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Risky Business: Popular Images and Reality of Capital Markets Handling Risk—From the Tulip Craze to the Decade of Greed

Christian C. Day*

Speculators are often portrayed in popular culture as predatory businesspeople. Sometimes they are seen as fools. But, the portraits are often ill-informed. This article studies speculation found in Tulip Mania and the South Sea Bubble. The article then focuses on speculation in debt from the American Revolution. The Gilded Age and railroad building are surveyed. The article concludes with the Decade of Greed, the 1980s, as envisioned in film. While popular portraits are entertaining, the historic and economic reality is much different. Speculators play an important role providing capital and liquidity, risk taking, and rationing of resources critical for market economies.

* © 2008. Associate Dean for Academic Affairs, Bond, Schoeneck & King Distinguished Professor of Law (2006-2008), Syracuse University College of Law, Associate Director, The Center on Property, Citizenship and Social Entrepreneurism (Corporate Counsel and Governance). A. B., Cornell University, 1967; J.D., New York University, 1970. My Research Assistants Meghan S. Gaffey, Syracuse University College of Law and Whitman School of Management, 2008, (J.D. and M.B.A.), Hector M. Torres, II, Syracuse University College of Law and Whitman School of Management, 2007 (J.D. and M.B.A.), John Ford, Syracuse University College of Law, 2006, Abby Landau and Mira Pashieva, Syracuse University College of Law, 2005, Michael L. Sturm, Syracuse University College of Law, 2004, Laura Accurso, Syracuse University College of Law, 2001, Kimberly Radnor Simi, Syracuse University College of Law, 2001, and Joseph B. Williams, Syracuse University College of Law, 2001, were very helpful with their comments, digests, and edits on portions of this paper. I received helpful comments on an earlier version of this piece at the 14th Conference on the Theories and Practices of Securities and Financial Markets, National Sun Yat-sen University, Kaohsiung, Taiwan, December 15-16, 2006, the International Conference on “Long-Term Perspectives on Institutions, Business and Finance: What Have We Learned from the Past?” held at the University of Antwerp, Antwerp, Belgium, October 19-20, 2006, and the 9th Annual Association for the Study of Law, Culture & the Humanities Conference, Syracuse University College of Law, Syracuse, NY on March 18, 2006. Last, but certainly not least, Dean Hannah R. Arterian, who supports and encourages my scholarship. Errors alone are mine.
I. INTRODUCTION

Speculators are often portrayed in literature, film and the media as evil businessmen who prey upon markets. Or they are portrayed as fools, who part with their money. The popular portraits accepted by the culture, while colorful, are ill-informed.¹

This article looks at the view held of speculators in early market bubbles such as Tulip Mania (1634-1637) and the South Sea Bubble (1720).² It then moves to the 1780s and early 1790s in the United States and looks at the broadsides fired by supporters of Jefferson and Madison at speculators in Revolutionary War debt. Next, the Gilded Age exemplified by Jim Fisk (the great drummer and war profiteer), Daniel

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1. George Will’s recent synopsis of Tulip Mania is the standard refrain: Tulip mania gripped Holland in the 1630s. Prices soared, speculation raged, bulbs promising especially exotic or intense colors became the objects of such frenzied bidding that some changed hands 10 times a day. Then, suddenly, the spell was broken—prices plummeted in some cases to one-hundredth of what they had been just days before. And when Reason was restored to her throne, no one could explain what all the excitement was about. George F. Will, The Last Word: Of Tulips and Fred Thompson, NEWSWEEK, June 18, 2007, at 82. Pundits provide similar misinformation about the South Sea and Mississippi Company Bubbles, the Gilded Age, and the 1980s (the Decade of Greed). Mysteriously, the Jeffersonian screed against the speculation in Continentals has dropped from the pulpits. But its view of arbitrageurs remains soundly etched in the psyche of the general public and those who should know better.

2. For an exceptional article on market speculation, regulation and gambling, see Theresa A. Gabaldon, John Law, With a Tulip, in the South Seas: Gambling and Regulation of Euphoric Market Transactions, 26 J. CORP. L. 225 (2001).
Drew (the Speculative Director), Jay Gould (the Dark Genius of Wall Street), and Commodore Vanderbilt ("the public be damned") is surveyed. The article concludes its survey with the Decade of Greed, the 1980s, as seen through "Other People's Money" and "Wall Street."

While the portraits of these culprits are vivid, and the fulminations and exhortations against speculation are entertaining, the historic and economic reality is much different. Speculators provide an important and discrete function. They provide capital and liquidity, risk taking, and rationing of resources vital for all market economies.

II. TULIP MANIA: THE DUTCH WERE NOT MAD!

The Netherlands: The World's First Modern Economy. From approximately the mid-sixteenth century until the end of the seventeenth century, the Netherlands was the strongest and most innovative economy in the West. During this period the Netherlands underwent a financial revolution creating the first modern financial system. The Dutch financial system contained all the requirements for modernity. It had an efficiently-managed public finance and debt system. Holland enjoyed sound money. It possessed a banking system and a central bank. The Netherlands had a securities market and it had corporations, such as the Vereenigde Oost-Indische Compagnie (the VOC or Dutch East India Company), the West India Company (WIC), and the Bank of Amsterdam.

Dutch wealth and economic power were founded upon shipping, trade and the related financial institutions that developed to

5. See Richard Sylla talk at Conference on Early Securities Markets, Humboldt University, Berlin, Germany, October 15-16, 2004 (notes on file with author).
6. See FIRST MODERN ECONOMY, note 4, at 131-34.
7. Shares in the VOC were first traded on the Amsterdam bourse in 1611. See JOHN MICKLETHWAIT & ADRIAN WOOLDRIDGE, THE COMPANY: A SHORT HISTORY OF A REVOLUTIONARY IDEA 20 (Modern Library 2003).
8. While the VOC and the WIC were technically not corporations, they operated as limited partnerships. Their risk-sharing structure and limited liability enabled these enterprises to undertake important economic activities. The corporate form meant businesses were capable of both more efficient borrowing and deployment of capital. The innovative financial structure and operations of the Dutch East India Company are described in Ron Harris, The Formation of the East India Company as a Deal between Entrepreneurs and Outside Investors (Sept. 2, 2004), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=567941.
accommodate the Netherlands' position as an entrepôt for Europe. By the 1550s the Dutch had employed futures in grain (before the harvest) and herring (before the fish were caught). Money made in futures was described in the following manner:

And this bargaining is most proper for such and the like commodities, the price whereof doth quickly rise and fall, and are also commodious when mans money is not so ready to buy much, and to make a great employment with little money, which happeneth upon some sudden advice many times unexpected, whereupon men are very hot either to buy or sell: which is much used in Flanders in buying of Herring, before they are caught, by "stellegelt," as they call it, that is by a summe of money agreed upon to be paid, if the partie doeth repent himselfe of the bargaine....

By the seventeenth century futures were traded in such goods as pepper, coffee, cacao, saltpeter, whale oil and whalebone. In 1609, "futures trading" emerged for shares in the Dutch East India Company where a disgruntled former owner tried to organize "bears" to drive down the price.

**Tulip Mania and the Innovative Futures Market.** Tulip Mania (1634-1637) is constantly offered as an example of a market truly gone manic.

Every time there is a bubble the whipping boys of Tulip Mania and the South Sea Bubble are trotted out by pundits who should know better. Investors in tulip bulbs are often seen as rubes that lost fortunes and destroyed the Dutch economy over wild speculation in tulip bulbs. Critics of *Tulpenwoorde* (tulip madness) claim family fortunes were lost for a single bulb. For some, it serves as a perfect model of speculative frenzies. Indeed, many commentators unwittingly report that the frenzy

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9. *First Modern Economy*, supra note 4, at 150.
11. *First Modern Economy*, supra note 4, at 150.
12. *Id.* at 151. "Bears" are speculators trying to drive prices down to make a profit. A bear goes short. He borrows against the stock at a certain price and promises to replace the stock within a period of time. If the stock is overpriced, the bear replaces the borrowed stock with the cheaper-priced shares, thereby making a profit.
14. In conventional usage, a bubble is a rise in the price of an asset that feeds on itself but is unrelated to any fundamental change in the value of the asset. Thus, an increase in the price causes further increase in price. At some point, asset holders become persuaded that the increases cannot possibly continue and begin selling, which causes others to sell even faster now that they are persuaded the bubble has burst. See Phillip Caruso & Virginia Paganelli Caruso, *Book Reviews: Great Bubbles*, 31 BUS. ECON., No. 1, 67 (2002).
produced a collapse of the economy from which it took the Dutch years to recover.\textsuperscript{15} The truth is quite different.

The high prices that rare tulips commanded in Tulip Mania—and the source of madness of the crowds in morality tales—is a common aspect of markets for newly developed varieties of prized goods.

A standard pricing pattern arises for new varieties of flowers, even in modern markets. When a particularly prized variety is developed, its original bulb sells for a high price. As bulbs accumulate, the variety’s price falls rapidly; after less than 30 years, the bulbs sell at their reproduction cost.\textsuperscript{16}

Even today, rare bulbs can command high prices.\textsuperscript{17}

Little economic dislocation resulted from tulip speculation.\textsuperscript{18} The surviving morality tales\textsuperscript{19} stem from the Dutch government’s campaign against such speculation. The speculation in common bulbs that occurred in 1637 was aberrant. It lasted one month, occurring in the midst of an outbreak of bubonic plague. It had no lasting effects.\textsuperscript{20}

The Fascinating Tulip and Northwest Europe’s Fascination with It. The word tulip is probably derived from the Turkish tulipan, or turban.\textsuperscript{21} By the mid-sixteenth century, travelers to Turkey were fascinated with the flower and imported it to Vienna. The flower attracted notice and was soon grown in Belgium, Holland and Germany.

\textsuperscript{15} The truth is vastly different. The Dutch were “a great power inside and outside Europe for almost a century.” PAUL KENNEDY, THE RISE AND FALL OF THE GREAT POWERS: ECONOMIC CHANGE AND MILITARY CONFLICT FROM 1500 TO 2000,67 (Random House 1987). During the economic “devastation” that followed the tulip bubble collapse, the Dutch continued to field an army of 100,000 men and rostered large fleets (on a population base of 1.5 million). See Peter M. Garber, FAMOUS FIRST BUBBLES: THE FUNDAMENTALS OF EARLY MANIAS 20 (MIT Press 2000) [hereinafter FAMOUS FIRST BUBBLES]. This is no mean feat for an economy allegedly on its back because of the tulip bubble. The continued prosperity, the vibrancy of its capital markets, and Holland’s continued international importance belie any substantial effect of the speculation.

\textsuperscript{16} Peter M. Garber, Famous First Bubbles, 4 J. ECON. PERSPECTIVES 35, 38 (1990) [hereinafter Garber-1990].

\textsuperscript{17} Even though tulips have dropped from fashion, new bulbs can be quite expensive. “Information provided by officials at Bloembollencentrum in Haarlem indicates, however, that new varieties of ‘very special’ tulip bulbs currently sell for about 5,000 guilders ($2,400 at 1987 exchange rates) per kilogram. A small quantity of prototype lily bulbs recently sold for 1 million guilders ($480,000 at 1987 exchange rates).” Peter M. Garber, Tulipmania, 97 J. POL. ECON. 535, 555 (1989) [hereinafter Garber-1989].

\textsuperscript{18} See FAMOUS FIRST BUBBLES, supra note 15, at 23.

\textsuperscript{19} See infra notes 61-85 and accompanying text.

\textsuperscript{20} Save for the plethora of misinformation about its “devastating” bubble that continues to this day.

\textsuperscript{21} See EDWARD CHANCELLOR, DEVIL TAKE THE HINDMOST: A HISTORY OF FINANCIAL SPECULATION (Farrar Straus Giroux 1999) [hereinafter DEVIL TAKE THE HINDMOST].
The tulip was new and valuable as the rising middle class 22 and aristocracy decorated their ladies with exotic flowers, including tulips. Cultivated tulips sometimes produce "striking mutations" caused by a virus. These mutations produce extraordinarily beautiful and rare flowers.

[T]he flower itself had a unique trick which added dangerously to its other attracts. It could change colour, seemingly at will. A plain-coloured flower such as Councillor Herwart's red tulip, might emerge the following spring in a completely different guise, the petals feathered and flamed in intricate patterns of white and deep red. Seventeenth-century tulip lovers could not know that these 'breaks' were caused by a virus which was spread by aphids for the research that provided the answer to a mystery that had intrigued and ensnared tulip growers for centuries was only carried out in the late 1920s. 23

Growers would seek such mutations, called "breaks." The new bloom, rectified, would be in great demand. The rarest specimens could command great prices.

The virus was the joker in the tulip bed. Since its cause was for so long not known, its effects could not be controlled. Fortunately, once a bulb had broken, it remained broken and the offsets produced by the bulb carried the same characteristics. But the virus had the effect of weakening the tulip, so offsets were not produced so freely and vigorously as might be the case with a virus-free bulb. Consequently, fine broken varieties such as 'Semper Augustus' were slow to increase and that in turn increased their value. 24

Tulips Futures Develop. By the 1620s the tulip had become the flower of fashion. 25 A futures market for tulips gradually emerged for professional horticulturists and speculators. 26 Buying in the winter for future delivery came into practice around 1634, that is, contracts for future delivery were made during the fall and winter. Like present day futures markets, these options, or futures, only required a small percentage of the purchase price for the option. However, as will be seen, there were substantial and consequential differences between the tulips futures market and modern day futures markets.

23. Id. at 7-9; see also Famous First Bubbles, supra note 15, at 39-42.
25. See id. at 137-45.
26. Other parties were often involved. "Shortage of available land was a constant problem for growers. Contracts drawn up between buyers and sellers at the height of Dutch tulipmania show that bulbs were often grown on plots belonging to a third party, who doubtless took a cut from the proceeds of any sale." Id. at 151.
The tulip market extended to the “future” sale for full bulbs. Horticulturists and speculators alike sought bulbs that contained the mosaic virus that produced fantastic “breaks.” The high price for tulips was for particularly beautiful broken bulbs. Single colored breeder bulbs, except for their potential as “breaks,” were not highly valued. Breaking was unpredictable and growers’ pursuit of breaking bulbs could be characterized as a calculated gamble.27

As tulips became more popular, futures markets developed for rare tulips, with considerable speculation, and modest future markets for common tulips. The Dutch were shrewd business people—they grew their tulip market fast, but not too fast. This method both popularized the wonderful flower and maintained high demand. Very early, the Dutch commodified the tulip trade by selling bulbs by weight. The standard of measure was the azen. Twenty-one azens equaled one gram. “The weight was important, for the larger the bulb, the more likely to flower and to produce the precious offset, the daughter bulb.”28 “Once the concept of the azen had taken hold, these azens could be traded on their own account, without the bulbs actually changing hands at all. The azens took on a ‘futures’ life of their own and the tulip itself. . . . ‘became an abstraction, a name, a symbol interchangeable with a certain amount of money.’”29 Demand for rare and common bulbs peaked in late winter, just before the delivery of the bulbs.30

Premiums for extremely rare breaks did not last long. Horticulturists bred them to reap profits. This breeding spread the variety and made it more accessible and common. Some of the rare tulips mutated rapidly into a more common form, reducing the value of those bulbs but also heightening the speculation for rare and productive bulbs. New rare varieties depressed the prices for older varieties. As the prices dropped, tulip production spread.31

27. Because the cause of the “breaks” was not discovered until the late 1920s, horticulturists, growers and florists were required to speculate on which bulbs would “break.” Thus, these futures were somewhat riskier than futures in herring or grain. The issue with herring and grain was quantity and quality, determined by weather, and sometimes, naval interdiction by rival commercial powers. With tulips it was different because as talented as the Dutch growers and horticulturists were, they lacked scientific precision in determining which bulbs would produce the critical “daughters” and what splendor those “daughters” would take. See id. at 7-9.

28. Id. at 7 n.1.

29. Id. at 7, citing ZBIGNIEW HERBERT, STILL LIFE WITH A BRIDLE (1991).

30. This peak in demand is to be expected in an agricultural market. Prices typically peak when the commodity is in short supply and its quality is unknown.

31. This expansion in production would seem to lower the cost of production and returns to investors. However, the Dutch were careful in husbanding the growth of their luxury goods by seeking spectacular varieties for the wealthy. The growers also increased the production of common tulips production to sell to the rising middle class.
The successful development of the Dutch economy in the seventeenth century required striking a balance between "safe" investments and "speculations" or "unsafe" investments. The oligarchy and magistrates recognized that some speculations needed to be tolerated because growth depended on undertaking new and risky ventures. Safe investments were activities with extensive public regulation like marine insurance, the Wisselbank (a note-issuing bank) and Baltic trade, which the Dutch monopolized. 32

Riskier, but critical activities, included investment in the Dutch East India Company and the West India Company. 33 Risky and suspect investments included "windhandel" or "trading in the wind" (trading shares investors do not possess—think stock options). Such investments were banned by an edict in 1610. 34

The tulip futures market lacked some of the features of modern futures markets. Sales for future delivery were permitted for those investors who actually owned shares. We can see that futures for bulbs would violate the edict of 1610 because most of the speculators would not own the bulbs they were trading. 35 While futures for hedging were permitted, the authorities decried future trading as immoral gambling and edicts precluded civil enforcement of these contracts. 36 An edict banning risky investments was extended when the war with Spain renewed in 1630, and again in 1636. 37

Futures traders were not prosecuted. However, legal enforcement of the contracts was refused. The process—"an appeal to Frederick" (or to the Prince)—permitted the buyer of a futures contract to renege with the backing of the courts. Nevertheless, future trading and selling short were tolerated and thrived with private enforcement. Repudiation might result in the trader being excluded from the bourse. Reputation and the desire for profits from future trading persuaded most traders to honor their contracts. Only when traders faced bankruptcy did they choose to dishonor the contracts. 38

32. See FAMOUS FIRST BUBBLES, supra note 15, at 33.
33. See id. at 33-34.
34. See id. at 34.
35. Many of the tavern-formed tulip contracts were "naked options." Naked options are the riskiest form of options because the writer of the option must go into the market to procure the shares or commodity to fulfill the contract. In a rising market, writers of "puts" will be squeezed as they scamper to cover the contract at settlement. For more on options, see ROBERT W. HAMILTON, MONEY MANAGEMENT FOR LAWYERS AND CLIENTS: ESSENTIAL CONCEPTS AND APPLICATIONS 438-42 (Little, Brown & Co. 1993).
36. See FAMOUS FIRST BUBBLES, supra note 15, at 34.
37. See id.
38. See id. at 34-35. A number of the non-professionals who entered the game may have lost money or even gone bankrupt because they borrowed money to enter the market initially or during their trades. Under these circumstances, the debt would still be due
Thus, while futures trading in tulips and other commodities was frowned upon by the magistrates and authorities, it thrived. Even though such trading was banned by the edicts and unenforceable in the courts, by the mid-1630s the Dutch had created a developed and sophisticated futures market for tulips. It was soundly financed and relied principally upon moral suasion and reputation for enforcement.

The Tulip Mania. By 1634 the market for tulip bulbs included both professional florists and growers as well as speculators. During the next two years an informal futures market had also developed. Amid an outbreak of Bubonic Plague in the summer of 1636, traders met in groups called "colleges" in taverns. Buyers were required to pay 1/20 guilder per contract with a maximum of 3 guilders for each deal, or "wine money," a modest amount. Margins were not required for either party. Typical buyers did not possess the cash until closing. Sellers did not possess the bulbs. Neither party expected delivery on settlement. Payment of the amount between the contract price and settlement price was required. Contracts were not re-priced according to market fluctuations, there were no margin requirements to prompt compliance, and commitments were to individuals rather than an exchange. In modern practice:

even though the contract they were funding was unenforceable. These speculators were still liable for the funds advanced, but not legally liable to close on the future contract!

39. See id. at 44. For a description of the trading in the tavern groups called colleges, see id. at 44-45. Schama also describes the tavern trading:

There were three methods of buying, the simplest through Dutch auction, at which the seller began with a high price and reduced it until a bid was offered. The more common method of dealing, though, was either "through the plates" or "through the nought." In the former, wooden discs with value units inscribed on them were circulated, those receiving them having to make a bid. Sellers were forbidden to offer their own goods directly but to intimate in some strangely roundabout way [that] they would sell for a price that had been offered. When some sort of convergence was noted, the two parties and proxies haggled together privately, marking their agreed price with chalk marks on the discs. If the deal went through, the marks remained; if not, they were wiped off by one party or the other. Whoever withdrew paid a small fee to the other as compensation. "In the nought" had the seller draw a design on a slate and place a sum of money in it to act as a premium incentive to whoever bided highest at auction.

Simon Schama, The Embarrassment of Riches: An Interpretation of Dutch Culture in the Golden Age 359-60 (Knopf 1987) [hereinafter Embarrassment of Riches].

40. See Famous First Bubbles, supra note 15, at 45 (stating that the margin requirement protects the futures market by ensuring that the players are capable of settling on the contracts. A defect of the tulip market was the lack of such a requirement. Hence, unschooled, amateurs freely entered and distorted the market during the height of Tulip Mania because they had so little at risk.).

41. See id. at 44-45.
The futures exchange has a clearing association that serves as guarantor of all futures contracts and reduces the default risk significantly. At the end of every business day the futures' clearing association interposes itself between the two parties to a futures contract, assuming the opposite side of each transaction. The clearing association also serves as a guarantor of every futures contract.42

These protections were absent from the Dutch tulip market and this undoubtedly contributed to that market's turbulence.

Settlement price was "determined by that at which most bargains were made," undoubtedly at the expiration date of the contract (which is the modern practice).43 In the event of a market collapse gross rather than net positions would have to be unraveled.44 We can readily see that the primitive character of the legal and accounting conventions would make any collapse a mess to correct.

Professor Peter Garber speculates that an exogenous event—the Bubonic Plague outbreak—prompted the Tulip Mania and brought common, unsophisticated investors into the futures market.45 From 1635-1637 the plague devastated the Netherlands.46 Over 17,000 people were killed in Amsterdam in 1636 (1/7 of the population).47 Leiden lost over 14,000 (1/3 of its 1622 population).48 The Dutch faced a heightened probability of death by plague and imminent invasion by Spain during 1635-1637, when Tulip Mania was at its peak.49

The rumors of war and the hideous plague caused a gambling outbreak. Gamblers, with death at the door, had nothing to lose by speculating in tulips. Because of the legal prohibitions, the contracts remained unenforceable. If the gamblers "won," they would receive a windfall. If they lost, the gamblers could ignore the contract because they did not have to fear being excluded from the bourse. These Dutch, under perceived death sentences, could "bet the house" without recourse or remorse. These wild gambles had no structural connection to the underlying futures market in tulips. But their bets caused temporary

43. FAMOUS FIRST BUBBLES, supra note 15, at 46 (quoting JOHANN BECKMANN, HISTORY OF INVENTIONS, DISCOVERIES, AND ORIGINS (Harry G. Bohn, 4th ed. 1826)).
44. Id. at 45.
45. Id. at 37-38; see also THE TULIP, supra note 22, at 159 (speculating that the plague caused a shortage of labor, "perhaps improving wages so dramatically, that for the first time in their lives, bricklayers, carpenters, woodcutters and plumbers had money to lose").
46. See FAMOUS FIRST BUBBLES, supra note 15, at 37.
47. See id.
48. See id.
49. See id. at 38.
gyrations and dislocations that led to increased regulation and moral disapprobation.

Serious and substantial tulip traders were not affected by the new speculative markets taking place in taverns.\textsuperscript{50} Major traders possessed substantial capital and enjoyed access to the capital markets. Short sales would also have required substantial capital and sound credit.\textsuperscript{51} The astonishingly high prices centered on the rare bulbs during the majority of the tulip speculation.\textsuperscript{52}

Tulip prices collapsed in February of 1637.\textsuperscript{53} There was a general suspension of settlements for contracts coming due.\textsuperscript{54} Florists proposed that contracts before November 30, 1636, should be executed and honored.\textsuperscript{55} Later contracts would give the buyer the right to reject the contract on payment by the buyer of 10\% of the sales price.\textsuperscript{56} The Dutch authorities rejected the proposal.\textsuperscript{57} In April, Holland suspended all contracts giving the seller the right to sell at market prices during the suspension.\textsuperscript{58} Thus, growers were released to market the bulbs in June.\textsuperscript{59} Other avenues of settlement followed. For example, Haarlem permitted buyers to avoid the contract upon payment of 3.5\% percent of the contract price.\textsuperscript{60}

The courts did not uphold the contracts, but local settlements were agreed upon by growers and florists.\textsuperscript{61} This modest frenzy, fueled by novice speculators immune from enforcement, (but not death), died out. The tulip markets returned to normal with little lasting effect upon the vibrant commerce of the Netherlands.

The Dutch market for tulip futures arose because of a convergence of factors, including trade, increased globalization, specialization in commerce and finance, and a rising middle class and prosperous population. The Dutch futures market for tulips created wealth and supported a much-coveted product that transferred risk to willing

\textsuperscript{50} Id. at 46.
\textsuperscript{51} Id.
\textsuperscript{52} The high prices were to be expected for markets in rare bulbs. "Common bulbs became objects of speculation among the lower classes in a future market which emerged in November 1636. These markets were located in local taverns, and each sale was associated with a payment of "wine money." Garber-1990, supra note 16, at 39.
\textsuperscript{53} See FAMOUS FIRST BUBBLES, supra note 15, at 44.
\textsuperscript{54} See id. at 61.
\textsuperscript{55} See id.
\textsuperscript{56} See id.
\textsuperscript{57} See id.
\textsuperscript{58} Id.
\textsuperscript{59} Id. at 61-62.
\textsuperscript{60} Id. at 62.
\textsuperscript{61} Id.
takers—professional speculators who financed horticulturists (growers) and florists (sellers) and the horticulturalists and florists themselves.

**Contemporary Perceptions of Tulip Mania.** We have seen that speculation in tulips and tulip futures were discouraged investments because of their risk and probably because of the frivolous association with wealth and luxury. Tulip futures certainly were not as safe and respected as investments that were critical for Dutch prosperity like the India Companies, the Baltic grain trade or the North Sea fisheries. Tulips and, later, coffee appeared to be dangerous fads—financially and morally.

**Stock Markets and Speculation.** The Netherlands of Tulip Mania already had developed stock markets that were alive with speculation. The first chronicler of stock markets was Joseph Penso de la Vega, in *Confusion de Confusiones* (1688). Vega described the market as a “[G]ame [of speculation that] is an affair of fools.” He further described exchange behavior in actions that can still be found on the floors of the stock and commodity exchanges.

A member of the Exchange opens his hand and another takes it, and thus sells a number of shares at a fixed price, which is confirmed by a secret handshake. With a new handshake a further item is offered, and then follows a bid. The hands redden from the blows (I believe the shame that even the most respected people do business in such an indecent manner as with blows.) The handshakes are followed by shouting, the shouting by insults, the insults by impudence and more insults, shouting, pushes, and handshakes until the business is finished.

Vega described speculators as “[F]ull of instability, pride and foolishness. They will sell without knowing the motive; they will buy without reason.”

**Tulip Speculation.** As the Netherlands became increasingly more prosperous, dabblers entered the tulip markets. The movement was not

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63. See FAMOUS FIRST BUBBLES, supra note 15, at 33-34.
64. See generally DAVID LISS, THE COFFEE TRADER (Random House 2003).
65. DEVIL TAKE THE HINDMOST, supra note 21, at 11.
66. Id.
67. Id. at 13.
68. Id. at 13.
69. See generally DEBORAH MOGGACH, TULIP FEVER (Vintage 2000) (detailing working class laborers and small businessmen entering the risky market only under the assurance that it would go up). The author’s rendering is based upon Schama and other sources; however, her financial and legal observations are faulty as they are based on Charles Mackay’s *Extraordinary Popular Delusions and the Madness of Crowds* (1841).
unlike the upsurge of day-traders and first-time investors during the Dot-com craze of the later 1990s. "Private negotiations between individuals gave way to informal trading in rooms of inns, called Colleges. . ."\textsuperscript{70} These trades were described in a contemporary pamphlet of dialogues between a speculator, Gaergoedt (Greedy Goods) and his friend Waermondt (True-Mouth).

You must go to an Inn [says Gaergoedt]; I will name a few. I know of few or none, where there are no companies or colleges. Being there, you must ask whether there are any florists. If you then come into their room and because you are a newcomer some will squeak like a duck. Some will say, "A new whore in the brothel," and so on, but don't take any notice; that goes with it. Your name will be put down on a slate. Now the plates go round. That is, everyone who is present at this company has to give plates, beginning with the one at the top of the slate. He who holds the plate must ask for some goods. You may not put up on auction your own goods, but if you drop a hint in conversation, and somebody is interested, you are almost sure to have it bid for or to get the plates on it.\textsuperscript{71}

Speculators were certain that their gains could be spent on luxuries.\textsuperscript{72} "All grandeurs were imagined. No one knew how high he would rise in his estate."\textsuperscript{73} During the height of Tulip Mania, all bulbs, both rare and common, increased in price.\textsuperscript{74}

A contemporary pamphleteer calculated that the 2,500 guilders paid for a single bulb would have bought twenty-seven tons of wheat, fifty tons of rye, four fat oxen, eight fat pigs, twelve fat sheep, two hogsheads of wine, four tuns of beer, two tuns of butter, three tons of cheese, a bed with linen, a wardrobe of clothes, and silver beaker.\textsuperscript{75}

It is reported that speculators paid no heed to the prices as they intended to sell quickly.\textsuperscript{76} Gaergoedt urged Waermondt to invest: "[Y]ou give no money till it's summer, and then you have sold all your stuff."\textsuperscript{77} The over-heated market broke and tulip prices crashed.\textsuperscript{78} The tulip investments "[V]iolated the Calvinist work ethic."\textsuperscript{79} Waermondt has the last word on economics and morality in the \textit{Dialogues}:

\textsuperscript{70} \textit{DEVIL TAKE THE HINDMOST}, \textit{supra} note 21, at 17.
\textsuperscript{71} \textit{Id.}
\textsuperscript{72} \textit{Id.} at 18.
\textsuperscript{73} \textit{Id.} (quoting N.W. Posthumus, \textit{The Tulip Mania in Holland in the Years 1936-1937}, J. of Econ. and Bus. Hist. I 462 (1928-29)).
\textsuperscript{74} \textit{FAMOUS FIRST BUBBLES}, \textit{supra} note 16, 133-44.
\textsuperscript{75} \textit{DEVIL TAKE THE HINDMOST}, \textit{supra} note 21, at 19.
\textsuperscript{76} \textit{Id.}
\textsuperscript{77} \textit{Id.}
\textsuperscript{78} \textit{Id.}
\textsuperscript{79} \textit{Id.} at 20.
[W]hat need is there for merchants to have any style, or to risk their goods overseas, for the children to learn a trade, for peasants to sow and to work so hard on the soil, for the skipper to sail on the terrible and dangerous seas, for the soldier to risk his life for so little gain, if one can make profits of this sort?80

The Dialogues and other contemporary pamphlets sum up the popular view of Tulip Mania, that the “[B]ubble grew rapidly, delighting beholders with its reflective brilliance, but disappearing instantly. It was sustained only by air or wind, a symbolism recognized in both the seventeenth-century Dutch windhandel to describe the futures trade and in [contemporary art depicting] tulpenwoerde. . . .”81

Flora’s Chariot of Fools, the original painting by Hendrik Pot, and a popular similar print, entitled Floraes Mallewagen (Flora’s Car of Fools), portray Flora in a wind chariot (representing both a varitas allegory and a satire on the trading).82 Her associates are drinking and travelling light. One of the girls on the chariot is weighing the bulbs while the other girl releases a bird, symbolizing the loss of innocence. The sojourners are not alone. A crowd follows clamoring to be let on. Broken tulips strew the road and another chariot can be seen sinking beneath the waves.83

Thus, contemporary accounts portrayed Tulip Mania as a speculative folly that undermined the economy and morality.84 These accounts were bereft of any appreciation of the economic role of speculation and the importance of futures, even frivolous tulip futures,85 to the Dutch economy, and ultimately modern economies. Yet these images have shaped our perceptions of futures, speculative investments, and market behavior.

80. Id. at 20 (quoting N.W. Posthumus, supra note 73, at 452).
81. Id. at 21.
82. EMBARRASSMENT OF RICHES, supra note 39, at 363.
83. Id. at 363-64; see also DEVIL TAKE THE HINDMOST, supra note 21, at 21 (describing the allegory of the artwork); MARJÈT WESTERMANN, THE ART OF THE DUTCH REPUBLIC 1585-1718, at 54 (Lawrence King Publishing 1996) (Describing that the wind chariot was an actual device that took advantage of the wind’s bounty. The ingenious vehicle was invented by Simon Stevin (1548-1620), the court engineer of the Stadhouder Maurits (a Dutch hero in the long war of independence against the Spanish). Stevin was also famous for his military fortifications.).
84. See DEVIL TAKE THE HINDMOST, supra note 21, at 24 (comparing Garber’s belief that many of the accounts were government propaganda to Chancellor’s argument that they followed a conventional method of recording events and moralizing, probably containing considerable truths).
85. Tulips, once a fad and a luxury for the wealthy and nobility, of course became a leading Dutch export.
III. **THE SOUTH SEA BUBBLE (1720): MONETIZING THE NATIONAL DEBT AND CORNERING THE MARKET.**

Commonalities run throughout the history of these early market bubbles. New finance instruments were exploited: options in Holland and joint stock shares and national debt refunding in England. All of this exploitation occurred against a backdrop of developing legal and financial institutions. An understanding of these complex and sophisticated matters lagged significantly.

The Dutch had their moralists who railed through time against the ridiculous excesses of the tulip market. The South Sea Company Bubble occurred during a high point of English intellectual brilliance. Great writers and thinkers such as Daniel Defoe, Alexander Pope, Jonathan Swift—every literary light great and small—speculated. No less a luminary than Sir Isaac Newton was a speculator. Their writings and sayings preserved their pungent observations for posterity—thus shaping our opinions of the events. The South Sea Bubble also had to its credit a colorful cast of rouges such as John Blunt, Robert Knight (the cashier

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89. See id.

90. Newton initially made substantial profits and then re-invested; he lost ultimately £20,000. See JOHN CARSWELL, THE SOUTH SEA BUBBLE 108 (Sutton Publishing 2001) (1960) [hereinafter CARSWELL]. Newton confessed to not understanding the market. "When asked about the direction of the market, he is reported to have replied, 'I can calculate the motions of the heavenly bodies, but not the madness of the people.'" *Devil Take the Hindmost*, supra note 21, at 69.

91. John Blunt (1665-1733) was the son of a Rochester shoemaker who rose to become a director of the South Sea Company and a leading player in the South Sea Bubble. See generally BALEN, supra note 87, at 22-36. He began his career as a scrivener. *Id.* His work with merchants and landowners gave him insight into business dealings which he put to good use, becoming a very rich man due to his investments in real estate. *Id.* Blunt became company secretary of the Sword Blade Company, placing him in contact with several men who would become leading players in the South Sea Company. *Id.* As early as 1710 Blunt impressed Chancellor Robert Harley with his ideas on funding the national debt. *Id.* In November 1719, Blunt presented his plan to have the South Sea Company “incorporate the whole of the National Debt, including the debts owed to the Bank of England and the East India Company...” P.G.M. DICKSON, THE FINANCIAL REVOLUTION IN ENGLAND: A STUDY IN THE DEVELOPMENT OF PUBLIC CREDIT 1688-1756 95 (1967). Because of his relatively-low birth, Blunt was seen as a
who fled England to the Continent),92 members of Parliament who took bribes,93 ladies in waiting94 who invested on the basis of rumor and gossip, the King and his court who were insiders and took their profits before the bubble burst, and throngs of common investors who dabbled in the innovative joint stock companies (Bubble companies and others). Their common (mis)understanding of the Bubble still dominates our view of this scheme to refund and monetize the national debt.

The South Sea Bubble story begins in a time of great optimism and hope in England.95 England had been victorious in war.96 She was expanding her overseas empire.97 The invasion of the Old Pretender, son of James II, was defeated at Glenshiel in Scotland.98 The dangerous royal rebels were in exile in France. George I was increasingly secure on his throne. His speech that opened Parliament on November 23, 1719 was upbeat:

All Europe as well as these Kingdoms, are on the point of being delivered . . . by the influence of British arms and counsels . . . so far as Prudence can foretell the Unanimity of this Session of Parliament must establish, with the Peace of all Europe, the Glory and Trade of these Kingdoms, on a lasting foundation. I think that every Man may see the End of our Labours: all I have to ask of you is, that you will agree to be a great and flourishing People.99

The pump was primed for commercial expansion to bring even greater prosperity to the realm. The joint stock company100 and the refunding of the national debt (to create capital for investment) would

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92. See Richard Dale, The First Crash: Lessons From the South Sea Bubble 92 (2004); Famous First Bubbles, supra note 15, at 111 (stating that the Company paid £1.3 million in bribes to members of Parliament and the King’s favorites). Bribery for important projects was the coin of the realm. “Indeed, that Parliament and the government supported the refunding so enthusiastically must have served as a signal that official cooperation in South Sea’s ventures had been purchased.” Id. at 112.

93. Women invested a great deal in the market because there were no restrictions on owning shares. This was not the case in real property investments where the law of male entail held sway. See Devil Take the Hindmost, supra note 21, at 79-80.

94. See id.

95. Dickson, supra note 91, at 90.

96. Id.

97. See Devil Take the Hindmost, supra note 21, at 58.

98. See id.

99. Devil Take the Hindmost, supra note 21, at 58.

100. See Franklin Gevirtz, Global Issues in Corporate Law 3 (Thompson West 2006) (“The term joint stock comes from the fact that . . . the merchant members [in the trading companies] chipped in money to buy a common stock of goods for trade (the joint stock), instead of each merchant trading on his own company’s franchise.”).
flood England with productive enterprises and create even greater wealth and prosperity.

By 1695 there were 100 joint stock companies with £4 million in nominal capital—one ninth the estimated value of all the personal property in the realm. Good stocks and bonds were thought to be, and were, very good substitutes to land rents from agriculture. Land rents were steady and reliable. But, new investments in industry and commerce, represented by stocks and bonds, provided helpful leverage and offered the dream of great wealth.

The public was passionate about credit. New theories of public finance circulated and supported economic expansion. The law lagged far behind finance and corporate structures. Civil recovery was expensive and rarely pursued. Indeed, false pretense was not a crime until 1757. Thus, promoters and the unscrupulous could take advantage of the unwary by offering clever schemes and new ventures for making money without fear of civil or criminal retribution. Indeed, there were even substantial difficulties in collection of promissory notes! As with Holland, the law lagged behind the financial structures. In addition, anti-fraud measures and protections in the market or for face-to-face fraud were non-existent.

The Origin of the South Sea Company and the Refunding of Redeemables. In 1711, the South Sea Company was originally chartered to trade in the South Seas (the Caribbean basin) with Spanish colonies. It also enjoyed a monopoly on the slave trade to that

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101. CARSWELL, supra note 90, at 8.
102. Id.
103. Id.
104. John Law was a leading exponent of this new attitude. Law (1671-1729) was the brilliant Scot financier who crafted monetary policy centuries ahead of his time and paid the price for his innovation when the French economy imploded with the Mississippi Company Bubble (1719-1720). Law’s Mississippi System, which produced Europe’s first stock market boom, was predicated upon refunding and monetizing France’s huge public debt. For a while it appeared bound to succeed, promising to solidify France’s claim of primacy in Europe. The threat posed by Law and his economic plans spurred the English debt refunding scheme. For more on John Law, see ANTOIN E. MURPHY, JOHN LAW: ECONOMIC THEORIST AND POLICY-MAKER (1997) [hereinafter JOHN LAW] and JANET GLEESON, MILLIONAIRE: THE PHILANDERER, GAMBLER, AND DUELIST WHO INVENTED MODERN FINANCE (1999).
105. CARSWELL, supra note 90, at 11.
106. Id.
107. Id. at 15.
108. What is past is prologue. The Special Purpose Entities employed in Enron were modern innovations beyond the edge of law.
109. The company’s coat of arms displayed the motto “A Gaibus usque Auroram.” “From Cadiz [still held to be the empire’s last outpost] to the Dawn.” BALEN, supra note 87, at 31; DALE, supra note 93, at 40.
region.\textsuperscript{110} Because of war with Spain, the South Sea Company's purpose was frustrated.\textsuperscript{111} It found a new life in 1713 with its successful conversion of government short term debt to long term debt and its reduction in interest paid to the annuitants.\textsuperscript{112} Short term debt interest was reduced to five percent.\textsuperscript{113} Short term annuities at nine percent were refinanced and replaced with long term annuities at seven percent.\textsuperscript{114} This refinancing was a boon to the government and investors alike. The redemption put liquid capital into the markets when annuitants who accepted the buyouts offered by the redemption redeployed their capital.

English refunding, unlike that of the French, was limited by due process. The government could not change the terms unilaterally for the "irredeemables" (long term debt).\textsuperscript{115} But "irredeemables" could be exchanged for cash or stock with the consent of the annuitants.\textsuperscript{116} In contrast, "redeemables" were short term obligations representing lottery tickets, sailors' stubs, scrip, etc.\textsuperscript{117}

From 1713 to 1719, South Sea stock increased in value, largely due to the successful refunding and the conclusion of a peace treaty with Spain in 1719 that would open up the Caribbean. The market was also on an upswing as peace was breaking out in Europe, and new opportunities appeared to abound.\textsuperscript{118} So did new threats.\textsuperscript{119}

The John Law System for revolutionizing public finance was being implemented with apparent success in France.\textsuperscript{120} That boded ill for England, as France threatened to become the dominant financial power in Europe.\textsuperscript{121} England was greatly concerned about the juggernaut Law was designing and its effect on political power and capital markets.\textsuperscript{122} The British endeavored to counteract it with a refunding system of their own.

\begin{itemize}
\item \textsuperscript{110} See BALEN, supra note 87, at 31; DALE, supra note 93, at 40.
\item \textsuperscript{111} See BALEN, supra note 87, at 32, 34; DALE, supra note 79, at 49-50; DICKSON, supra note 91, at 93.
\item \textsuperscript{112} DICKSON, supra note 91, at 92.
\item \textsuperscript{113} \textit{id.} at 92.
\item \textsuperscript{114} \textit{id.}
\item \textsuperscript{115} DALE, supra note 93, at 73; DICKSON, supra note 91, at 92.
\item \textsuperscript{116} DICKSON, supra note 91, at 92.
\item \textsuperscript{117} See CARSWELL, supra note 90, at 86 (commenting that the common feature of redeemable debt was that it could be redeemed under Walpole's sinking fund). Sailors stubs and scrip were paper given for wages in lieu of money.
\item \textsuperscript{118} See DICKSON, supra note 91, at 94 ("A tidal wave of speculation and Company flotation, initiated in Paris, was already beginning to rise in all the commercial centres in Europe.").
\item \textsuperscript{119} See \textit{id.}
\item \textsuperscript{120} See generally JOHN LAW, supra note 104.
\item \textsuperscript{121} BALEN, supra note 87, at 66.
\item \textsuperscript{122} \textit{id.} at 66-67; DALE, supra note 93, at 73.
\end{itemize}
The South Sea Company and the Refunding of the National Debt. As fortune would have it, the Company was in search for new adventures. It did not enjoy the power or the prestige of the Bank of England nor the lucrative monopoly of the East India Company. Because the English government was alarmed by Law's success, it listened to the Company's plan to take over substantial portions of the national debt and refinance it at rates favorable to the state. The capital gains from the newest refinancing could be plowed into England capital markets, commerce, and industry—propelling England to greater heights. The Company's plan would take advantage of rising stock prices that were linked to the Law System and what would become known as the Mississippi Bubble. (These London and Paris capital markets were linked, and fund transfers influenced these bubbles.)

In 1719, John Law, the French minister of finance, had copied English lottery ticket conversions to refund part of the French debt. The Company was now prepared to copy Law. The Company struck a deal with the Treasury to exchange government debt for Company stock. Bills were introduced authorizing the South Sea Company refunding. Members of Parliament were bribed with stock and cash to pass the conversion legislation. Indeed, bribes were of massive proportions; such was the state of political affairs in the eighteenth century when bribes were common and greased the wheels for legislation, appointments, and government contracts. In addition, the Company paid a veritable King's ransom to the government for the conversion privilege. The maximum payable was £7,567,503. (This was an above-board payment that compensated the government for the right to engage in this lucrative arbitrage. In modern terms, this was a franchise fee. A modern example is land use exactions required of developers.)

Paymaster General Walpole noted, in his minutes, the scheme to aid commerce and trading by freeing up encumbrances associated with the

123. DICKSON, supra note 91, at 93-94.
124. Id. at 94.
125. See DEVIL TAKE THE HINDMOST, supra note 21, at 60-62.
126. See id.
127. CARSWELL, supra note 90, at 87.
128. DICKSON, supra note 91, at 102.
129. BALLEN, supra note 87, at 76; CARSWELL, supra note 90, at 95; DICKSON, supra note 91, at 110-12, 119.
130. BALLEN, supra note 87, at 76. Parliament required a conversion fee from the Company. The fee was set originally at £1.5 million, but eventually grew to over £7.5 million. DICKSON, supra note 91, at 97, 100. Thus, Parliament had an interest in rising Company stock prices, for the higher the stock prices, the more the state would earn from the Company's privilege of converting the national debt.
131. BALLEN, supra note 87, at 80; DICKSON, supra note 91, at 100.
Annuities were deemed by society to be less liquid than shares. Further, capital gains obtained by investors from market gains on the stock would be used in other productive capacities, increasing the economy's leverage.

The Bank of England, its predominance in the capital markets threatened, also prepared plans for tackling the conversion. This competition eventually forced the Company to promise to pay franchise fees totaling £7.5 million. This payment cut the Company's profit margins considerably. For the conversion to work, both the government and the Company required a rising stock market. The rising market increased the value of the shares as consideration for the exchange and made the exchange more lucrative for the annuitants. Indeed, profits hinged on a rising stock market.

Company stock was valued at £100 par (and the company was required by law to receive that in consideration for the shares). The general arrangement of the refunding follows: for each £100 of long term debt, the Company could issue an additional £2000 in par value shares. (These conversion ratios were based upon discounting the face amount of the annuity and the income stream to net present value. The conversion values reflected a reasonably accurate and honest estimate of the future value of the income stream.) Thus, 20 shares could be issued at par to fund the debt. The shares could be exchanged with annuitants or issued to the public. For each £100 of short term debt, par value of the Company increased by £1400, representing 14 shares. As the bubble expanded and fueled its expansion, the Company made generous loans

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132. Robert Walpole described the scheme thus:

[T]o consult the landed and trading interest of the nation, by lessening its incumbrances [sic] and public debts, and putting them in a method of being paid off in a few years; which could not have been done, unless a way had been found to make the Annuities for long terms redeemable; which had been happily effected by the South-Sea Scheme, without a breach of parliamentary faith. DICKSON, supra note 91, at 97, citing Parl. Hist. vii. 690, 20 Dec. 1720.

Sir Robert Walpole was a great man and the first modern prime minister. His long stewardship in the eighteenth century established a strong financial foundation for the British economy. For Walpole's role in the South Sea Bubble, see EDWARD PEARCE, THE GREAT MAN: SIR ROBERT WALPOLE: SCOUNDREL, GENIUS AND BRITAIN'S FIRST PRIME MINISTER 97-148 (2007).

133. BALEN, supra note 87, at 80; DALE, supra note 93, at 75.

134. BALEN, supra note 87, at 80; DALE, supra note 93, at 76. I use the convention of assessing the fee at £7.5 million for simplicity's sake.

135. See DICKSON, supra note 91, at 101.

136. Id.

137. Id.

138. BALEN, supra note 87, at 102.

139. DICKSON, supra note 91, at 104.

140. Id. at 104.
against shares to encourage the purchase of even more shares. Very high margins were permitted for subscriptions with as little as one eighth down and the balance due within several years (to be financed, the buyers hoped, by rising share prices). The diagram of the scheme is shown in Appendix 1 and in an excellent summary prepared by Professor Richard Dale.

A natural question is why annuitants would surrender a seven percent irredeemable for Company stock with a par of £100.\textsuperscript{141} This suggests the annuity would be surrendered at a discount! The reason is that annuitants were similar to present day lottery winners or tort settlement holders who desired to liquidate the income stream in exchange for a lump sum payment, in this case shares of stock. The shares could be liquidated by selling to other investors and the annuitants would possess cash. Annuitants who converted at £200 also enjoyed a gain of £100 as accounting principles calculated a capital gain as value in excess of par.\textsuperscript{142} Further, without violating accounting conventions or the law, joint stock companies could declare dividends from these "profits," which were in reality capital surplus.\textsuperscript{143} Investors bought Company stock because of these "profits."\textsuperscript{144} In a perfect world with accurate financial accounting and reporting, the profits would have come from the value of the arbitrage (the difference between what the Company paid for the debt and the income stream, as well as other Company investments). Profits also could be legitimately taken in modern terms by selling the shares for greater than the purchase price (a capital gain). Further, during the Bubble, the Company declared dividends based upon this source of capital. The dividends were large and fueled further speculation and purchases of the stock.\textsuperscript{145}

Nowadays, substantial corporate procedures must be followed to declare dividend out of capital surplus (notice to investors of the source, 

\textsuperscript{141.} In reality, shares traded in excess of par throughout the Bubble. The higher the share price (the amount for which annuitants were willing to part with for their cash stream), the greater the discount. Annuitants who traded irredeemables for Company shares hoped to profit by high share prices, not the ultimate arbitrage that was to produce a smooth flow of dividends.  

Other investors treated the high-priced stock as options and rationally walked away from further installments when the prices tumbled. \textit{See} Gary S. Shea, \textit{Financial Market Analysis Can Go Mad (in search for irrational behaviour during the South Sea Bubble)}, 60 ECON. HIST. REV. 742, 747 (2007).

\textsuperscript{142.} Modern standards require this to be treated as capital and any excess above par is treated as capital surplus. It certainly is not "gain" and can not be cashed out for dividends. Eighteenth century conventions permitted both!

\textsuperscript{143.} \textsc{Dale, supra} note 93, at 80.

\textsuperscript{144.} \textit{Id.} at 101.

\textsuperscript{145.} \textit{See Dale, supra} note 93, at 101; \textit{see} Dickson, \textit{supra} note 91, at 141.
etc.). In addition, capital surplus\textsuperscript{146} is not treated as profits or gain. Yet, such treatments were common and legal in the early capital markets. Further, as there were no standard accounting procedures or guidelines, accurate financial reports were non-existent.\textsuperscript{147}

To review, the refunding scheme came about because the government could not unilaterally abridge, or alter, the irredeemables or long term debt.\textsuperscript{148} A voluntary exchange for capital stock was called for.\textsuperscript{149} The government mandated the amount of stock the Company could issue \textit{but not} the exchange ratios.\textsuperscript{150} Indeed, the failure to establish exchange ratios permitted the rapid rise in the stock prices.\textsuperscript{151} \textit{Both the government and the Company had an interest in this structural shortcoming.} It is unclear if exchange-ratio failure came about by accident or design. Perhaps it was a “happy accident” that occurred because accounting rules and financial structures were rapidly evolving. It is unlikely that the participants engineered the defect. However, they certainly took advantage of it. The Treasury was given some latitude to repay the debt early, cancel stock, or reduce interest—so some genuine risks to investors were also present.

The refunding execution was complicated. It became more complex as the refunding continued and market interest heightened. The Company’s internal fiscal controls were not up to the sophisticated accounting demanded of it.\textsuperscript{152} The Company lacked good internal records of either the irredeemables offered or the demand for shares.\textsuperscript{153} Hence, it could not accurately price the shares. Further pricing decisions were complicated by the confusion of capital surplus with “profit.” Sound external analysis was also absent. Neither buyer nor seller could price the conversion with any degree of accuracy.

The extension of refunding to redeemables brought the Company into direct competition and conflict with the Bank of England. Instead of

\textsuperscript{146} Modern accounting and corporate finance permit corporations to transfer retained earnings (profits) to capital surplus, hence boosting the capital account on the company’s books. But that was not the practice in the eighteenth century.

\textsuperscript{147} \textit{Cf.} Dale, supra note 93, at 90. This is one of the reasons why it was so difficult to untangle these bubbles and remains so to this day.

\textsuperscript{148} \textit{See} Dickson, supra note 91, at 92.

\textsuperscript{149} Id. at 92-93.

\textsuperscript{150} Walpole wanted to lock the Company into a fixed exchange rate. \textit{See} Balen, supra note 87, at 81. Blunt successfully opposed such a condition. \textit{Id.}

\textsuperscript{151} Modern practice in corporate acquisitions is to establish exchange ratios. “Collars” protect buyers and sellers from wild market fluctuations. Some acquisition agreements provide formulas for adjustments beyond the collar. Others give the parties “walking privileges” if the market price at the time of the closing is outside the terms of the deal. These practices developed much later and were not employed in the refunding.

\textsuperscript{152} \textit{Balen, supra} note 88, at 206.

\textsuperscript{153} \textit{Id.}
RISKY BUSINESS

exchanging stock for annuities and calculating the amount left over (the profit on the arbitrage), the Company continued to offer new, highly leveraged subscriptions. Ultimately there were four subscriptions, with the Fourth Subscription asking £1000 per share! Thus the value of the stock was both devalued (because it was based on the income stream) and, paradoxically, overvalued due to all the interest in the conversion and stock prices. Exchanges took place later than contemplated and terms and conditions were altered twice. There was a “frenzied” competition for Company stock, other joint stock shares, illegitimate Bubble companies, and scrip.

The Company marketed ever more shares to take advantage of the rising prices and to fund the conversion and profits. Other companies jumped in, including notorious Bubble Companies that had no legitimate investments and were pure swindles. In this market a number of legitimate companies also were launched in insurance and banking, but there were a number of unscrupulous firms that stole from investors.

Europe seemed to be awash in magical credit. The Mississippi Company Bubble percolated and disintermediated funds from Paris and Amsterdam pushed prices even higher. The shortage of shares and scrip pushed prices even higher. Rogue companies sucked up funds from the Company and other established investments. The share price increased and peaked in excess of £1,100 in June 1720. Then the transfer books closed.

The Bubble Act; the Bubble Deflates. Meanwhile the Company sought to protect itself through the intervention of Parliament. The result was the Bubble Act of 1720 wherein Parliament outlawed the unchartered Bubble Companies that had arisen to take advantage of the market. The Bubble Act and the subsequent prosecution of Bubble

155. BALEN, supra note 87, at 133-34; CARSWELL, supra note 90, at 145-46.
156. BALEN, supra note 87, at 133-34; CARSWELL, supra note 90, at 145-46.
157. DICKSON, supra note 91, at 123.
158. Id.
159. Id.; DALE, supra note 93, at 98-101. Again, modern corporate accounting controls would have precluded this type of unprecedented stock creation. Auditors and controllers would have required some economic basis for the underlying exchange ratio.
160. BALEN, supra note 87, at 89-92; DALE, supra note 93, at 107-08.
161. BALEN, supra note 87, at 89-92; DALE, supra note 93, at 107-08.
162. See BALEN, supra note 87, at 89-92; DALE, supra note 93, at 107-08.
163. DICKSON, supra note 91, at 140-41.
164. Id. at 144.
165. See BALEN, supra note 87, at 89-92.
166. BALEN, supra note 87, at 114.
167. DALE, supra note 93, at 106.
168. See DICKSON, supra note 91, at 147.
169. BALEN, supra note 87, at 105-06; DICKSON, supra note 91, at 148.
Companies by the Treasury Solicitor ushered in the fall of the stock.\textsuperscript{170} On August 18 the stock began to fall and hampered the Fourth Subscription, pegged at an astounding £1000.\textsuperscript{171} Desperate attempts were made to staunch the descent.\textsuperscript{172} The Company declared a 30% Christmas Dividend; it hawked a dividend guarantee of 50% for the next 12 years.\textsuperscript{173}

The government prosecution of the Bubble Companies had unintended consequences. The smaller bubbles could not be popped without destroying the Company’s Bubble.\textsuperscript{174} Amsterdam’s exchange rate rose sharply against London’s.\textsuperscript{175} Gold flooded out of London.\textsuperscript{176} Londoners were selling off their gains to invest in Amsterdam;\textsuperscript{177} the Bubble imploded.\textsuperscript{178} Prices dropped to £300 by October\textsuperscript{179} and settled below £200 by the end of the year (£191 in December 1720—a drop of over 600 points since September 1).\textsuperscript{180} Officers and insiders fled to the Continent. Directors were disgraced. The Company’s rivals, the Bank of England and the East India Company, rode to the rescue, stabilized the market and completed the debt conversion.\textsuperscript{181}

**The Bubble Post Mortem.** England experienced a normal depression, lasting several years, after the collapse. The lasting effect of the Bubble was the Bubble Act that set back and thwarted British commercial development until it was finally repealed in the 1840s. By then England was destined to lose the corporate footrace to its upstart

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170. DICKSON, supra note 91, at 149.
171. Id.
172. See id.
173. BALEN, supra note 87, at 135; DICKSON, supra note 91, at 149. A 30% dividend is £30; £50 represents a 50% dividend. These are phenomenal returns on £100 par shares. Even at £50 on a £1000 investment, the 5% yield would look respectable. Then there was the potential for cashing out on the £900 “profit.” In reality this would be a distribution of capital surplus if paid by the company. But it would be an inducement for someone to offer the buyer even more for the share. If he sold quickly, let us say for £1100, his profit (£100) could be quite great because he undoubtedly bought on margin. For example, assume Newton bought a share for £1000, but his down payment was only £125. If he assigned his right to receive the share (like an option) to the buyer, he would receive £100 on the £125 out-of-pocket, a very nifty return, cash on cash, once his buyer honored the seller’s installment obligation.
174. DICKSON, supra note 91, at 150.
175. Id. at 151.
176. Id.
177. Id. at 152.
178. Id. at 149.
179. Id.
180. Id. at 159.
181. Id. at 163, 170-72.
\end{flushright}
child, the United States, in a large part owing to the legal restrictions placed upon corporate entities in the Bubble Act.  

Finally, the South Seas Bubble was part of an international capital movement speculating in the refinancing and refunding of government debt (a great benefit to both France and England if successfully accomplished). The revolutionary financial theories of John Law and others were put to work to alter the oppressive structure of vast government debts incurred in the wars between 1689 and 1714. Laid on top of the refunding were the extremely optimistic and heart-felt economic and commercial development plans that captivated governments and investors alike. The Company refunding failed for a want of capital and for want of a legal, accounting and financial structure to support such a great enterprise. The Company's failure is echoed in the contemporaneous collapse of the Mississippi Bubble and the Law System in France.

There was a social setting to this bubble not too dissimilar from that of Holland or Law's France. These bubbles were set in great towns, places of ambition, culture, fame and fortune (and fortune hunters). There were high death rates, disease, misery, and wealth. There was uncertainty about the future. Financial frauds were not easily punished by the law. Life could be short and brutal. Deceit in revenue dealings was still common. There was a debased public morality and an appetite for gain. All these social factors contributed to gambling in the capital markets.

Ultimately, what remains is a rational scheme for the necessary refunding of public debt that was flawed by design. The goal of refunding was certainly necessary and appropriate. The method of exchanging annuities for shares to reduce the debt and provide liquidity was fundamentally sound in theory. It had been employed by the Amsterdam banks to fund Dutch national debt during their magnificent seventeenth century, the Bank of England was to use it for great advantage during the eighteenth century, and this model would launch the United States on the road to becoming a great republic of commerce.

The national debt refunding left something to be desired. The failure to fix exchange rates was critical (similar to the Dutch failure to link tulip option settlements to the "exchange" price structure). Accounting and corporate finance are also culprits. The Company was

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182. In the United States, the state governments were liberal in their support of new business ventures, including corporate ones. With no Bubble Act legacy, the nineteenth century saw the rapid industrialization of the United States by businesses using relatively flexible corporate forms.

183. Deceitful revenue dealings are still common today, even in the United States and the industrialized democracies, let alone developing nations.
able to book capital surplus as gains and to declare dividends from the surplus above par. This, too, proved to be fatal. There was a paucity of civil protections for market torts and no effective criminal sanctions—the unscrupulous could engage in face-to-face fraud with impunity. There were no exchange regulations or required financial reports that might have assisted the astute in puzzling out the fundamentals. These reforms would arrive in the nineteenth and twentieth centuries.

Ultimately, the South Sea Bubble and the collapse of the John Law System in France were intrinsically entwined with market structure, legal remedies, investor behavior and promoter cupidity. The schemes were innovative and the concepts were sound, as evidenced by the successful refunding and monetizing of national debt that later occurred in England and America. Cupidity, corruption, greed, and the madness of the crowds, all played a part in the collapse. But the underlying idea was sound; it was just ahead of its time.

IV. CONTEMPORARY PERCEPTIONS OF THE SOUTH SEA SCHEME AND CAPITAL MARKETS

Seventeenth Century English Economic Thought. Throughout the seventeenth century, English economic thought was evolving and taking note of the movement from traditional, agriculture-based society to a more commercial and market-based economy. In the early seventeenth century, the Lord Treasurer stated that money was "a base creature whearof never any wise man spake without contempt." Sir Francis Bacon evoked morality and the Council of Nice to condemn usury, but he also explained that high interest rates inhibited agricultural improvements for men would not ‘labor upon drayning of Marshes, or in any other good or ingenious device, but employ their Money to more certaine Profitt at use.” A moral economy of biblical balance and certainty was giving way to an economy where “individual[s] had

184. JOYCE OLDHAM APPLEBY, ECONOMIC THOUGHT AND IDEOLOGY IN SEVENTEENTH-CENTURY ENGLAND 78-79 (1978) [hereinafter ECONOMIC THOUGHT AND IDEOLOGY]. The rejection of traditional, conservative values in favor of freewheeling commercialism and market forces was roundly criticized at the end of the eighteenth century by the great conservative thinker and politician Edmund Burke. Burke contended the rise of financiers following the French Revolution had done manifestly great damage “The age of chivalry is gone; that of sophisters, economists, and calculators has succeeded, and the glory of Europe is extinguished forever.” EDMUND BURKE, REFLECTIONS ON THE REVOLUTION IN FRANCE 113 (1790).

185. ECONOMIC THOUGHT AND IDEOLOGY, supra note 184, at 34. This of course echoes Biblical sentiments: “For the love of money is the root of all evil...” 1 TIMOTHY 6:10.

186. ECONOMIC THOUGHT AND IDEOLOGY, supra note 184, at 34.
become subsumed in a depersonalized aggregation\textsuperscript{187} because their decisions were divorced from their consequences.\textsuperscript{188} Debate raged over the power to maximize profits by setting price. Some saw this economic freedom as preying on the poor. Others, such as Joseph Lee, a minister, argued that \textquote{\textquote{\textquoteright}[t]he advancement of private persons will be the advantage of the publick . . . if men by good husbandry, trenching, manuring their Land, &c [sic] do better their Land, is not the Commonwealth inriched thereby?\textquoteright}\textsuperscript{189}

English economic and commercial thought was advanced by observation of their Dutch neighbors who enjoyed the most successful and modern of European economies in the seventeenth century. English thinkers sought to explain the Dutch success. R.W.K. Hinton observed that the Dutch had demonstrated that \textquote{\textquote{\textquoteright}private profit led to 'national strength and back to private profit.'\textquoteright}\textsuperscript{190} Observers were slowly coming to believe in the idea of a \textquote{\textquote{\textquoteright}personal drive for private gain.\textquoteright}\textsuperscript{191} By the end of the seventeenth century, \textquote{\textquote{\textquoteright}[e]very index of economic growth showed an advance: agricultural output, capital investment, imports from the Indies and the New World, [and] the range and quantity of home manufacturing.\textquoteright}\textsuperscript{192} Domestic consumption was at a high level.\textsuperscript{193} The English were enjoying a much higher standard of living and foreign trade was burgeoning.\textsuperscript{194} \textquote{\textquote{\textquoteright}Daniel Defoe hailed the period since 1680 as a projecting age when men set their wits to designing 'Engines, and Mechanical Motion,' a propensity greatly encouraged, he noted, by stockjobbing.\textquoteright}\textsuperscript{195}

The stage was set: England in the early eighteenth century was in the midst of the Commercial and Financial Revolutions which would radically transform her economy and society. The invention of the joint stock corporation enabled many participants to invest in companies, as an alternative to traditional investments in land.\textsuperscript{196} Joint stock companies and corporations had obvious advantages—management for the investor was not labor-intensive, portfolios could be assembled offering the security associated with diversification, and the opportunity to invest in large scale enterprises both domestic and overseas, beyond the ken of the

\textsuperscript{187.} \textit{Id.} at 53.
\textsuperscript{188.} \textit{Id.} at 52-53.
\textsuperscript{189.} \textit{Id.} at 62.
\textsuperscript{190.} \textit{Id.} at 78-79.
\textsuperscript{191.} \textit{Id.} at 95.
\textsuperscript{192.} \textit{Id.} at 164-65.
\textsuperscript{193.} \textit{Id.} at 165.
\textsuperscript{194.} \textit{Id.}.
\textsuperscript{195.} \textit{Id.}.
\textsuperscript{196.} \textsc{John Train, Famous Financial Fiascos} 88-89 (1985).
average investor.\textsuperscript{197} By the end of the seventeenth century, England had over 100 companies engaged in banking, overseas trade, insurance and industrial profits. Wealth and power were shifting away from the aristocracy and landed gentry to urban investors, traders, stock-jobbers, and merchants—servants of these twin economic revolutions. This transfer of power and wealth conferred status on the new arrivals and created tensions as the established order gave way to the brave new world of finance and trade.\textsuperscript{198}

\textbf{Daniel Defoe, the Speculator.} Merchants were undergoing a transformation. In \textit{The Merchant}, Edward Young compared “merchants favourably with heroes, priests, kings and even the heat-giving planets.”\textsuperscript{199} Alexander Pope, Richard Savage, and James Thompson also praised merchants in their works.\textsuperscript{200} To Richard Steele, “the merchant was ‘the greatest Benefactor of the English Nation.’”\textsuperscript{201} “In Defoe’s work, the merchant’s virtues almost define an Englishman’s virtues.”\textsuperscript{202} Later, in the eighteenth century, the glorification began to wane. The ideal of the merchant-prince continued, “but the self-made businessman was disdained as an upstart, a social parvenu, a mere mushroom who threatened the social order.”\textsuperscript{203}

In general, the literary merchant characters of the seventeenth century were praised not for their business sense, but instead for their gentlemanly qualities.\textsuperscript{204} “Samuel Foote’s \textit{The Nabob} (1772) . . . reflect[s] the tensions posed by the enormous wealth of the returning nabobs who threatened the position of the landed classes by their wealth, their newly acquired possessions, their ostentatious free spending and their ‘governing spirit.’”\textsuperscript{205} This was not a problem for Defoe, who stated that “[w]ealth is wisdom, he that is rich is wise,’ . . . and since the route to wealth ran via trade the gentleman should seek greater wealth by following the merchant’s lead.”\textsuperscript{206} Defoe also believed that “a true-bred Merchant is a Universal Scholar, his learning excells the meer scholar in Greek and Latin, as much as does that of the Illiterate Person, that cannot

\textsuperscript{197} \textit{Id.}
\textsuperscript{198} Defoe had high regard for trade and manufacture, and sided with those forces over the traditional land-based economy. See \textsc{John Robert Moore}, \textsc{Daniel Defoe: Citizen of the Modern World}, 312 (1958) [hereinafter \textsc{Daniel Defoe}].
\textsuperscript{200} \textit{Id.} at 109-10.
\textsuperscript{201} \textit{Id.} at 110.
\textsuperscript{202} \textit{Id.}
\textsuperscript{203} \textit{Id.}
\textsuperscript{204} \textit{Id.} at 115.
\textsuperscript{205} \textit{Id.} at 112.
\textsuperscript{206} \textit{Id.} at 118.
read or write.”\textsuperscript{207} However, Defoe believed that there was a greater calling for people. Once a merchant accumulated his money, his children could become “as good statesmen, judges or bishops as those of the most antient \[sic\] families.”\textsuperscript{208} “Once the trader has made his legitimate and much valued fortune, he will be expected to seek to convert it into land or the pursuit of public service.”\textsuperscript{209}

Defoe, of course, had been a projector. In his first venture he invested £200 into a diving engine patented by Joseph Williams.\textsuperscript{210} Williams himself invested no money, and the invention was a bust.\textsuperscript{211} Consequently, Williams received £2,360 for his worthless invention, one in which he did not invest any of his own capital.\textsuperscript{212} Defoe lost all of the capital he invested, as well as capital he gave to Williams as a loan. Defoe later described Williams as a “patent-monger.”\textsuperscript{213}

Fourteen years later, Defoe invested in the raising of civet cats for the sake of perfume production, which had become a Dutch monopoly.\textsuperscript{214} However, Defoe had to give up this investment, in order to meet prior obligations, including those that stripped him of his property, during his year of bankruptcy.\textsuperscript{215} Defoe ended up losing a total of £1,300 on this venture.\textsuperscript{216}

Defoe later invested £800 in stock of the African Company, which had depreciated to £100 in value by the time he decided to withdraw his investment in the Company.\textsuperscript{217} Despite this depreciation, Defoe “supported the company’s right to a fair return on its outlay and the importance of the African trade (which he said could not be maintained by the Separate Traders).”\textsuperscript{218} However, “he saw the folly of delegating all trade to vast organizations, which often substituted stockjobbing and committee direction for effective personal management: ‘we are so fond of companies, it is a wonder we have not our very shoes blacked by one, and a set of directors made rich at the expense of our very black-guards.’”\textsuperscript{219} The main reason for the African Company was to trade
slaves, a practice Defoe believed to be profitable, although he believed it to be morally wrong.\textsuperscript{220}

Writing on John Law and the bubble Law had created, Defoe stated:

The case is plain, you must put on a sword, kill a beau or two, get into Newgate, be condemned to be hanged, break prison, IF YOU CAN,—remember that by the way,—get over to some strange country, turn stock-jobber, set up a Mississippi Stock, bubble a nation, and you may soon be a great man; if you have good luck, according to an old English maxim: Dare once be a rogue upon record, And you may quickly hope to be a Lord.\textsuperscript{221}

**Projectors.** Any number of legitimate schemes were launched, such as banks, insurance companies, canal projects and the like. England’s commerce was rising but the new-found wealth had its critics. One critic of the system wrote:

The World of late has run into so many whimsical projects, prithee for once publish the following to see how they will encourage a good one.

The Projector, by long Study, has attained a certain method of melting down Carpenters Chips and Saw-Dust, \&c. and running them into Planks and Boards of all Lengths and Sizes.

Hereby all Gentlemen, Builders and others, may, upon ten Days Notice, be furnished with Boards and Planks adapted exactly to Dimensions they want, at least twenty-five percent Cheaper than yet has been known.

These Boards will be free from Knots and Sap, and delivered grained or not as desired.

The Projector promises himself, that he shall shortly be able to give them Tincture of Marble shade, or any other fine Stone Colour....

The Composition in these Boards has a secret virtue which prevents their shrinking, and destroys all Bugs and Vermine that come near them.

Proposals for erecting a Company, and raising Joint-Stock of one Million five hundred thousand pounds, on very advantageous Terms to subscribers, will be shortly published, and the Projector will be

\textsuperscript{220} Id.  
\textsuperscript{221} Id. at 292-93.
gad (in the interim) of an Opportunity to confer with any Gentlemen of Ingenuity upon so beneficial a Scheme; and for that purpose, will give daily Attendance at Exchange Alley, at the Cock in Birchin Lane.222

**Bubbles.** These new investment schemes and projects were known as “bubbles.” Shakespeare employed “bubble reputation.”223 *The Volunteers, or the Stock-Jobbers,* a play by Thomas Shadwell (1693), described men who cheated as “bubbling” each other for profit.224 A venturer in the new market does not care if the business is reality-based. “[B]etween us,” he confides, “It’s no matter whether it turns to use or not; the main end, verily, is to turn the Penny in the way of Stock-Jobbing, that’s all.”225

Stock-jobbing had entered the vocabulary and had many meanings—ranging from trading in stock to cheating on the trades.226 By early 1692, a member of the House of Commons was lamenting that “[t]he trade of stockjobbing is now become the sole business of many persons, which has ruined great numbers of tradesmen and others.”227

By the time of the South Sea Bubble, some financial schemes were understood by the population to be bubbles, like airy, free-floating soap bubbles.228 Improbable companies proved the inspiration for “A New Pack of Bubble Cards.”229 Here is the epigram from the Five of Hearts:

> They talk of distant seas, of ships and nets  
> And with the style of Royal gild their baits;  
> When all that the projectors hope or wish for  
> Is to catch fools, the only chubs they fish for.230

**The South Sea Company and its bubble.** As documented, the South Sea Company was an interesting financial institution in the 1710s. It had failed as a trading company, yet had succeeded in its first ventures in re-financing some of England’s national debt. In 1717, the Company, which had already increased its capital to 10 million pounds, wanted to

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222. BALEN, supra note 87, at 90-91.  
223. Id. at 91.  
225. Id.  
226. Id.  
227. Id. at 26, citing THE PARLIAMENTARY DIARY OF NARCISSUS LUTRELL (Henry Horwitz ed., 1972).  
228. Id. But, alas without their transparency.  
229. BALEN, supra note 87, at 92.  
230. Id.
raise an additional 2 million pounds. In response, one Member of Parliament (MP), John Aislabie, argued that:

[O]f late years the companies of monied men are grown so uppish as not only to tread familiarly with Parliament, but even to pretend to dictate to it, and that, therefore, it is high time to give them a check, and let them know that the landed men and their representatives are the mainspring and stock of the wealth and strength of the Kingdom.

Melville quotes an unknown author who wrote the following in the Original Journal in 1719:

If any of the days of us or our forefathers might be called the projecting age, I think this is the time. . . . If ever there was a nation that had been twenty-three years ruining itself and recovered in a moment, this is the time. If ever a Government paid its debts without money, and exchanged all the cash in the kingdom for bits of paper, which had neither anybody to pay them for, or any intrinsic fund, to pay themselves, this is the time. If ever a credit was raised without a foundation, and built up to a height that not only was likely to fall, but indeed was impossible to stand, this is the time.

The MP's who opposed the Company proposal to solve the National Debt were led by Walpole, who urged that the Company:

[C]ountenanced the pernicious practice of stock-jobbing, by diverting the genius of the nation from trade and industry; that it held out a dangerous lure for decoying the unwary to their ruin by a false prospect of gain, and to part with the gradual profits of their labour for imaginary wealth. In vain he insisted that if the proposal of the South Sea Company should be accepted, the rise of their stock ought to be limited. . . . [I]t was to raise artificially the value of the stock by exciting and keeping up a general infatuation, and by promoting dividends out of funds which would not be adequate to the purpose. In vain he predicted that if the establishment succeeded, the Directors would become masters of the Kingdom, and control the resolutions of the Legislature; or if it did not succeed, the failure would cause a general discontent.

Other MP's opposed the Company, because it would allow foreigners to double their money, then withdraw their investment and take it to other countries. Also, the artificial rise of Company stock

231. See LEWIS MELVILLE, THE SOUTH SEA BUBBLE (1921) [hereinafter MELVILLE].
232. Id. at 24-25.
233. Id. at 34.
234. Id. at 42-43. Compare this with the lament of Waermondt, the moralist, in the Dialogues, DEVIL TAKE THE HINDMOST, supra note 21.
could “decoy unwary people to their ruin. . .” Finally, the Company was feared to be, due to its enormous capitalization (30 million pounds), too powerful, and might have too much influence in the political arena. Lord Cowper stated that “like the Trojan horse was ushered in, and received with great pomp and acclamation, but which was contrived for treachery and destruction.”

Lord Sunderland defended the decision, stating that the directors of the Company would do their best to make money to solve the National Debt problem, but also had a prospect of private gain. Sunderland believed that it was reasonable for the directors to profit from sound management and industry.

The “Boom” in the Stock of the South Sea Company, April - July, 1720. Edward Harley wrote that “[t]he spirit of stock-jobbing is rising to a higher degree than ever” in February of 1720. Mrs. Windham wrote that “ladies sell their jewels to buy [South Sea Company stock], and happy are they that are in.” Charwood Lawton said that “[n]obody talks of anything but stocks and South Sea, and now and then a duel.” Mist’s Weekly Journal printed:

If you are ambitious, you must put on a sword, kill a beau or two, get into Newgate, be condemned to be hanged, break prison, if you can—remember that, by the way—get over the water to some strange country, set up a Mississippi stock, bubble a nation, and you may soon be a great man.

This was in response to the sentiment of the French that John Law “was regarded as the greatest man of the day.” During this time, interested parties circulated wild rumors in order to increase the Company's stock price. “[N]othing was too absurd to be said, and, presently, nothing was too ridiculous to be believed.” Isaac Newton, when asked about “the continuance of the rising of the stock, answered that he could not calculate the madness of people.”

Stock of the South Sea Company Slumps, August - September, 1720. Eustace Budgell, in a statement attempting to lend support to the

235. MELVILLE, supra note 231, at 42-43.
236. Id.
237. Id. at 50.
238. Id. at 50-51.
239. Id. at 53.
240. Id. at 54.
241. Id. at 55.
242. Id. at 56. This quote has been attributed to Defoe. See DANIEL DEFOE, supra note 198, at 292-93.
243. MELVILLE, supra note 231, at 56.
244. Id. at 57.
245. Id. at 58; see also DEVIL TAKE THE HINDMOST, supra note 21, at 69.
directors during the slump, added that "but the most artful story, the most malicious falsehood, that our enemies have given out is, that two or three of our very Directors, that some of our own body, have basely betrayed the trust reposed in them, and have been the chief causes of the present confusions."\textsuperscript{246} He stated that he could not believe that men who had been "entrusted with the fortunes of so many of their fellow-subjects, could engage in so base a design."\textsuperscript{247} Budgell stated that the directors could, if they wished and were "wicked," "get a great deal of money at the expense of those who trusted them" and, if they did, they would not be "safe in the enjoyment of it."\textsuperscript{248} He only stated this to "show how unlikely, how improbable, a falsehood the malice of our enemies has invented."\textsuperscript{249} This prompted one of the directors, Robert Chester, to emphatically rebut the idea suggested by Budgell.\textsuperscript{250} Chester's rebuttal was satisfactory to the public, but the public was alarmed that none of the other directors took the opportunity to follow suit, although James Craggs the elder stated that the idea Budgell floated was a result of the many enemies of the Company as a by-product of jealousy.\textsuperscript{251}

**The Nation in Distress and Public Outcry, October - November, 1720.** The public outcry among the upper and middle classes was enormous during this financial crisis. The general sense was that of anger and a desire to punish those responsible for the financial collapse. "Indeed, no man's reputation was safe, and slander was as busy with the innocent as with the guilty."\textsuperscript{252} The directors were unanimously condemned in the court of public opinion.

Any number of caricatures and newspaper and pamphlet editorials damned the South Sea Company and its speculators. Even Jonathan Swift got into the act:

\begin{quote}
*South Sea Project*

Directors, thrown into the sea,
Recover strength and vigour there;
But may be tamed another way,
Suspended for a while in air.\textsuperscript{253}
\end{quote}

\textsuperscript{246} MELVILLE, supra note 231, at 128.
\textsuperscript{247} Id.
\textsuperscript{248} Id. at 128-29.
\textsuperscript{249} Id.
\textsuperscript{250} Id. at 129.
\textsuperscript{251} Id.
\textsuperscript{252} Id. Swift continues with similar venom for another eight stanzas. Id. at 144.
\textsuperscript{253} Swift continues with similar venom for another eight stanzas. Id. at 144.
We end with Alexander Pope, once an enthusiastic speculator, having buyer's remorse:

The fate of the South-sea Scheme has much sooner than I expected verfy'd what you told me. Most people thought it wou'd come but no man prepar'd for it; no man consider'd it would come like a Thief in the night, exactly as it happens in the case of death. Methinks God has punish'd the avaritious as he often punishes sinners, in their own way, in the very sin itself: the thirst for gain was their crime, and that thirst continued became their punishment and ruin. As for the few who have the good fortune to remain with half of what they imagined they had, (among whom is your humble servant) I would have them sensible of their felicity. . . . They have dreamed out their dream, and awakening have found nothing in their hands. Indeed the universal poverty, which is the consequence of universal avarice, and which will fall hardest upon the guiltless and industrious part of mankind, is lamentable. The universal deluge of the S. Sea, contrary to the old deluge, has drowned all except a few Unrighteous men: but it is some comfort to me that I am not one of them, even tho' I were to survive and rule the world by it.254

A disaster of biblical proportions indeed. Or so it seemed.255

V. BLOODSUCKERS, WIDOWS, ORPHANS AND THE REVOLUTIONARY WAR DEBT.

Speculation and the Revolutionary War went hand-in-glove. During the War, the States and national government issued a variety of debt to finance the struggle. The value of the debt rose and fell with the fortunes of war.

The Financing of the War (1775-1789). British North America was not blessed with precious metals. Specie money (gold and silver coin) was hard to come by and many colonial governments relied upon fiat money and currency backed by land banks.256 Land banks financed land sales and backed their currencies with mortgages held by the banks


255. In fact, the downturn following the bubble was average for the English eighteenth century economy. The collapse fell unevenly on the classes. "It was the small speculator, the petty country gentleman or the substantial farmer, jealous of the gains of his wealthy neighbours, who came late into the game, without experience and without London advisors, who was likely to lose it all." Julian Hoppit, Financial Crises in Eighteenth-century England, 2nd Series XXXIX, 1 ECON. HiST. REV. 39, 48 (1986), citing E.P. THOMPSON, WHIGS AND HUNTERS 114 (1975).

and deposits from rural landowners and investors. Land is an illiquid asset and in times of economic stress when agricultural prices were depressed, land values fell, as did the value of land bank-based currency.\textsuperscript{257} Colonial legislatures were likely to inflate the money supply by "printing" fiat money. This eased the pain of agrarian debtors as well as kept money in circulation.\textsuperscript{258} It also ran the not insubstantial risk of debasing the currency.

When the war broke out in 1775, the colonies turned to a mixture of taxation, fiat money, and government debt to finance the war.\textsuperscript{259} As the fortunes of war turned against the colonists and colonial economies were ravaged by destruction, its fiat money depreciated and claims paid by fiat money threatened to become worthless.\textsuperscript{260} To field forces and protect the state, many colonies and sometimes the Continental Congress resorted to confiscation of war material.\textsuperscript{261} The confiscation was, of course, disguised, as merchants, farmers and vendors were issued Congressional or state certificates in payment for the vital war goods. With prospects fragile, these payments differed little from outright confiscation. Such procurement outraged merchants and farmers, undercutting the very ideals of the Revolution.\textsuperscript{262}

When the Continental Congress met in 1774, the nation's government was in terrible financial condition. There was no treasury, no customs officers, no taxes, and no collectors. To control the revolution and win the war, Congress would require funds.\textsuperscript{263} At that time, both the British officials and state officials claimed the right to tax. For political reasons, Congress and the states did not want to incur the ire of the populace by raising onerous taxes.\textsuperscript{264} Thus, states resorted to loans or the printing press. By 1780, $241,000,000 in loans had been issued.\textsuperscript{265} Loans offered a method of obtaining money without resort to printing it. But these loans had to be repaid. The interest had to be serviced if the state was to survive.

\textsuperscript{257} Id. at 7.
\textsuperscript{258} Id. at 5.
\textsuperscript{259} Id. at 8.
\textsuperscript{260} EDWIN J. PERKINS, AMERICAN PUBLIC FINANCE AND FINANCIAL SERVICES 1700-1815, at 43 (Ohio State University Press 1994) [hereinafter AMERICAN PUBLIC FINANCE].
\textsuperscript{261} BRUCE CHADWICK, GEORGE WASHINGTON'S WAR 344 (Sourcebooks Incorporated 2004).
\textsuperscript{262} Id. at 347.
\textsuperscript{264} Id.
\textsuperscript{265} In 1775, £6 million was advanced to the Congress for gunpowder. Id. at 6.
The National Debt. By 1779-1780 the Continental currency had collapsed. Congress began to issue certificates. By 1780 these certificates were almost a total loss. The national government was reluctant to redeem them. Nevertheless, these almost-worthless certificates could be used in payment for each state’s tax requisition.

Quartermasters used them for supplies but they were virtually worthless. The military often resorted to impressments—“legal robbery qualified by a promissory note”—to obtain grain, cattle and other provisions.

By 1790, Alexander Hamilton estimated that the national debt of the Continental Congress and the Confederation was about $54 million.

The Foreign Debt. In addition to loans to the Congress and state loans, the new nation turned to foreign nations and their capital markets for loans. Continental currency, while it was just meeting domestic needs, could not be used for foreign debt. With the victory of Saratoga, the French openly lent to the United States sums totaling 18 million livres tournes, representing 21 loans. These loans were contracted to be repaid at 5 percent in 1782. The French also enabled the Americans to obtain credit from the Dutch, guaranteeing 10 million livres of Dutch loans in 1781. In 1782 John Adams obtained 5 million guilders at 5 percent and an additional 800,000 at 4 percent.

Foreign debt in 1790 was approximately $10.5 million.

The State Debt. The states “had voluntarily shouldered approximately 60 percent of the aggregate military expenditures from 1775 to 1783, with Congress assuming most of the remaining debts totaling $18 million by 1790.” States initially used paper money to fund the war effort. As runaway inflation ruined state credit they resorted to borrowing, the bulk of it in state certificates. In 1780,
Congress asked the states to issue certificates to compensate their troops.\textsuperscript{278} During the 1780s the chief expense of the state governments was debt service.

The use of debt to finance the war varied by region. The northern states relied on loans and taxes.\textsuperscript{279} The southern states, with capital tied up in slaves and land, and overrun by the British, relied on paper money and the confiscation of Tory estates to pay the debts.\textsuperscript{280} By 1785, many of the original holders of the debt had transferred their certificates to merchants, money brokers, and commercial farmers, so great was their need for specie. This transfer of certificates led to cries of "shame" and "bloodsucker" at the speculators who preyed upon widows, orphans, farmers, and war veterans.\textsuperscript{281} Into this heady mix of default and desperation was added the threat of insurrection by debtors when Daniel Shay and his followers rebelled in western Massachusetts. The rebellion was quickly suppressed. But fears of the wealthy persisted—fears that the government could not deal with the economy and that insurrections might become more common. These fears pushed the wealthy commercial classes toward a strong, central government with considerable economic powers.

\textbf{Robert Morris and the Debt.} In February 1781, Robert Morris, America's most prominent and respected financier and Superintendent of Finance for the Confederation, demanded control of expenditures and the right to settle the public accounts.\textsuperscript{282} Morris was a nationalist. He believed the radical Articles arrangement of Congressional power crippled effective government. He had little sympathy for the radical tradition of the agrarians and was tied to the rising power of the merchants. He, and other moderates like Hamilton, wanted the nation to rise to "power, consequence, grandeur,"\textsuperscript{283} Morris wanted the national government to foster business enterprise. He thought the United States should copy the British model of public finance.\textsuperscript{284} He believed that America would transcend to a continental power if it adopted such a policy.\textsuperscript{285}

In a message to Congress in 1782, Morris advised that if the debt were treated properly, the value of securities would rise, and funds flow "into those hands which would render it most productive."\textsuperscript{286} He desired

\begin{itemize}
\item \textsuperscript{278} \textit{The Price of Liberty}, supra note 263, at 23.
\item \textsuperscript{279} \textit{Id.} at 27.
\item \textsuperscript{280} \textit{Id.} at 27.
\item \textsuperscript{281} \textit{Id.} at 28-29.
\item \textsuperscript{282} \textit{American Public Finance}, supra note 260, at 107.
\item \textsuperscript{283} \textit{The Price of Liberty}, supra note 263, at 14.
\item \textsuperscript{284} \textit{Id.} at 14.
\item \textsuperscript{285} \textit{Id.}
\item \textsuperscript{286} \textit{Id.} at 15.
\end{itemize}
a revitalized system of currency and credit. "A due provision for the public debts would convert at once those debts into a real medium of commerce." He was proposing liquefying the debt, the tool the Bank of England used to great effect as it stoked the fires of trade and commerce in the British Empire.

The conservatives and moderates wanted to get the debt into the hands of the merchants so that they could leverage the economy and the nation's fortunes.

A public debt supported by public revenue, will prove the strongest cement to keep our confederacy together. Sound policy would also dictate that we should do justice to those who have trusted us, in order that we may have . . . credit in the future. We might, then, tax the present race of citizens at six pounds instead of a hundred and leave posterity to pay the principal.  

The radicals had other plans for the onerous debt—debt relief! Radicals wanted to reduce the debt quickly and at the cheapest cost (devaluation, payment at market value, and restructuring come to mind). Radicals and their agrarian allies wanted to treat the original holders "fairly" (by discriminating against the speculators).

Undeterred, Morris continued to push for consolidating the national debt by offering his program for consolidation of $27 million. By now the states had assumed some of the national debt. This was due to the fact that the Confederation could not pass a revenue bill unless all states agreed. Hence, some of the states took assumption into their own hands. This state assumption and repayment (often with devalued currency or modification) threatened national unity by making the states more powerful and the union less important in fiscal matters. Another scheme put forth by some of the public creditors was that federal certificates (almost worthless) could be used to purchase western lands. Morris objected to this scheme, as the land sales would not have been sufficient to fund the debt. He wanted to preserve the national debt to make the federal government supreme because to honor the debt would mean permanent federal taxes. The power of the purse would control the economy and the nation.

287. Id.
288. Id. at 15-16 (quoting CURTIS NETTLES, THE EMERGENCE OF A NATIONAL ECONOMY, 1775-1815, at 33 (New York Press 1963)).
289. THE PRICE OF LIBERTY, supra note 263, at 21.
290. Id. at 17.
291. Id. at 21.
292. See id.
293. Id. at 20.
294. Id.
In 1784 Rhode Island was the straw that broke the camel’s back. Rhode Island, a trading and debtor state, held out and refused to accede to a modest impost bill to fund Confederation expenses and to pay some of the interest in arrears. From 1784 the Confederation was doomed. It could not raise revenue. It could not pay its debts. It could not protect its settlers from the Indian tribes. It could not obtain advantageous commercial treaties with the British, its major trading partner. It could not dislodge the British from their western forts at Niagara and Detroit. The Confederation was bankrupt—fiscally and politically. America had come to the fork in the road.

**The New Federal Government.** The Confederation’s impotence was palpable. The Confederation was powerless to rescue America from its debt and weakness. The Annapolis Convention of 1786 was a last ditch attempt to rescue the Confederation by amending its economic powers. The Annapolis Convention failed but it laid the groundwork for the 1787 Constitutional Convention in Philadelphia. The Philadelphia convention wrote the Constitution. Its ratification offered the hope of fiscal salvation, national unity and power. The federal republic was born when New York and Virginia ratified the Constitution in 1788, ending the question of disunion. Rhode Island held out and ratified in 1790. The new government came into being with the election of the First Congress and George Washington as the first president.

The Debt was the most urgent problem facing the nation, like the Confederation before it. Hamilton estimated the national debt to be about $40 million. Also owed was $25 million in state debt and $11.6 million in foreign debt.

It was a staggering $76 million according to the new treasury’s best data. By any standard, the debt beggared the imagination. The new

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295. See id.
296. Which is after all what the radicals fought against in the Revolution. To give important fiscal and economic powers to a strong national government seemed to turn the Revolution upside down.
298. See id. at 15.
299. See id. at 22.
300. Id. at 22.
301. American Public Finance, supra note 260, at 213.
302. Id.
304. Id. at 316; see also Willard Sterne Randall, Alexander Hamilton: A Life 389-90 (2003) [hereinafter Alexander Hamilton: A Life] (discussing the
government would have to solve the debt problems or the Revolution would fail.

Unlike the British, the United States did not have one of the world's most sophisticated economies. It would be a gamble to stake the future of the nation on solving the debt problem. The British national debt had grown from £16.7 million to £272 million in about 100 years. During this period of time the English had grown wealthy and became a great power. The British had developed capital markets like the London Stock Exchange and the banks in the City. These markets were supported by the "open market operations" of the Bank of England. In contrast, America had nascent capital markets (speculation in the national debt in cities like New York and Philadelphia) and no national banking system. The United States had only five tiny banks in New York, Boston, Philadelphia, Baltimore and Providence. The banks' combined capital was $3 million; these banks were incapable of providing critical financial services like clearing accounts easily and lending to governments. The American financial system was rudimentary, to say the least. While poised on the cusp of the Industrial Revolution, the American banking system and "capital markets" were incapable of sustaining rapid industrial, technological and commercial change.

It was a gamble worth taking because of the strength of Hamilton's plan, turning the debt into a perpetual fund or annuity like the British system. This would allow the Republic to grow without the threat of bankruptcy.

Hamilton's expense budget showed a deficit of about $1.5 million. This could only be met by refunding the debt, borrowing new monies, and paying a lower rate of interest. Congress and the Treasury focused on the national debt, debt incurred by the Continental Congress and under the Articles first.

Funding of the National Debt and the Discrimination Problem. There was general agreement that the federal government should be

Confederation debt in 1790 could be broken down as follows: national debt to foreign states and nationals was $11,710,378; domestic debt (principal and interest) was $44,440,085; state debt was estimated to be about $25 million.

305. Hamilton's Blessing, supra note 274, at 1-2.
306. The Bank of England both supported the debt, keeping interest rates low, and issued banknotes, assuring the nation adequate liquidity for commerce and growth.
308. The Price of Liberty, supra note 263, at 23.
309. See id. at 235-36.
310. See id. at 264-65.
311. Hamilton's Blessing, supra note 274, at 68.
312. See The Price Of Liberty, supra note 263, at 15.
responsible for all national debt incurred in prosecuting the war. There was no serious consideration of defaulting, threatening to default, devaluing the currency, or restructuring the foreign debt. The $11.6 million owed to France, Holland and foreign nationals would be honored at face value and at the stated interest rate. When that decision was made, the value of these securities was restored as foreign governments and investors now trusted the new government's credit. The value in the securities rose in cities like New York and Philadelphia, as well as cities abroad, because there was an active market for $43 million in United States debt.

Speculation arose and speculators became active in both national and state debt owed to Americans. These speculators enjoyed a nasty reputation and were commonly thought of as blood-suckers by Anti-Federalists, agrarians, rural debtors, and states' right advocates. They did not make their reputations shine when, on rumors of federal action to refund the debt, moneyed men from urban areas went to the back woods in search of cheap, highly discounted debt. To make matters worse, Duer, Hamilton's assistant at the Treasury, and a number of Congressmen sent their representatives to the hinterlands to buy up the discounted obligations. The Georgians and North Carolinians in Congress were particularly hostile to these activities. While Hamilton was without reproach, rumors circulated about his inside profits. Anger welled up as reports filtered back to New York about the egregious behavior of the speculators. Many in Congress were willing to redeem the domestic portion of the national debt; however, they wanted to discriminate between the good, original holders, and the less worthy, subsequent holders who appeared to have been involved in speculation and were taking untoward advantage of the naïve and distressed.

The evils of speculation were exaggerated then and have been in many historical accounts of the discrimination issue. The long and short of it was that the speculation involved speculators and very few widows and orphans were forced to sell. Debt had been trading for about

313. AMERICAN PUBLIC FINANCE, supra note 260, at 213.
314. See id. at 315.
315. Wall Street, like the London Stock Exchange, was to be founded by investors trading in national debt and state debt. As businesses required more capital, these bonds could be used by banks and investors to fund the projects.
316. See AMERICAN PUBLIC FINANCE, supra note 260, at 213.
317. See ALEXANDER HAMILTON: A LIFE, supra note 304, at 392.
318. See AMERICAN PUBLIC FINANCE, supra note 260, at 222.
319. This exaggeration probably occurred because the press and politicians, echoing common wisdom, were so often vitriolic. However, when common sense is applied to the debt and the principles of speculation, it is apparent that brave James Madison, Thomas Jefferson, and their supporters got it wrong.
fifteen years so that when compounding of interest and discounting to net present value are considered, those who parted with the debt at an earlier time were in approximately the same economic situation as those who bought the discounted paper.320

"Debt certificates issued to soldiers and military suppliers were seen as obligations likely to claim a second call on congressional coffers, and they traded at lower prices than bonds."321 The original holders sold quickly to secondary investors as the original lenders had little use for financial instruments with an undetermined maturity date.322 These original holders had an immediate need for cash for consumption or tangible assets such as land, tools, etc.323 Sellers in the early and mid-1780s received very low sums for the debt instruments.324 The debts were extremely risky—they had no maturity dates and Congress was unable to pay even interest.325 Present value theory states that money presently received is always valued more than future payments as the money can be reinvested to earn interest.326

[W]ere the original holders of government securities who sold out to secondary investors unduly exploited and thus entitled to additional compensation in 1790? Most modern financial analysts would argue in the negative—opposing Madison [and Jefferson] and supporting Hamilton. Let us assume that on average sellers of certificates received about twenty-five cents on the dollar from 1783 to 1785. For example, the soldier who received $25 for certificates with a face value of $100 in 1784 had the use of that money for seven more years than the investor who was forced to wait until the resumption of interest payments in 1791. If the soldier invested the money in productive assets that returned 8 percent compounded annually, by 1791 the proceeds from that sale would have climbed steadily in value to about $43. Meanwhile, the investor in the soldier's certificates received no interest payments or any other form of remuneration during those same seven years. . . . Overall, it seems fair to conclude that in most instances the actual profits realized on speculative investments were a far cry from the exaggerated multiples alleged by Madison and his supporters.

320. Had the United States lost the war in 1780 (as it might very well have), the widow who sold her paper to the Pennsylvanian speculator at $.20 on the dollar during the dark days at Valley Forge would have had $.20 on the dollar, while the speculator had nothing for his money.
321. AMERICAN PUBLIC FINANCE, supra note 260, at 226.
322. Id.
323. Id.
324. Id. at 227.
325. See id.
326. Id.
Madison pointed to an allegedly gross inequity between the financial returns realized by original holders of federal debt instruments who sold prematurely and the returns of secondary investors who held to 1790. However, modern techniques have narrowed that gap—and perhaps even eliminated it altogether, depending on varying assumptions about the profit and risk expectations associated with investments in the federal debt and other forms of productive assets in the mid-1780s. Madison erred on two accounts. First, like many of his contemporaries unaccustomed to analyzing financial data (plus many people in the late twentieth century as well), he failed to consider fully differences in the timing of financial returns. Secondly, most of the trading in government securities in 1789 and 1790 occurred among secondary holders themselves. Some decided to take their profits on federal certificates, which had risen, for example from thirty cents on the dollar in 1789 up to the fifty-percent level in 1790. Numerous prudent investors feared that political rivalries might delay actual funding for several more years, lower the final interest rates, or even produce partial repudiation.\(^\text{327}\)

Indeed, speculators are quite useful economic creatures as they provide liquidity in markets. As bad as the discounts were during the darkest days of the war, the liquidity provided by the speculators was supporting the war bonds and certificates by providing a market for investors. They were playing a role similar to vulture capitalists in modern corporate bankruptcies, providing support for the bond market of the distressed company. The nation and the states would have been much worse off if the trading had been suspended to stop the speculators—then the market really would have fallen to the center of the world!

A related problem to the refunding of the domestic national debt at face value was that some states, like Pennsylvania, had for some time been buying up national debt and redeeming it.\(^\text{328}\) If this activity continued, the nation would be less reliant upon the central government to cure economic ills. Hence, it was important to nationalists, like Hamilton and Morris, to end the state purchase programs.

Added to the mix was sectional politics. The refunding of the national debt would take federal revenues and funnel it to urban areas, which Hamilton supported because the debt could then become active capital and fund commerce and industry.\(^\text{329}\) This would reduce the importance of rural states and agrarian communities. To a very real

\(^{327}\). AMERICAN PUBLIC FINANCE, *supra* note 260, at 227-29.


extent the South and West were pitted against the New England and the Middle Atlantic states.

Before the First Congress was elected, Madison seemed to be the logical Virginian choice for the Senate. However, his nationalism cost him and the state electors denied him the Senate. Madison then stood for election as a representative and was elected. He soon became the leader of the new body of representatives and a power broker with which the administration needed to deal.

Madison's thwarted senatorial aspirations undoubtedly caused him to mend fences. In *The Federalist Papers*, Madison had argued for non-discrimination. As the leader of the Virginian delegation he switched positions as many Virginians wanted discrimination. They had seen first hand speculators in their backyards buying up the debt. Virginians also feared the growth of commercial cities\(^3\)\(^3\) and the loss of "planter power." Thus, Madison opposed the funding bills, in opposition to his friend and former ally, Hamilton.\(^3\)\(^3\) Madison came around in the Compromise of 1790 that resolved several of the nation's most difficult problems.\(^3\)\(^3\)

The Assumption Battle and the Compromise of 1790. Incorporating the assumption of the state debt and deciding the location of the capital city were critical decisions in the nation's history and perhaps its most important Compromise. The resolution of the debt issue and the nettlesome location of the capital strengthened the union and the economy. Had they been resolved differently, forces of disunion might have threatened the new nation. Happily, Congress passed legislation assuming the state debt at face value and approved the new locations for the capital—ten years in Philadelphia followed by permanent relocation to the banks of the Potomac—which favored the South and West.\(^3\)\(^3\)

Tied in with the non-discrimination issue was whether the state debt, totaling about $21.5 million, was to be assumed by the federal government.\(^3\)\(^3\) Hamilton's plans called for the assumption to treat all creditors with parity and make available more collateral for the bank-issue currency he was planning for the nation.\(^3\)\(^3\) The assumption issue did not break down along sectional lines. Some states in the North favored it; others opposed it. The same was true for the South. The division broke along the lines of states who had repaid the debt and those that did not. Debtor states would be bailed out by a federal windfall,

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330. Madison, along with Jefferson and Monroe, hated urban areas.
332. Id. at 314.
333. Id. at 325.
335. Id. at 306-07.
funded by those good states that had reduced or paid off the debt. The truth was a different matter; many of the states had reduced their debt by repayment with devalued currency or restructured obligations. Virginia fell into that camp. Virginians would also pay excise taxes on northern goods and imposts to pay the debt. They correctly foresaw a capital transfer to northern mercantile areas.

The location of the capital was also to be determined. The Southern states wanted it moved from urban New York with its influence of filthy lucre from commerce to a southern or more central location. Philadelphia was hankering for the permanent capital. Pennsylvanians also proposed locating the capital on the Susquehanna near present-day Harrisburg, the state capital. Some wanted it at the fall of the Delaware (Trenton, New Jersey). Southerners held out for a more southern location. Pennsylvanians and Virginians were willing to trade votes if they got what they wanted. A deal was in the air and a number of proposals were floating at the time of the historic dinner.

The Compromise would solve three issues: the discrimination issue, the assumption of state debt, and the capital location. Several Virginians whose districts bordered the Potomac switched their votes, as did some Congressmen from Pennsylvania. The Congress approved Philadelphia for the temporary capital for 10 years. The permanent location was the District of Columbia, in the South. The Pennsylvanians got the opportunity to convince the government to stay in Philadelphia. The South was awarded the new capital, in the wilderness near Washington's home at Mount Vernon. The union was strengthened by the Compromise as the South received its recognition as host of the new capital. Interested creditors were aligned to the federal government's fisc. Hamilton got his assumption and consolidation of the debt. Once the bills were passed, the value of the securities traded at par—evidencing confidence in the new government's fiscal plans and prospects for survival.

Conclusion. Misunderstanding abounds concerning the bloodsucking speculators in Revolutionary War debt. While there was much speculation in war debt, the reasons for the speculation were the fortune of war and the weakness of the securities. Popular wisdom has it that soldiers and suppliers received pennies on the dollar while sharpies reaped huge profits. The data supports that many holders of debt sold early when the War was not going well and that the "profiteers" reaped

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336. Id. at 307.
337. Id. at 320.
338. Id.
339. Id. at 329.
their reward many years later. When time value of money and risk is taken into account and understood, it can be seen that the speculators earned reasonable returns for their risks while providing much-needed liquidity to the wartime economy.

VI. THE WILD RIDE OF THE ROBBER BARONS—SPECULATION AND RAILROAD CONSTRUCTION.\textsuperscript{340}

A common picture of the Gilded Age is one of Robber Barons exacting the last iota of wealth from Americans. In his 1962 Foreword to The Robber Barons: The Great American Capitalists 1862-1901, Matthew Josephson describes Robber Barons in the following manner:

Those "kings" of railways, those monopolists of iron or pork, moreover founded dynastic families which Charles A. Beard once likened to old ducal families of feudal England.

The expanding America of the post-Civil war era was a paradise of freebooting capitalists, untrammeled and untaxed. They demanded always a free hand in the market, promising that in enriching themselves they would "build up the country" for the benefit of all people.\textsuperscript{341}

The Robber Baron image persists to this day and suggests that the nineteenth century capital markets were gamed to the detriment of society. This common wisdom belies the creation of the infrastructure that was the foundation of twentieth century America’s gigantic and successful economy. Josephson’s image of these moguls is not only inapposite, it is grossly erroneous. The robber barons of yore preyed upon travelers in mountain passes and exacted their unjust tolls. They were thugs, profiting from their seizure of the high ground. They were rent-seekers with pikes and battleaxes. American Robber Barons cut the mountain passes, dug canals, and dredged waterways, building a modern national infrastructure. This infrastructure unified the nation and created


\textsuperscript{341} MATTHEW JOSEPHSON, THE ROBBER BARONS: THE GREAT AMERICAN CAPITALISTS 1862-1901 v. (3rd Harcourt Brace Janovich 1962). So that there can be no doubt about the industrialist, the title page quotes Francis Bacon: "There are never wanting some persons of violent and undertaking natures, who, so they may have power and business, will take it at any costs." Id.
a national economy linked to the global economy of the nineteenth century. These "plunderers" also built the manufacturing plants, the mills, and the emporiums for the hungry consumers. In the post-Civil War era their raw capitalism fostered an industrial giant that created enormous national wealth and dramatically raised American living standards.

The nineteenth century saw massive investment in the United States, tremendous growth of businesses and capital stock, and an increase in the nation's wealth.

The American investment capital market developed in a form very similar to that of the European system, not only because Americans copied the Europeans, especially the British, but also because the European system served as a template. If the Americans wanted to borrow European finance capital, they would have to offer bonds and other securities similar to those on the European markets. They would have to deal with investment bankers like the Rothschilds or the Barings and conform to the requirements that these conservative bankers proposed.\(^3\)

Financial institutions were one key to this transformational growth.\(^4\) Foreign capital became important in the 1830s. By 1853, approximately $222 million was due to foreign capital investments (19\% of American securities).\(^5\) By 1856, the Secretary of the Treasury estimated that foreign investment in railroads amounted to $83 million.\(^6\) After 1850,346 railroads were:

[\text{A\text{\textit{b}le to raise substantial sums in the European market, and the bulk of foreign investment came after the Civil War. To raise large sums of capital, which reached millions of dollars per enterprise, railroad}


343. Banks, trust companies, insurance companies, investment banks, and brokerages were key intermediaries in the financial markets. Their concurrent development played a major role in the development of America's capital markets.

344. See Jean Strouse, Morgan: American Financier 71 (Random House 1999) [hereinafter Morgan].

345. Id.

promoters... turned mainly to... merchant-capitalists (in the United States), who were often to be found among the ranks of their own stockholders. The companies relied on these private capitalists to help them in placing railroad stocks and bonds, which... were the first industrial securities to be offered publicly in large volume. Indeed, they were virtually the only ones until the last decades of the nineteenth century:... in the United States, it was only in the 1890s that manufacturers turned to the stock exchange for outside funds.\textsuperscript{347}

The rise of national banks and a financial system that exported capital to regions and industries that used it wisely aided development. The transfer of funds from the capital-rich East to the West contributed to the growth of modern America. Railroads bound the nation together and spurred the growth of great metropolises such as New York and Chicago. The urbanization of great cities further accelerated economic growth and wealth creation as they supported specialization of work.\textsuperscript{348} The capital transfer helped to meet the demand for tools, housing, communication works, and other infrastructure needs.\textsuperscript{349}

Of all the burgeoning American industries, railroads profited from economies of scale, but they required high maintenance and high capital costs.\textsuperscript{350} The tremendous financial needs of the railroads mandated public equity markets. And, the markets had to be regular or investors would be scared off.\textsuperscript{351}

\textsuperscript{347} Id. at 34-35.
\textsuperscript{348} For a good history of this rail-driven urban growth, see SARAH H. GORDON, PASSAGE TO UNION: HOW THE RAILROAD TRANSFORMED AMERICAN LIFE, 1829-1929, 267-301 (Ivan R. Dee 1990).
\textsuperscript{349} See STUART W. BRUCHEY, ENTERPRISE: THE DYNAMIC ECONOMY OF A FREE PEOPLE 312 (Harvard University Press 1990).
\textsuperscript{350} See JOHN STEELE GORDON, THE SCARLET WOMAN OF WALL STREET: JAY GOULD, JIM FISK, CORNELIUS VANDERBILT, THE ERIE RAILWAY WARS AND THE BIRTH OF WALL STREET 124 (Weidenfeld & Nicolson 1988) [hereinafter ERIE RAILWAY WARS]. Railroad stocks were also good for Wall Street. By 1856, there were 360 railroad stocks traded, 985 bank stocks, hundreds of corporate stocks and municipals, as well as 75 insurance stocks. See JOHN STEELE GORDON, THE GREAT GAME: THE EMERGENCE OF WALL STREET AS A WORLD POWER 1653-2000, 87 (Schribner 1999) [hereinafter THE GREAT GAME]. The variety of investments permitted diversification and increased liquidity and safety, ultimately lowering the cost of capital. See generally Day, Investor Power & Liquidity, supra note 340.
\textsuperscript{351} In the period before the Civil War, many stocks, including industrials, were owned and traded locally. See Hugh Rockoff, Banking and Finance, 1789-1914, in THE CAMBRIDGE ECONOMIC HISTORY OF THE UNITED STATES, VOL. II, THE LONG NINETEENTH CENTURY 679 (Cambridge University Press 2000). Regional and local stock exchanges, trading in local companies sufficed for most industrial needs Bankers and securities dealers in their localities sold new issues. This worked well for the moderate capital needs before railroad construction. See CHARLES R. GEIST, WALL STREET: A HISTORY 72-73 (Oxford University Press 1997). England, of course, had a number of regional exchanges. There, local knowledge was crucial in vetting companies for new issues. See Franks, supra note 342, at 17-18.
The Erie Railway Wars. Few protections existed for minority shareholders in railroad corporations.\(^\text{352}\) "Not only did control groups quickly form, but in some cases the objective of these blockholders was primarily to manipulate the stock price of their corporation."\(^\text{353}\) Professor Coffee cites the example of the battle for control of the Erie Railroad—the "Scarlet Lady of Wall Street."\(^\text{354}\)

The Erie Railway Wars were emblematic of the legal, moral, and financial chaos of the times and in the markets.\(^\text{355}\) The battle for control of the Albany and Susquehanna (a road linking Binghamton to the Albany gateway to New England) at the annual board of directors' election featured Cornelius Vanderbilt and his allies against Jay Gould, Jim Fisk, and their associates. A young J. P. Morgan advised the New York Central faction (Vanderbilt’s forces). Shareholders, lawyers, employees, proxy holders, process servers, and thugs attended the meeting. The company treasurer was arrested for stealing the subscription books. After papers were served and two separate elections held, each with a different victor, the battle moved to the courts. Morgan had the case tried in the friendly confines of Delhi, NY, not Albany or New York City, and the trial judge ruled in his favor on all counts. The Court of Appeals, however, reversed the decision in its entirety, except on the critical issue of who had won the election.\(^\text{356}\) Grievous harm had

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352. During this time period English company law also failed to protect minority shareholders. See Franks, supra note 343, at 12. Franks et al. cite two important cases: Foss v. Harbottle, 67 E.R. 189 (1843) (English reports) (restricting minority shareholder suits for damages) and Harben v. Phillips, 23 Ch.D. 14 (1883) (Chancery Decisions) (no common law right for proxy voting). Both decisions would make it difficult for minority shareholders to vindicate their rights.


354. See id. at 27-28. For other sources, see Jay Gould's contemporary, CHARLES FRANCIS ADAMS, JR., CHAPTERS OF ERIE (1871) [hereinafter CHAPTERS OF ERIE]. See also ERIE RAILWAY WARS, supra note 350; MAURY KLEIN, THE LIFE AND LEGEND OF JAY GOULD 77-98 (Johns Hopkins University Press 1986) [hereinafter JAY GOULD]. While Jay Gould was generally thought of as a villain by most, his control of the Erie was salubrious, however. Before Gould, the physical plant was run-down and the debt was staggering. Gould’s astute management rendered the Erie a much stronger property. See JAY GOULD, supra, at 88-102, 115-16, 119-21.


356. The Susquehanna War litigation was both complex and protracted. People v. Albany & Susquehanna R.R. Co., 7 Abb. Pr. (n.s.) 265, 38 How. Pr. 228, 1 Lans. 308, 55 Barb. 344 (1869). Smith, J., sustained the election of the Ramsey board (Vanderbilt/Morgan-backed) and disallowed the election of the Church board (Fisk/Gould-backed) on the grounds of fraud. The Fisk directors appealed Judge Smith's decision. The General Term of the Supreme Court sustained the Ramsey Board election and vacated much of
been done. Jeremiah Black, a former Attorney General of the United States, wrote:

A moment's attention to this will . . . show that the confusion, misapprehension, and total failure of justice which took place in these cases, while they could not possibly have happened in any other country, could scarcely have been avoided in New York . . . all parties were fighting under the ensign of public authority. It was judicial power subverting order and breaking the peace; it was law on a rampage; it was justice bedeviled; in one word, it was the New York Code in full operation.\(^{357}\)

*Harper's Weekly* intoned on point that the judiciary must be reformed:

If scenes of anarchy are to be avoided, if New York is to retain its preeminence as the commercial metropolis of the country, if foreign capital is to be retained here, something must be done to prevent, in the future, the unseemly abuses of power into which certain of our state judges have been betrayed in the past.\(^{358}\)

Thuggery did not end with the Susquehanna War. Consider the plight of foreign investors with the audacity to entertain lawsuits in New York to enforce their rights. English shareholders, who owned 450,000 of the 780,000 shares issued and outstanding (and hence, control of the company in a society ruled by law), were purposely prevented from voting for their slate of directors in the 1870 board election. Gould's forces won by a landslide vote of 304,938 to 3,000!\(^{359}\) The English shareholders then went to both state and federal court to overturn the fraudulent election. In July 1871, a year after they began their odyssey, the investors obtained a federal district court judgment in their favor.\(^{360}\)

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\(^{357}\) the Smith decision on technical grounds dealing with the right to a jury trial and costs. People v. Albany & S.R. Co., 5 Lans. 25 (N.Y.Sup.Gen.Term 1871). All parties resorted to the Court of Appeals, which eventually sustained the Smith finding of fraudulent conduct by the Fisk/Gould faction. Albany & Susquehanna, 57 N.Y. 161 (1874). The Susquehanna Wars litigation had come to an end, almost as an anticlimax. The defeat of Fisk and Gould in the 1869 Supreme Court litigation left the Ramsey board in control. In February 1870 it leased the railroad to the Hudson & Delaware Canal Company (the predecessor to the Delaware & Hudson Railroad), ending the ability of the Erie to mount a challenge at the New York Central's Albany gateway. *See Chapters Of The Erie*, supra note 354, at 190.

\(^{358}\) Id. at 252-53, 253 n.23 (citing Jeremiah S. Black, untitled article, GALAXY MAGAZINE, March, 1872).

\(^{359}\) Id. at 299-300. At the time, Gould and his allies controlled the Erie. They accepted the money from the English investors, but never officially transferred the stock on the company's books to the investors or their representatives, leaving them without the right to vote in the election.

\(^{360}\) There are four federal cases in this critical litigation to vindicate the rights of English shareholders. The key case, Erie R.R. Co. v. Heath, et al., 8 F. Cas. 762
However, they had to wait until December 1871, after yet another fraudulent election, before Gould would finally be compelled to turn over the stock to them. This battle cost the investors $25,000 and the loss of control for well over a year. Foreign investors also turned to the corrupt legislature, which refused to repeal the Classification Act, ostensibly because of the threat of foreign ownership. Such shenanigans surely depressed stock prices, harmed all investors, and raised the cost of capital.

In the absence of any federal regulations, different laws and judicial rulings from separate states often came into conflict with one another, but the real point is that investors were vulnerable less because of the substantive inadequacy of American corporate law itself than because of the lack of enforcement mechanisms and the prospect of corruption. Thus, in the nineteenth century, it was very difficult for investors to enforce their contract rights through litigation (or even lobbying for regulation). The transaction costs of a Londoner or San Franciscan

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(S.D.N.Y. 1871) (No. 4514), was decided in July 1871 and ordered Gould's agents to register the stock certificates in the names of their English owners, giving them the franchise. Erie R.R. Co. v. Heath, et al., 8 F. Cas. 761 (S.D.N.Y. 1871) (No. 4513), was a mandamus action ordering Gould's agents to produce the stock transfer book and other corporate records. Erie R.R. Co. v. Heath, et al., 8 F. Cas. 763 (S.D.N.Y. 1871) (No. 4515), denied the petition of Gould's agents for control of unregistered stock certificates. Finally, Erie R.R. Co. v. Heath, et al., 8 F. Cas. 766 (S.D.N.Y. 1871) (No. 4516), ordered payment to the master for supervising recording of stock certificates in the names of their rightful owners.

361. In the Gilded Age, New York legislators were paid the princely sum of $3.00 per day. These Solons supplemented their salary by taking bribes to pass legislation. The rate on important bills ranged between $2,000 and $3,000. ERIE RAILWAY WARS, supra note 350, at 185. Bribes were the only way to do business with such a corrupt legislature and legislation was required for railroad charters and key amendments to charters, such as additional routes, etc.

362. The Erie Classification Act of 1869 was enacted to make it difficult to dislodge directors by shareholder vote. The act provided for classification of directors into five groups, staggering their election over five years. See JAY GOULD, supra note 354, at 98. (Modern practice permits only three tiers of classification. Management still employs classified boards to thwart hostile takeovers.)

Gould's inspiration was the Pennsylvania classification act, created to rebuff his attack on the Pennsylvania Railroad. The Erie Classification Act perpetuated Gould's control at a time when the legislature was poised to remove its stock printing privileges that had been employed to great success in the past. See ERIE RAILWAY WARS, supra note 350, at 228, 230.

363. Id. at 299-300.


365. Domestically the nation witnessed a rapid acceleration of the trend to economic concentration that had begun after the Civil War. See WILLIAM H. REHNQUIST, THE SUPREME COURT 103(Knopf new ed. 2001). In the last third of the nineteenth century the corporation emerged as the dominant form of industrial organization in the United States, so that by 1890, 65% of the goods manufactured in the country were turned out by corporations, and by 1900, 79% were. Id. At the same time that the percentage of
litigating in New York or Boston were steep. There was also a substantial “home court advantage.” With no federal regulation of the capital markets and difficulty enforcing substantive rights, another monitoring device was required to attract capital and bring confidence to investors.\textsuperscript{366}

The Morgans [father and son—ed.] hated this kind of warfare, which played havoc with national financial markets and left their client-investors holding worthless paper. Hoping to transform railroad securities from high-risk speculations into stable, long-term investments, they and a few other bankers... attempted to discipline the industry. The fact that railroads continually needed huge infusions of capital put the bankers in a powerful position.\textsuperscript{367}

Pierpont “saw himself as a proxy for honorable European and American investors, a tool of transcendent purpose representing the sound men on Wall Street and in the City.”\textsuperscript{368} Pierpont spent much of his life trying to consolidate railroads, regularize rates, and manage ruinous competition.\textsuperscript{369} Morgan’s quest to rationalize and consolidate the trunk lines was quashed in \textit{Northern Securities Co. v. United States}.\textsuperscript{370} The Sherman Antitrust Act now applied to stock ownership. The Northern Securities Company, holding the stock of three major transcontinental railroads, was dissolved!

The Erie Wars were costly; they gave all participants a black eye. They also helped to fix the rapacious image of robber barons in the public’s eye.

corporate producers was thus increasing, the stock of many large corporations became publicly held and the ownership was so dispersed that no one stockholder had much of a say in how the corporation was operated. \textit{Id.} The result of this phenomenon was that a class of corporate managers grew up: While they were legally responsible to the stockholders, that latter body was so numerous that many important corporate decisions were made by the managers themselves without any thought of obtaining advance authorization from the stockholders. \textit{Id.}

366. Substantive enforcement rights were also hard to come by in England. \textit{See} Franks, \textit{supra} note 342, at 12.

367. \textit{Morgan, supra} note 344, at 134.


369. \textit{Morgan, supra} note 344, at 198. The heads of the Wabash, New York Central, and Erie in 1880 met “‘with a view of making permanent running arrangements’—that is, agreeing to divide up traffic rather than wage war.” \textit{Id.} (The Wabash and Erie were Gould roads!)

370. 193 U.S. 197 (1904).
Norms to the Rescue: The Role of the Gatekeepers. A fair amount of recent corporate governance literature has dealt with norms and other non-legal mechanisms of enforcement and regulation. There is much to be said for their use. An argument can be made that lessons of the nineteenth century cannot apply to the complex markets of today because of the size and diversity of the "community." J.P. Morgan and others could effectively ostracize malfeasors because they were club mates and prep school chums. The community was also more homogenous; the ethics and norms were more accepted and less susceptible to challenge. I make the analogy to the ethical rules for lawyers.

The Role of Investment Bankers. In such a chaotic legal environment filled with corruption, investment banks had to create a system of governance that would assure foreign investors that their investments would be secure. J. P. Morgan & Co. "pioneered" the technique of placing a partner of the investment firm on the board of the corporation. Morgan and other underwriters "first imposed the discipline of both periodic and inclusive financial reports" while "Wall Street... required the accountants to certify these reports." During the last two decades of the nineteenth century, virtually every major United States railroad developed close ties with one or more U.S. investment banking firms, and the practice of partners from investment banks and officers of commercial banks going on the railroad's board became institutionalized. A major investment banking firm on a corporation's board "offered mutual advantages both to the minority investors and to the corporate management by protecting both from the prospect of a stealth attack by a corporate raider seeking to acquire

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371. Portions of this section were adapted from Partner to Plutocrat, supra note 355, at 560-68. Norms, informal markets and monitoring appear to have reined in some of the agency problems in England during the nineteenth and twentieth centuries before the advent of "modern" securities regulation. See generally Franks, supra note 342.


373. "In 1879... when William Vanderbilt asked the younger Morgan to help sell some securities necessary to get the New York Central through a financial squeeze, Morgan sold securities in England and obtained the right to select a director, initiating a pattern that would remake the American economic structure." ROY, supra note 342, at 133; see also The Rise of Dispersed Ownership, supra note 353, at 29-30.

374. ERIE RAILWAY WARS, supra note 350, at 291.

control without paying a control premium.” 376 J. P. Morgan and other investment bankers consequently increased the importance of Wall Street to the world’s economy and provided an atmosphere of solidity and integrity that the markets needed. 377

A similar transfer of power to the market did not take place in Europe. In America, one of the practices pioneered on a large scale was underwriting. Jay Cooke & Company employed standard underwriting when it used $2 million of its funds to underwrite Pennsylvania Railroad bonds. 378 Cooke bought the bonds from the railroad and then sold them to the public, guaranteeing the client the funds that it needed. This was the first underwriting of a commercial company. Its ramifications were huge because underwriting guaranteed client firms sources of reliable funds and assured investors frightened by panics. 379

In Europe, financial institutions like J.P. Morgan either did not exist or were too small to underwrite such large equity risks. 380 In addition, they represented far fewer foreign and domestic clients. 381 Moreover, there was no great merger wave as there was in the United States from 1895 to 1903 after the passage of the Sherman Antitrust Act of 1890. 382 The Act “prohibited price-fixing and collusion among competitors, thereby outlawing the cartel-like structure that characterized many American industries.” 383 In order to circumvent this prohibition, companies engaged in horizontal mergers to create monopolies, which could better control prices. 384 For example, in 1901, J. P. Morgan orchestrated the merger of eight competing steel companies to form U.S. Steel, the largest corporation in the world at the time. 385 There was no similar incentive for British companies to merge in the same fashion.

376. For example, J.P. Morgan in the 1869 “Susquehanna War.” See ERIE RAILWAY WARS, supra note 350, at 31-32.
378. See GEISST, supra note 351, at 74.
379. Id.
380. The Rise of Dispersed Ownership, supra note 353, at 32.
381. Id. at 33.
384. Id. at 33.
385. See id. It is interesting in retrospect to wonder why the creation of the gigantic United States Steel Corporation was not challenged under the Sherman Act. Perhaps the best answer is that this combination occurred before the United States government began aggressively using its powers under the Act. President Theodore Roosevelt, the “Trust Buster,” sought successfully to dissolve the Northern Securities Company, which held the stock of three major trunk lines. Northern Securities Co. v. United States, 193 U.S. 197 (1904), was a 5-4 decision that put teeth into the Act.
especially because British courts were not aggressive in the prohibition of cartels or price-fixing. 386

The New York Stock Exchange as Guardian of the Public Investor. 387 Three important points should be noted about the early history of the New York Stock Exchange: 1) activism in governance, such as that of the NYSE, was not the norm for other stock exchanges around the world; 388 2) the NYSE, unlike with debt securities, “did not possess a de facto monopoly position in trading equity securities as of the late nineteenth century;” 389 and 3) the NYSE’s activism “seems directly attributable to its organizational structure and its competitive position.” 390 Before 1900, “the Boston Stock Exchange was the principal market for industrial securities,” due to the underwriting of New England textile mills and early railroad corporations. 391

There were several key differences between the NYSE and the London Stock Exchange (LSE). The first difference was the ability of new companies to be listed on the exchange. 392 The NYSE was a closed system, while the LSE was wide open. 393 For example, “between 1850 and 1905, the membership of the LSE rose from 864 to 5,567. In sharp contrast, the membership of the NYSE stayed constant between 1879 and 1914 at 1,100.” 394 A company could only enter the NYSE by buying the

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386. See The Rise of Dispersed Ownership, supra note 353, at 33.
387. Davis and Cull found that investors in companies on the NYSE were buying a signal of quality. The cartel policies made the listed companies more expensive but also provided screening, as did the par value rule. See Davis & Cull, supra note 372, at 777, 783.

Another paradox found in this interesting market is the NYSE’s use of its monopoly power that ultimately fosters competitive and diversified markets with a high degree of transparency. The exclusive “branding” described in this section was good for its business. Its salutary side effect was that it raised the quality of the market. The London exchange, as we will see, had the virtue of competition; in practice its standards were considerably lower. 388. See The Rise of Dispersed Ownership, supra note 353, at 34.
389. Id.
390. Id.
391. Id.
392. Id. at 36.
393. Id. at 35.
394. Id. at 34-35.

[Up] to the twentieth century the fear of being seen as a monopoly and provoking intervention, helped to maintain an open policy on admissions to the London Stock Exchange, along with the interest of the proprietors in increasing income and discouraging competition. Between 1886 and 1903 a total of 3,854 people applied for membership . . . and only 39, or 1 per cent, were rejected. RANALD C. MICHIE, THE LONDON STOCK EXCHANGE: A HISTORY 84 (Oxford University Press 1999) [hereinafter MICHIE, THE LONDON STOCK EXCHANGE]. The New York Stock Exchange used the cost of membership to maintain its exclusivity. In 1904 it cost just £120 to be a member of the London exchange; New York seats were available for
Unlike the LSE's open system, the closed system of the NYSE provided several incentives: (1) "the growth of large, diversified financial services firms (such as J. P. Morgan & Co.)"; (2) the favoring of self-regulation to protect the value of a member's seat; and (3) the fragmentation of United States equity markets into higher and lower quality tiers, which promoted competition between exchanges.

A second difference between the NYSE and LSE was the membership rules:

NYSE member firms could raise capital from outsiders—known as "special partners"—and not all partners in a firm were required to be members of the exchange. In contrast, the LSE required all partners in a firm to be members of the exchange and further prohibited every member from engaging in any other businesses.

The NYSE's rules allowed American firms to grow much larger, with better capitalization, than their British counterparts (at least five times larger).

A third difference was each exchange's position on the issue of "competitive versus fixed brokerage commissions." Into the late nineteenth century, the NYSE had fixed commissions, while the LSE permitted variable commissions. The NYSE's fixed commission policy increased the cost of trading and generated lower trading volumes, driving the lower priced stocks off of the exchange, which gave the general public the perception that such stocks were lower in quality and higher in risk. The policy also forced the NYSE to "limit itself to a

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396. Id.
397. Id.
398. See id. The NYSE specialized in top-tier firms (and still does). Therefore, it vetted the quality of firms for the dispersed investors.
399. Id. On the surface, the LSE seems more attuned with contemporary notions of "free" markets (more access, lower costs of access, competitive commissions, etc.). This notion makes perfect sense in the Information Age with the Internet and federal and exchange disclosure requirements. However, one must remember that the nineteenth century did not have these tools and markets were susceptible to misinformation by sharp operators. Therefore, the monitoring performed by investment bankers and the NYSE was most beneficial.
400. See The Rise of Dispersed Ownership, supra note 353, at 36-37.
401. Id. at 35.
402. Id.
403. Another consequence of the New York Stock Exchanges' fee schedule was that companies with higher par were listed on it. Low par value companies such as many mining and manufacturing concerns were thus excluded. Over time, the NYSE's deliberate policy of selection and exclusion resulted in the NYSE companies having a
high-volume, high-quality business” in order to meet minimum commissions. The limitation also came out of fear that “listing high-volatility stocks would invite predictable insolvencies among its members” (e.g., mining or petroleum companies). Therefore, the NYSE regularly rejected issuer applications, “either because the issuer lacked an adequate earnings track record, had insufficient assets, or was in a high-risk industry.”

Finally, one of the most important developments of the NYSE was its mandatory disclosure policy for members, even in the absence of any formal law. In fact, “some financial historians date the advent of modern financial reporting from 1900, not from 1933, when the federal securities laws were first adopted.” Serious self-regulation may actually have been inaugurated somewhat earlier following the Erie Wars debacle. Wall Street realized that without supervision and monitoring, it could lose its position in the global capital markets. Its close monitoring acted as a functional equivalent for future securities regulations, something not present with the LSE. One of the most important reforms was proscribing directors from selling their firms short. Short-selling by directors and other insiders personified by the likes of Daniel Drew, the “Speculative Director” of the Erie, destabilized the market and led reasonable investors to conclude the market was rigged. Honesty and such regulation were good for business—a corrupt market drives away investors who fear losing their investments to fraud, countenanced by corrupt brokers. An honest market boosts sales and commissions and leads to increased liquidity and investment. Self-regulation would help New York to surpass London as the dominant capital market within two generations.

Consequently, by the end of the nineteenth century, the investment banking firms, led by J. P. Morgan & Co. and the NYSE, developed successful methods of monitoring corporate activity and protecting dispersed shareholders from predatory practices of speculators and Wall Street insiders.

market capitalization five times greater than those on the LSE. See Michie, The London Stock Exchange, supra note 394, at 177-85. Quotation on the NYSE gave listed firms a premium that enabled them to gobble up smaller firms in mergers. Id. at 186.

404. Id. at 36.
405. Id. at 39.
407. Id. at 37.
409. Id. at 278.
410. Id. at 118.
411. Id. at 213.
VII. FILM AND THE DECADE OF GREED

The last two decades of the twentieth century in the United States were decades of unsurpassed growth and prosperity. The stock market boomed. Computers, the Internet, and other technologies drove the market to dizzying heights. Millions of jobs were created and poverty levels shrank. Yet, the 1980s have been viewed as the Decade of Greed. In addition, the takeover boom that generated much of the expansion is seen as busting up much of corporate America with devastating effects upon the economy. This article will conclude with thoughts about how the images from two popular films—Other People’s Money (1991) and Oliver Stone’s Wall Street (1987)—shaped the perceptions of speculation and Wall Street.

Professor Larry Ribstein in Wall Street and Vine: Hollywood’s View of Business states: “Capitalists in films are villains because they see businesses as simply fungible sources of monetary gain, not places where people work, live and create.” In his article, Professor Ribstein argues that “[f]ilmmakers’ portrayal of business is significant because films have persuasive power that tips the political balance toward business regulation.” Ribstein notes Hitler understood the power of film.

Films are powerful, at least in their traditional theatrical presentation, because they can create a persuasive illusion on a large screen that dominates the audience’s minds for two hours or more. Unlike television, the audience must leave home, sit in a darkened theater,
and participate in a communal response to the film with the other strangers in the audience. Unlike with books and home video, the images reel forward relentlessly, giving the audience little opportunity to analyze what they are seeing.\footnote{421}

More importantly, films generally can alter the political equilibrium if they consistently express a coherent political position.\ldots\ [F]ilmmakers consistently express distrust of capitalists.\ldots\ [F]ilms implicitly take the side of those who advocate bringing non-shareholder “stakeholders” into corporate governance and calling on managers to be more socially responsible. By instilling such communitarian attitudes in audiences of voters, films lower the lobbying costs of stakeholder groups and commensurately raise those of groups favoring shareholder wealth maximization.\footnote{422}

Society’s apprehension of corporate takeovers and Hollywood’s distaste for the 1980s was vividly seen in \textit{Wall Street} and \textit{Other People’s Money}—both highly critical of \textit{Barbarians at the Gate}.\footnote{423} Both films focused on the troubling aspects of finance capitalism\footnote{424} that appeared to expose weaknesses in American business, culture and ethics.\footnote{425}

\begin{itemize}
\item \textit{Barbarians at the Gate} is the compelling story of the then-largest corporate takeover in American history, the $25 billion LBO of an iconic American corporation. It is a must read for anyone interested in the 1980 takeover battles. Also highly recommended is \textit{Connie Bruck, The Predators’ Ball: The Junk-Bond Raiders and the Man Who Staked Them} (1988) (the story of takeovers and Michael Milken’s success at Drexel Burnham). \textit{See also Jesse Kornbluth, Highly Confidant: The Crime and Punishment of Michael Milken} (Harper Collins 1992).
\begin{quotation}
[T]he giant modern American corporation was created for financial reasons during the merger wave of 1897 to 1903, primarily for the sake of promoters’ profits. The consequences of this age of consolidation were profound for the course of American capitalism. As Thorstein Veblen predicted, it resulted in a capitalism that privileged finance over business and, indeed, finance at the expense of business. Since the primary product of the corporation created during this period was capital stock, not industrial goods, the merger wave created the modern securities market just as a prosperous middle class with the means to invest was emerging at the beginning of the Progressive Era. That class internalized stock trading as a substitute for the land and small proprietorships underlying the earlier, and now gone, American Jeffersonian
\end{quotation}
\end{itemize}
Let’s Go to the Movies. . . .

Other People’s Money is the story of the takeover of New England Wire and Cable, a Rust Belt Industry, by money-hungry Larry “the Liquidator” Garfield (Danny DeVito). Money gives Garfield, a pretty unlovable cur, “unconditional acceptance.” Garfield makes his money liquidating “unproductive” companies. His target, New England Wire, is managed by Jorgenson (Gregory Peck), a decent man who cares for his town and workers. Garfield’s opening overture is abrasive—he tells Jorgenson that New England Wire “is worth more dead than alive.” Jorgenson retains his estranged daughter, a top-drawer Wall Street lawyer, as counsel. She advises that it makes sense to re-incorporate in Delaware (much more friendly to management). This is good advice. Delaware has Unocal and Paramount Commc’ns., Inc. v. Time, Inc. that, taken together, would have permitted New England Wire to “Just Say No.” That is, at least until a White Knight appeared. But Jorgenson’s morality will not permit him to consider re-incorporation or “greenmail”—both of which may have saved the company.

Garfield and New England Wire hunker down for battle, with both breaking the Standstill Agreement that required them to desist from any more purchases of stock during the duration of the agreement.

The climactic scene takes place at the shareholders meeting at the plant and headquarters. Jorgenson and Garfield have both rallied their forces. Jorgenson paints a dark picture of Garfield and his minions. Garfield is: “the entrepreneur of post industrial America, playing God with other people’s money. . . . He creates nothing, builds nothing, runs nothing and in his wake leaves nothing but a blizzard of paper to cover the pain.” Garfield will destroy a company that could be used by America to rebuild its infrastructure. Jorgenson brings his people to

ideal. Stock became the new property. As such it gradually was pushed to the forefront of American business life.

Id. (see Abstract).

425. BARBARIANS AT THE GATE, supra note 423, at 11.
427. Id.
428. Id.
430. 571 A.2d 1140 (Del. 1990).
433. Id.
434. Id.
435. Id. at 13-14.
their feet when he castigates “murder in the name of maximizing shareholder value, substituting dollar bills where a conscience should be.... A company is more than money. Here we build, we care about people.”

Garfield then mounts the stage. Garfield likens Jorgenson’s speech to a funeral oration:

This company is dead. I didn’t kill it; it was dead when I got here. . . . This business is dead, let’s have the decency to sign the death certificate and invest in the future. As for the employees, Who cares? They didn’t care about you . . . . Employee wages went up way more than stock. Who cares? Me. I’m your only friend. I’m making you money; that’s the only reason you became shareholders. You want to make money, invest somewhere else, create new jobs.

Garfield prevails; New England Wire will be broken up and sold for more than it was worth as a going concern. But deus ex machina—Kate, the company’s lawyer, salvages the company by proposing an employee stock option plan (“ESOP”). The employees will buy the corporation, retool, and make airbags for autos.

*Other People’s Money* shows corporate America looting its plants and cheerfully feasting on its carcasses. Little shrift is given to the sound economics of Garfield’s position and the benefits shareholders (and society) reap from Schumpeter’s “creative destruction” and restructuring. And, the film has a happy ending because Garfield’s love for Kate conquers all and he accedes to the ESOP deal.

Garfield is sweetness and light to the demonic character of Gordon Gekko (Michael Douglas) in *Wall Street*. Gekko is a corporate raider par excellence. He briskly buys and sells control of companies with no interest in their operation. He changes management, quickly resells his prize or breaks it up. He restructures and holds some companies, using a pool of investors (similar to KKR). Gekko is financed by Wall Street—money center banks, insurance companies, pension funds, and other institutional investors.

Gekko’s role as a legitimate speculator is seen in the takeover of Teldar Paper Company. His corruption and the insider trading that is his downfall runs throughout all of his major transactions—the plain

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436. *Id.*
437. *Id.* at 14.
438. *Id.*
439. *Id.*
440. *Id.* This is an “ESOP” Fable. ESOP’s have not been wildly successful at saving struggling businesses.
implication is that takeover artists are also criminals.\textsuperscript{441} The important question is what the Teldar deal suggested about corporate America.

Gekko initiated his play for Teldar by purchasing enough stock to block takeovers and obtain access to corporate records.\textsuperscript{442} Gekko wants to spring on Teldar and employ an illegal “parking” scheme to acquire more than five percent of Teldar’s shares. Gekko was perhaps using undisclosed agents to “warehouse” the stock.\textsuperscript{443}

The classic scene in the film is the shareholders meeting where Gekko rails against the 32 vice presidents and the corporate waste they represent. He announces that he is the largest stockholder in the company and proclaims his values in his “Greed is Good” speech. Gekko touts the same values later espoused by Garfield. The board counters, asking its shareholders to re-organize the company (probably putting in a dual-class voting stock to repel takeovers).\textsuperscript{444} Ultimately, Gekko appears to have bought sufficient stock to have replaced the board. He is running the company, but not quite so profitably as he once thought.

Gekko is classically Armani-sleazy. He is ruthless. He manipulates people. He sleeps around. He destroys companies. He is betrayed by Bud Fox (Charlie Sheen), his corrupt protégé. He goes to jail.

Is this corporate America? Certainly the Gekkos did exist in the likes of Ivan Boesky.\textsuperscript{445} However, they are not the whole story, and certainly not the most important part of the story. The great productivity and unprecedented increase in wealth and prosperity of the last 25 years could not have occurred if Wall Street were filled with rotters. Films and popular culture ignore both the performance of markets and the benefits of trade-producing gains. First, consider a description of how markets operate:

Moreover, the stock markets, far from the perverse gods of film fiction, fairly accurately reflect firms’ value. The “efficient capital markets hypothesis” holds that share prices move in relation to available information about the firms whose shares are trading. Market prices reflect not only what the firms publicly disclose, but

\textsuperscript{441} \textit{Id.} at 11.
\textsuperscript{442} \textit{See} DALE A. OESTERLE, \textsc{Teacher’s Manual for the Law of Mergers and Acquisitions} 200 (3d ed., Thomson West 2005).
\textsuperscript{443} \textit{See id.} at 201. In warehousing, Gekko wanted to push the price upward to force the managers to acquiesce to a takeover. If the managers had blocked the deal, the stock would have slumped and they would have faced shareholder ire.
\textsuperscript{444} \textit{Id.}
\textsuperscript{445} \textit{See} JAMES B. STEWART, \textit{Den of Thieves} (1991) (The story of Wall Street corruption featuring Michael Milken, Ivan Boesky, Martin Siegel, and Dennis Levine. The heroic lead is played by none other than Ruddy Giuliani, the crusading United States Attorney for the Southern District of New York.).
also a significant amount of inside information that trading filters into share prices. Prices also aggregate many educated and uneducated guesses into a formidable collective wisdom. It follows that takeover artists like Gordon Gekko or Larry Garfield cannot make money on the stock they buy unless they can make the company more valuable. Indeed, speculators perform a service because their trades assist the market in pricing the securities it trades.446

That brings us to trade. Modern economies and markets are not a "zero sum game." Trade and markets produce benefits that are conferred upon the parties to the deal. Professor Ribstein notes that filmmakers believe that "[f]irms' commitment to the bottom line of profits therefore comes at society's cost."447 He continues:

This view may have held in the primitive one-on-one pre-capitalist markets. However, for several reasons the view is inherently implausible in modern markets. First, no firm can stay in business without conferring some benefits on those with whom they deal—that is, buyers' or sellers' surplus. If no one received such benefits, why would the dealings continue?448

Even if markets destroy, liquidation and reorganization recycle capital and employ it at a more optimal level, benefiting society.449

VIII. CONCLUSION

Speculators often appear to be unsavory, despised characters. They have been caricatured in political cartoons since at least Tulip Mania. Popular images have speculators preying on markets, destroying property and lives. This is a recurrent theme in art, literature and politics.

We have seen that speculators in seventeenth century Holland financed overseas trade as well as the fantastic tulip market (tulips are still an import/export of that nation). In the early capital markets of 1720, speculators are reputed to have brought the English economy to its knees with the collapse of the South Sea Bubble. At the end of the eighteenth century, in her former colony, speculators were called bloodsuckers for providing a market for the fallen Revolutionary War debt—yet this very same debt and their investment in it were to provide the capital markets that would put the new American nation on a very sound financial footing.

The specter haunts the Gilded Age in the likes of Gould, Vanderbilt and others who eventually bound America from coast to coast in ribbons

446. Wall Street and Vine, supra note 417, at 55-56.
447. Id. at 56.
448. Id.
449. See id. at 57.
of steel. The twentieth century closed with the Decade of Greed and the Dot-Com Boom. Again, speculators were vilified in the press, the halls of Congress and the arts. Yet speculators engaged in arbitrage, provided the capital markets with liquidity critical to the stock market boom and economic prosperity. Speculators and speculation in markets are necessary and not necessarily evil.

**APPENDIX 1**

**South Sea Company Debt Conversion**
The Main Elements of the South Sea Company Conversion

1. The South Sea Company offered to buy all outstanding long annuities, short annuities and redeemable debts, totaling approximately £31.5 million in exchange for its own stock.

2. The Company agreed to pay £4 million unconditionally to the government plus a further conditional sum equivalent to 4.5 year's purchase on all irredeemable debts exchanged by 1 March 1722, together with a penalty equivalent to one year's purchase (up to £666,000) on all long annuities not exchanged by then, the maximum sum payable to the government under all headings being just under £7.6 million.

3. The government would credit the Company with an increase of £31.5 million both in its nominal capital and in the amount owed to it by the state if all the subscribable debts were exchanged. The basis on which debts were capitalised for this purpose was: 20 years' purchase of long annuities, 14 years for the short and par value for the redeemables.

4. The government agreed to pay interest on the increased debt partly at 5 percent and partly at 4 percent until midsummer 1727 when interest on all debt owed to the Company would be reduced to 4 percent.

5. The government could start to pay off debts subscribed into the South Sea Company from midsummer 1727, that is, the entire debt had become redeemable.

6. The government could lend the Company £1 million in Exchequer Bills as immediate source of liquidity.\(^450\)

\(^{450}\) This text describing the scheme is found in DALE, supra note 93, at 102-08.