions as *Citizens United v. Federal Election Commission*, 588 U.S. 310 (2010).

The combination of recognition of intangible property as property protected by law and the personhood of the corporation for purposes of Constitutional protections provided the platform for legal protection favoring vested financial interests. These interests were devoted to the pecuniary value of the corporation (intangible property) and not its production of use values. Profitable inefficiency was preferable to the uncertainty of production at full capacity. Despite the duality of ownership recognized by *Van Allen* providing a distinction between the shareholders and the corporation, the Supreme Court in *Santa Clara* and subsequent decisions has settled on a nominalist theory of the corporation which integrates the interests of the shareholders, and particularly the vested interests, with the purpose of the corporation and those interests are in profits above all other purposes.

Partnerships and Corporations

Formation of corporations for business purposes in the United States would not be significant in the eighteenth century when only 355 corporations would be

chartered - many of them for municipal or charitable purposes (Friedman 1973, 166). Between 1781 and 1800 charters granted by state legislatures, and in two instances by the national government, numbered 335 (Davis [1917] 1965, 22-3). Thirty-six were for local public services (27). Two-thirds were for construction and maintenance of highways and 20% for financial institutions (24-5).

Corporations were formed with increasing frequency during the nineteenth century, although the rate would not truly accelerate until the latter two decades of that century. Nevertheless the corporation would still not be the most favored form of business organization. The first year the United States Census recorded information on organizational forms was 1900 when "67% of all manufacturing establishments owned by more than one person were partnerships (including limited partnerships) and 29% were corporations" (Lamoreaux and Rosenthal 2005, 37).

Owners of establishments organized as general partnerships were exposed to liability for the obligations of the business to the full extent of their personal assets. Despite this exposure the "partnership form of organization predominated" among manufacturing enterprises in the 1880s when the typical manufacturing company had a net worth of less than $2,000,000 (US) (Navin and Sears 1955, 109). State legislatures would permit the liability of partners to be limited to the partner's investment. In 1874 Pennsylvania led the states in limiting liability by allowing partnerships to organize as partnership associations. Pennsylvania was followed by Michigan in 1877, New Jersey in 1880 and Ohio in 1881 (Gazur and Goff 1991, 393). Thus, while the corporate form assured limited liability to owners, partners could also, under certain circumstances and in particular jurisdictions, achieve the same protection.

Andrew Carnegie would use this form of partnership association to organize and grow the steel business (Livesay 1975, 93-123) with partners such as Henry Clay Frick, Henry Phipps and George Lauder bound to the partnership under the "Iron Clad Agreement" of 1897 protecting Carnegie with his 58% interest from being pushed out (170-71). When Carnegie Steel was merged into United States Steel Corporation in 1901, while his partners took stock in the new enterprise organized by J. P. Morgan, Carnegie took his share worth approximately $225,000,000 (US) in 5% mortgage bonds (Standiford 2005, 279).

Increased use of the corporate form began in the 1880s and continued with the merger wave of 1895-1904. At the end of the nineteenth century while use of corporations for industrial enterprises was increasing, most enterprises were still family owned, whether as partnerships or corporations (Cheffins 2003, 475). Few such enterprises were listed in the stock exchanges. Table 1 shows that for such states as Massachusetts, New Jersey, Pennsylvania and Ohio the formation of corporations between 1880 and 1889 would be at a rate significantly higher than the prior 10 years period (between 128% and 439% higher). Although the rate of formation would decline for the period 1890-1899 in absolute numbers New Jersey would see 11,363 corporations formed in 1890-99. Much of this increase of 932% over 1870-79 would be related to the adoption in 1888 of New Jersey's liberal general incorporation statute which permitted corporations to organize as holding companies and under which the old "trusts" such as the Standard Oil Trust and the Sugar Trust would reorganize as New Jersey corporations.

Table 1

Incorporation By States

State	1870-1879	1880-1889	1890-1899
Massachusetts	693	1,539	2,335
New Jersey	1,101	3,859	11,363
Ohio	3,048	6,945	8,059
Pennsylvania	757	4,082	6,000

Source: Susan B. Carter, *et al.* (eds.), *Historical Statistics of the United States*, Vol. 3, Part C, Chap. Ch, New York: Cambridge University Press, 2006.

Separation of Ownership and Management

Prior to the Civil War corporate ownership of manufacturing firms was limited to textiles, and these tended to be held by a close-knit group of people who were familiar with each other. There were no organized stock exchange markets to support wider distribution of securities. Coal mining was the other industry in the pre- Civil War period to be organized by corporations (Berle and Means [1932] 1967, 13; Navin and Sears 1955, 106).

Production in pre-war America was by hand tools in local craft shops to serve local markets. The creation of intercontinental railroads supported the transition from local craft production to industrial production organized in factories for the emerging regional and national markets. Both railroads and the accompanying mass production required a movement from proprietorships and partnerships to corporate ownership to serve the widening markets. Corporate finance was slow to develop to support the spread of stock ownership for the nascent industrial firms. Railroads were large and well known whose securities were traded on organized stock exchanges. In contrast, as late as 1880s "industrials though numerous were small, scattered, closely

owned, and commonly regarded as unstable" (Navin and Sears 1955, 106). A listing of a Dow Jones industrial stock average was not started until the mid-nineties (106).

This began to change in the 1890s with industrial consolidation and the concentration of economic power (Berle and Means [1932] 1967, 18-46; Navin and Sears 1955, 116). The business organizations used in craft firms were not sufficient to manage mass production technology. Trusts were formed to centralize administration of a number of scattered plants. The concentration of economic power began with converting trusts along corporate lines and mergers imitating trusts but along corporate lines (Navin and Sears 1955, 116). With the Supreme Court's adoption of the Rule of Reason the Sherman Act of 1890 came to be aimed at combinations in restraint of trade, and not bigness (Atkinson and Paschall 2016, 45-46). This evolution set the platform for the industrial securities we know today.

A consequence of this financial innovation of industrial securities markets, which supported industrial technology, was the dispersion of stock ownership. Berle and Means concluded that "… parallel with the growth in the size of the industrial unit has come a dispersion of its ownership such that an important part of the wealth of individuals consists of interests in great enterprises of which no individual owns a major part" (Berle and Means [1932] 1967, 64). The result was the creation of a large population of passive owners who have no voice in the control of production by the property they own.

Merger waves played a role in the spread of stock ownership. The growth of stock ownership was also stimulated by owners of smaller companies involved in

mergers who wanted to unload part of their equity for more liquid assets (Navin and Sears 1955, 116). Merger waves encouraged people to sell their ownership in their family businesses and rich non-industrialists put their investible funds into industrial securities. They expected that the reduction of price competition due to economic concentration and the ability to capitalize intangible property in the form of goodwill would enhance their future earnings and they would enjoy immediate liquidity compared to having their wealth tied up in illiquid, tangible property of a family business.

The co-evolution of financial innovation and industrial technology enabled the development of oligopolistic industries dominated by a few large firms. Competition is no longer price competition among many firms. Joseph Schumpeter reached the same conclusion. It is not price competition described in textbooks, "...but the competition for the new commodity, the new technology, the new source of supply, the new type of organization (the largest-scale unit of control for instance)- competition which commands a decisive cost advantage and which strikes not at the margins of profits and outputs of existing firms but at their foundations and their very lives" (Schumpeter [1942] 1950, 84). The creation of huge firms operating in oligopolistic industries owned by passive shareholders allowed management to usurp control.

In these enterprises with stabilized revenues, the shareholders could earn returns above those in competitive industries and the resulting financial assets are liquid. Furthermore, the owners enjoy their income without exerting effort in production. Passive shareholders enabled boards of directors and managers to control the operations. A basic concept of private enterprise was that owners controlled their property. This unity has been destroyed in the modern corporation. "The recognition that industry has

become dominated by these economic autocrats (directors and managers) must bring with it a realization of the hollowness of the familiar statement that economic enterprise in America is a matter of individual initiative"(Berle and Means [1932] 1967, 116). Ownership was divorced from control and the separation was supported by law.

By July 31, 1916 Ford Motor Company had accumulated assets worth $132,000,000 with $52,000,000 of that in cash. John and Horace Dodge held significant amounts of Ford Motor Company stock despite the fact that by this time they had begun to produce their own automobiles. They were not members of the Board of Directors of Ford Motor Company. Henry Ford with the unanimous support of the Board of Directors planned to reduce the price of Ford cars, invest in increased production capacity and to invest in the operation of iron smelters for the production of automobile parts. Henry Ford also declared on behalf of the Board of Directors that there would henceforth be dividends in an amount of no more than 5% per month based on the capital stock of $2,000,000 because investors had already through sizeable dividends recaptured the value of their initial investments (*Dodge et al. v. Ford Motor Co. et al.*, 204 Mich. 459, 465-69 (1919))..

The Dodge brothers asked the Circuit Court of Wayne County, Michigan to enjoin Ford Motor Company from proceeding on the announced plan (including the investment in iron smelters), to require a special distribution of 75% of the accumulated cash and further to require the Company to distribute future earnings as dividends except such amounts as were reasonably required for conduct of the business (*Dodge*, 204 Mich. at 474). The Circuit Court ordered the payment of a dividend of one-half of the

accumulated cash and enjoined the Company from investing in iron smelters (*Dodge*, 204 Mich. at 486-88).

When asked to review the Circuit Court's decision, the Michigan Supreme Court examined the responsibilities of the Board of Directors of a corporation. "The purpose of any organization under the law is earnings – profit. Undistributed profits belong to the corporation, and . . . may be lawfully employed as capital" (*Dodge*, 204 Mich. at 497). Henry Ford had announced the policy of limiting the dividend at the same time he expressed his intentions to improve the conditions of employees and to employ more people (*Dodge*, 204 Mich. at 468). Although the Michigan Supreme Court considered those intentions to be inconsistent with the stated purpose of a corporation to generate a profit, it would not summarily supersede the authority of the Board of Directors. The directors of a corporation have the power to declare a divided and to determine its amount. A court would not interfere with that exercise of discretion "unless they [the directors] are guilty of a willful abuse of their discretionary powers, or of bad faith or of a neglect of duty" (*Dodge*, 204 Mich. at 500). Nevertheless, under the circumstances of this case given the stated intentions of Henry Ford regarding employees, the court concluded that the directors were not acting in the best interests of the corporation and affirmed the lower court's order to pay a special dividend of one-half of the accumulated cash surplus. The court reversed the lower court's injunction regarding iron smelters as beyond the authority of a court and an interference with the discretion of the directors in managing the corporation (*Dodge*, 204 Mich. at 510)..

The Michigan Supreme Court explained its decision by reference to one of its earlier decisions.

> It is a well-recognized principle of law that the directors of a corporation, and they alone, have the power to declare a dividend of the earnings of a corporation, and to determine its amount [citations omitted]. Courts of equity will not interfere in the management of the directors unless it is clearly made to appear that they are guilty of fraud or misappropriation of the corporate funds, or refuse to declare a dividend when the corporation has a surplus of net profits which it can, without detriment to its business, divide among its stockholders, and when a refusal to do so would amount to such an abuse of discretion as would constitute a fraud, or breach of that good faith which they are bound to exercise towards the stockholders" (*Hunter v. Roberts Throp and Co.*, 83 Mich. 63, 71 (1890)) *cited in* (*Dodge*, 204 Mich. at 500).

Only under the most extreme circumstances would a court find reason to interfere with the board of directors of a corporation in the management of the business or the declaring of a dividend.

The decision in *Dodge* has been described as an enshrinement of the principle "that companies had a legal obligation to maximize profits for shareholders, and their interests trumped those of anyone else" (Foroohar 2016, 71). The case also has been the subject of classes in schools of business and of law as legal authority for profit being the most important, if not the only, purpose for organization of business under the corporate form (Stout 2008). Examining the particular facts in *Dodge* and the court decisions relying on it as precedent, the decision really stands for the position that the directors of a corporation are responsible for management and have broad discretion in the use of the financial resources and profits, whether for reinvestment, reserves or dividends. Their decisions are only subject to challenge when the directors are involved in fraud, breach of good faith or misappropriation of funds. In other words, *Dodge* stands for the principle announced by Berle and Means that ownership of a corporation is separated from its management.

Dodge is binding precedent only in Michigan and may be considered merely as persuasive authority in courts of other states. Sixty-two decisions have cited to the opinion in *Dodge*. Twenty-four of those were Michigan decisions. Twenty-four were decisions in courts of other states. Twelve were tax cases related to the extraordinary dividend awarded to the stockholders in *Dodge*. Two were decisions by the U.S. Supreme Court which did not pertain to the payment of dividends. For the 24 decisions in other states, most declined to find the decisions by a board of directors to violate the broad discretion granted to them. In 1991 the Court of Chancery for New Castle County, Delaware reviewed the claim of minority stockholders that the board of directors of E.C. Barton & Company, an employee-owned company with employees holding the majority interest, had distributed profits through employee benefits instead of dividends thereby providing a benefit to employee stockholders but not to other stockholders (*Blackwell et al. v. Nixon et al.*, 17 Del.J.Corp.L. 1083 (1991)). Noting the prospect for application of *Dodge*, the court found no basis for such and stated that "[f]ew, if any, cases have involved a set of facts egregious enough to meet that standard" (*Blackwell*, 17 Del.J.Corp.L. at 1090). Case law applying the standard in *Dodge* does not hold it forth as precedent for the purpose of the corporation to be the maximization of stockholder wealth or for the right of stockholders to dividends. The decision in *Dodge* and its subsequent citation in other cases clearly identifies that decision as an undesirable interference with the otherwise broad discretion of the directors to manage the corporation and is to be undertaken only under extraordinary circumstances.

Financialization

Endorsements by courts and legislatures of business practices to stabilize revenues and protect the vested interests had consequences for the co-evolution of industry and finance and institutional economists were pioneers in examining this evolutionary process (Atkinson and Whalen 2011, 58-65). They did this in the context of the shift in the legal definition of property from tangible to intangible property (Commons 1909; 1934, Mitchell 1927, Veblen 1904). The value of tangible property rests on the cost of the physical structure, whereas intangible value is determined by the *expected* future exchange value of the going concern. The legal shift came in 1890 regarding the state of Minnesota's regulation of railroad rates when the Supreme Court ruled that rate regulation could lead to the taking of the exchange value of the company even though their tangible property would not be affected (*Chicago, Milwaukee & St. Paul Railway Co. v. Minnesota*, 134 U.S. 418 (1890)).

As noted above in the discussion of the widening of markets, and the spread of the corporate form of business, railroads were the primary force which created the national market that was possible with mass production technology. Our point here is to show how these interacting developments were early steps in the financializaion of the economy.

Factories, which were required for mass production to serve the wider markets needed expensive equipment which created the need for accommodative financial institutions (Atkinson and Whalen 2011, 60). In addition to equipment, inventories had to be financed that were also not required in the craft economy. Producing in the wider market extended the time between the initiation of production and

the receipt of income; thus equipment and inventories were only a part of the extra expense of roundabout production. As Wesley Mitchell expressed it, "(t)he hazards to be assumed grow greater with the extent of the market and with the time which elapses between the initiation and fruition of the enterprise. But the progress of industrial technology is steadily widening markets, and requiring heavier investments of capital for future production" (Mitchell [1927] 1949, 173). Mitchell goes on the say that this brought financiers into decision making about industrial projects for which they were not well-fit. Mitchell built his empirical study of business cycles on Thorstein Veblen's concept of the credit economy. Veblen contrasted the credit economy of the "… then-modern capitalism with the 'money economy' associated with the handicraft stage" (Jo and Henry 2015, 26). This was the early stage of the co-evolution of industry and finance.

Railroads were one of the earliest industries to adopt the corporate form of ownership in order to raise large amounts of financial capital and to manage their far-flung operations. However, the railroad chiefs themselves quickly turned to finance rather than operating the tangible property. "They (corporate directors) were coming more and more in their fiscal transactions to deal in stocks and bonds, in rights to property rather than in physical property itself" (Cochran and Miller 1942, 151) This focus on finance was one of the consequences of the emergence of intangible property.

Adolf A. Berle and Gardiner C. Means' classic book, *The Modern Corporation and Private Property,* deepened the understanding of the evolution of the corporation and property. As corporations grew in size and spread to many industries, stock ownership became widespread to the point that few shareholders had any power

over the management decisions of the firms they owned (Berle and Means [1932] 1967, 64). The shareholders were only interested in earnings and liquidity. In his 1967 Preface to the revised edition, Berle observed "...that stock markets are no longer places of 'investment' as that word is used by classical economists. Save to a minimal degree, they no longer allocate capital. They are mechanisms for liquidity" (xxi). Mature corporations do not rely on investors to supply capital. In an economy of administered prices corporations set prices high enough to finance the production capital of the going concern. They tap individual investors for a little less than 20 percent of their capital through the issuance of bonds to institutions such as life insurance companies, trust funds, pension trusts and savings banks (xv). More recently we have experienced the growth of such institutions as mutual funds.

Hyman Minsky has provided a useful schema of the co-evolution of industry and finance (Minsky 1992, 107 – 113). He began with commercial capitalism which preceded the industrial revolution. Commodities were produced by craft workers using hand tools that they often owned. Financial arrangements were needed to ship these commodities to distant markets where personal relationships did not exist between sellers and buyers as transportation infrastructure was improved domestically and internationally. Banks issued bills of exchange to guarantee that the bank would pay the shipper in case the receiver did not. "Commercial capitalism was based on the knowledge of home bankers about local merchants and distant bankers" (108). During the commercial capitalism period the primary role of bankers was to finance inventories rather than durable capital assets that would arise during the next phase of the co-

evolution of industry and finance. These financial arrangements were a consequence of the widening of markets.

During the industrial revolution machinery reduced the role of skilled labor, and that machinery was a high fixed cost that had to be financed. In addition, time between cost commitment and receipt of income from sales was lengthened, which also had to be financed. Commodities could be produced in greater volume and more quickly, and this added to the need for inventory financing. Minsky called this the period of Financial Capitalism. He stated that "... commercial banks were not the main conduit for funds to corporations to finance positions in expensive capital assets that made the industrial revolution possible" (108). However, we should remember that this was before the adoption of the Glass – Steagall Act of 1933, which separated the investment and commercial functions of banks.

This transition from craft production to factory production corresponds to the shift from the "age of scarcity" to the "age of abundance" according to John R. Commons (Commons [1934] 1961, 773). Minsky pointed out that "(n)ineteenth century bankers discovered that when production involved expensive capital assets, excess capacity and strong competition among producers led to prices that did not generate sufficient cash flow to fulfil commitments on debts (Minsky 1992, 109). When bankers and financiers, such as J. P. Morgan, discovered that the increased production was only sustainable if entry into industries could be limited they worked with and encouraged industries to form trusts, cartels and monopolies to reduce cutthroat competition. As we discussed earlier, this is when the Supreme Court adopted the Rule of Reason which in many anti-trust decisions meant that if the concentration within an industry could

stabilize the revenues and show gains in efficiency and use of resources then concentration was not a violation of anti-trust laws (Atkinson and Paschall 2016, 127). Commons made a similar argument when he said that abundance requires actions for stabilizing the economy (Commons [1934] 1961, 773-789). However, such private actions were insufficient to prevent the Great Depression.

To conclude this discussion of finance capitalism, we can see how the evolution in tools of production required an evolution in finance. Moreover, we see how finance came to take on a bigger role as roundabout production and expensive machinery which elevated fixed costs as a proportion of total costs were required to serve the wider market. In order to satisfy debt obligations caused by these additional costs, purely competitive markets would lead to disastrous economic instability.

The next phase in the co-evolution of industry and finance is managerial capitalism. Government became a much larger part of the economy during the New Deal and the Second World War and this continued in the post-war period. The Federal Reserve System (FED) became passive and kept interest rates low in order to support the Treasury's need to issue bonds during both economic emergencies. Deficits rose during the Great Depression mainly because of declining tax revenues rather than a positive fiscal policy. Expenditures obviously increased during the war and Congress resisted tax increases which led to ballooning deficits. The FED's accommodation of the Treasury's needs postponed the advent of Banker Capitalism predicted by Commons. The FED became restive as evidence of inflation began because of the rising expenditures to finance the Korean conflict. The banker population supported the FED's call to tighten

monetary policy and this resulted in the Accord of 1951 between the FED and the Treasury which re-established the FED's independence (Lee 1955, 460-475).

Minsky observed that government continued to play a larger role in the economy than it had in the pre-depression years. Government debt financed the stimulation of housing construction and this generated profits for private businesses. In 1938 the Federal National Mortgage Association ("FNMA") was established by Congress to improve access to capital in the mortgage market. "The liquidity of mortgages was enhanced with the creation of government agencies (Government National Mortgage Association, Federal Home Loan Mortgage Corporation, and Federal National Mortgage Association), which were charged by Congress to foster a secondary market" (Fabozzi and Modigliani 1992, 2). The Government National Mortgage Association ("GNMA") established in 1968 began in 1970 to guarantee pools of mortgages insured or guaranteed by FHA, the Veterans Administration or the Farmers Home Administration. These pools of mortgages were the underlying assets for Mortgage Backed Securities which had a major role in the Great Recession of 2008.

The government took on other initiatives which stimulated aggregate demand. According to Minsky, "(t)he flow of profits from the deficits of government and from debt-financed housing construction meant that the internal cash flows of firms could finance their investments. Managements of established firms which had some market power that protected them from competition could be independent of their investment bankers" (Minsky 1992, 110). Randall Wray wrote that, "... for some decades after World War II 'finance capital' played an uncommonly small role" (Wray 2009, 813). This corresponds to the period that Kevin Phillips (Phillips 2002, 137) identified as the

Great Compression when wealth and income became more equally distributed across the population.

The management of these firms also continued to be independent of their passive stockholder owners. This independence enabled firms in this position to take the long view in strategy. However, the independence led to bureaucratic behavior and complacency.

Finally this independence of firms from financial markets was short-lived. The development of an array of financial innovations began in the 1960s and 1970s to circumvent the constraints imposed by New Deal policies (Wray 2009, 814). This movement ultimately led to the repeal of the Glass-Steagall Act in the 1990s. Wray (2009) described in detail how these innovations contributed to the dominance of finance and the financial fragility witnessed in the last few decades.

In addition, the prosperity created following the Great Depression led to the emergence of private pension and mutual funds. Corporations had the earnings to fund pension plans for employees and the middle class accumulated sufficient wealth to support mutual fund enterprises. The pension and mutual funds were managed by professionals who took the place of the passive shareholder. Minsky called this phase, money manager capitalism. The fund managers demanded high returns in the short run. Corporate managers had to change their focus from long term strategic policies to providing maximum quarterly returns. If not, the fund managers would move their portfolios to firms that did satisfy the portfolio managers. This caused corporate managers to be less complacent but it is doubtful if this shift led to greater economy-wide

efficiency. In any event, we see once again that finance can determine production strategy rather than just enabling production.

In fact, there is growing evidence that fund managers and corporate raiders on Wall Street are sabotaging production in order to increase stock prices. One tool which was enacted will illustrate this point. In 1982 the Reagan administration legalized stock buybacks. Before that action stock buybacks were considered unlawful market manipulation (Foroohar 2016, 125). In addition to the problem with market manipulation, stock buybacks allow firms to use financial resources that would have gone into production of goods and services to generate more financial wealth for stockholders instead. The motive for this manipulation can be traced back to the legal recognition of intangible property that introduced this section. Intangible property is valued on the expected exchange value of going concern. How long can a concern keep going if it sacrifices current and future production in order to manipulate its pecuniary value in the short run? Jo and Henry (2015) found that, " ... business enterprises are vehicles to promote the vested interests of the ruling class – in particular, absentee owners, money managers, and managerial elites" (42). Foroohar (2016) notes that "Most important, the wealth represented by buybacks stays within the financial markets and asset portfolios of the richest Americans. In other words, buybacks don't facilitate a sharing of America's broadly created business wealth: they promote a hoarding of corporate value within the financial system itself. Buybacks are in most cases the very definition of financialization" (125-126). And what is the risk to the national economy that rides on a financialized economy that has sacrificed production for pecuniary values? Jo and Henry worry, with justification that the capitalist class along with the social provisioning

institutions are at risk (Jo and Henry 2015, 42-43). This question brings to mind the dot.com bubble of the 1990s when substantial financial wealth was created briefly on promises without realized production.

Perhaps more troubling is the decimation of research to produce the next generation of goods and services. For example, Dow and DuPont chemical companies will reduce their research facilities after their merger because investors do not see a sufficient return on research and development, so these efforts are being gutted (www.chem.info/article/2016/03/how-dow-dupont-merger-will-impact-chemical-industry, accessed October 16, 2016). Using the case of Apple investors, including many hedge and private equity funds, contributed nothing to the development of the technology or productive assets used by the firm. Much of the underlying technology was financed and developed by the federal government (Foroohar 2016, 123). Equally troubling is the fact that such firms place much of their income in tax havens and avoid paying for the productive assets that were financed by taxpayers.

The passive stockholder period analyzed by Berle and Means in the financial capitalism phase has been replaced by active financial agents in the money manager capitalism phase to the detriment of industry and the general population. Keynes ([1936] 1953, 376) would be disappointed that the rentier has not been euthanized as he hoped, so they continue to manipulate the financial system to exploit the artificial scarcity value of capital. Keynes bluntly said there are no intrinsic reasons for the scarcity of capital (376). Keynes was concerned about the liquidity trap of the Great Depression era and we are experiencing a similar trap today. The effects are being hidden in the short run somewhat by the actions of firms that are using available cheap

debt to buy back their stocks, but at the cost of jeopardizing the long term health of the national economy. The Wall Street raiders and pensioners are satisfied with the performance of their portfolios as workers struggle.

It is obvious that industry and finance have co-evolved with support from the legal system, and will probably continue to do so. Thorstein Veblen observed that "business ends have taken the lead of dynastic ends of statecraft, very much in the same measure as the transition to constitutional methods has been effectively carried through. A constitutional government is a business government." (Veblen [1904] 1936, 284-5). As evolutionary economists, how can we identify the seeds of the next phase of capitalism in the current phase? Will it still be capitalism? “The capitalist process, by substituting a mere parcel of shares for the walls of and machines in a factory, takes the life out the idea of property” (Schumpeter [1942] 1950, 142). Because of this Schumpeter does not think that capitalism can survive (61). This structure of the economy would not be possible if corporations were constrained by the u*ltra vires* principle or without the legal recognition of intangible property.

Conclusion

The widening of the market and the forthcoming development of industrial enterprises to supply the market introduced a period of deflation which undermined the stability of revenues required to meet the costs of production and payment of debt. Stabilization would be achieved through consolidations and agreements in restraint of trade but such efforts were challenged by courts which found them to be *ultra vires*. The liberal general incorporation statute of New Jersey in 1888 provided a jurisdiction in

which what was not permitted under the *ultra vires* doctrine would be permitted by New Jersey law and similar statutes adopted soon thereafter by other states. By 1900 the rate of formation of corporations had increased in virtually every state by a magnitude of more than double. In New Jersey that rate was more than 900% higher than for the period 1870-1879. A merger wave commencing in 1895 would result in the formation of corporations and the disappearance of more than 1800 firms into consolidations having substantial control over the markets for their products.

The emergence of the corporate form as the preferred form of business organization for mergers would occur alongside the expanded legal definition of property to include intangible property. The use of intangible property (the expected profits) of businesses would facilitate investment bankers in forming the new large corporations and give rise to a market for industrial securities which allowed the owners of businesses to transfer their businesses to these new merged entities and to convert their business interests into cash or other industrial securities. The corporation would become the vehicle for financialization of the economy.

The formation of corporations introduced financiers into a position of significant control over the newly emerged large industrial oligopolies. That control was further established by the dispersion of stock ownership and the separation of ownership from management. The discretion exercised by boards of directors extended over the use of all the financial resources of their corporations, including those that might be paid in dividends.

The law remained a threat to the ability of the oligopolies to stabilize revenues through stabilized scarcity, placing pecuniary values ahead of use values. However, as the Sherman Act would make acts in restraint of trade or monopolizing an industry illegal, its effects would be mitigated by a Supreme Court narrowly interpreting what constituted interstate commerce and by the judicial creation of the Rule of Reason. The Rule of Reason would permit actions challenged under the Sherman Act to proceed if there were arguments that the actions would foster greater efficiency. The formation of large corporations monopolizing or significantly controlling the market in their industry could proceed and protect the financial interests underwriting their formation.

Courts in the 1890s moved toward the nominalist characterization of the corporation as an association of its shareholders and, therefore, sharing the protections of personhood of the shareholders. Shareholders were considered to own the assets of the corporation even though the entity of the corporation itself stood between the shareholders and the corporate assets. This characterization would limit the ability of states to regulate businesses during this same period of growth and market domination. By the time the substantive due process period of jurisprudence ended in 1937, these large corporations would enjoy the protection of the Commerce Clause as being engaged in interstate commerce and outside of the regulation of states even when the courts found little basis for federal regulation of such interstate commerce.

Through this co-evolution of industry and finance as endorsed by the law, financial interests were promoted by actions seen as necessary to keep a capitalistic economy functioning under the circumstances of a widening market and technologies able to produce an abundance of product. Those actions that were seen as necessary to

secure a desirable outcome for the economy would benefit the financial interests above all others. This outcome might have been foreseen and, perhaps, avoided, but having set forth on this path of financialization the economy could only be diverted with a considerable disruption for vested interests and potentially the wider economy.

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