This article will explore how the creation of early capital markets was viewed by those in the throes of dynamic economic change. It will look at the rise of modern markets in the Netherlands (during the 17th century) and England (during the early 18th century).

During this period of approximately 100 years, the economies of Northwest Europe underwent a fundamental change as domestic and international trade burgeoned. The Commercial and Financial Revolutions were underway. Land, which had been the primary locus of production, wealth and status, suddenly found itself in strenuous competition with banknotes, joint-stock shares, futures, and other newfangled-forms of investments circulating in urban centers. The new paper currency and other forms of intangible property funded new commercial enterprises, created vast amounts of new wealth, and threatened the status quo.

The article will use Tulip Mania and the South Sea Company Bubble to illustrate the threats posed by the new forms of property and new economic relationships. It will rely on contemporary accounts, current economic history and research, and works of fiction that capture the mores...
and psychology of the new markets. And it will show how
the perceptions of people 400 years ago still influence our
view of capital markets.

I. INTRODUCTION

My title for this article was inspired by “A Conspiracy of Paper,”
by David Liss, a recent work of fiction set in the South Sea Bubble in
1720. Mr. Liss did a superb job of capturing the rising capital markets in
England and the Netherlands. He had a strong feel for character, society,
and especially finance. I thought it would be interesting to see how
contemporary accounts of the new markets squared with their respective
financial, political, and economic realities; hence, this essay.

In Europe in the seventeenth and eighteenth centuries the rise of the
capital markets threatened the status quo and helped change the manner in
which society thought about property rights, commerce, and investment.
Feudalism has waned. Nation states are on the rise. The commercial
activities of merchants in the late middle ages have spawned nascent capital
markets in Bruges, Amsterdam, Antwerp, Paris, and London. Agrarian
society and land are becoming less important. Merchant classes arise and
the wealth of states becomes increasingly tied to commerce, industry and
trade. Large pools of money are needed to fund ever more expensive wars,
overseas conquest and colonies, and new industries. The need for ever
more money strains specie-backed finance and gives rise to extensive use of
paper money in Western Europe. New technologies and new products
result from expanded commerce.

The new money and wealth causes creative individuals like John
Law to theorize about money and its relationship to commerce and industry.
This new wealth creates a middle class that threatens traditional power and

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2 David Liss, A Conspiracy of Paper (2000). Liss’s works gives a real feel for the
dramatic tensions brought about by the rise of financial markets. In addition to telling
good detective stories, his understanding of finance, politics, and culture is first-rate.


4 The London capital markets were filled with “projects” and “projectors” who
promoted useful technologies such as canals. Others promoted flim-flam and frauds.
In Angliae Tutamen, the outburst of speculation was attributed to the
character of the English nation, which runs a madding after new
Inventions, Whims and Projects: And this unhappy Ingredient my
dear Country-men have in their Tempers, they are violent, and
prosecute their Projects eagerly for a time, but, not meeting with
Success, they give over, and abandon all Hopes of ever doing good.

Edward Chancellor, Devil Take the Hindmost: A History of Financial
the Hindmost]. See also infra notes 189-213 and accompanying text.
prerogatives—merchants can find themselves considerably richer than nobles and the landed gentry. There is a mystery to the new. Proponents of new fangled investments and the wealth they generate often conflict with representatives of the conservative, old order. When the markets crashed, as they appeared to in the Tulip Craze and did in the Mississippi and South Sea Bubbles, society often rejoiced in *schadenfreude*. The *parvenus* and *nouveau riche* merchants, dabblers, stock jobbers and worst had received their just desserts.

This article details Tulip Mania and the South Sea Bubble. It explains the structure of the markets and describes the investment scheme, paying attention to the finance, economics, law, and societal concerns at play. It comments upon the market fundamentals and the structure of the enterprises. It then contrasts the way the capital markets, investors, and the investments themselves were perceived in art, commentary, and literature. It concludes that many of the contemporary assessments captured the mania of the period and the excitement and disturbance caused by the new markets and investments. These assessments help usher in many of our modern perceptions of markets and business. These stereotypes and caricatures persist to this day, despite the fact that many of the original observations and assessments were indeed faulty.

II. **Tulip Mania: Were the Dutch Mad?**

A. **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 had undergone a financial revolution creating the first modern financial system. The Dutch financial system contained all the requirements for modernity. It had a system of public finance and public debt that was managed efficiently. Holland enjoyed sound money. It possessed a banking system and a central

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7 Richard Sylla, Henry Kaufman Professor of The History of Financial Institutions and Markets and Professor of Economics, Address at a Conference on Early Securities Markets at Humboldt University in Berlin, Germany (October 15-16, 2004) (notes on file with author).
The Netherlands had a securities market\(^8\) 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.\(^9\)

Because of pioneering in shipping, trade, banking, technology, and agriculture, the Netherlands developed a modern economy with increasing reliance upon globalization, thus bringing great wealth to its people. “The United Provinces of the Netherlands had become the first truly global commercial power—the first hegemon.”\(^10\) It was an age of exuberance; it was an age of discovery. Wealth and the promise of riches flooded the Netherlands and offered exciting possibilities.

Dutch wealth and economic power was founded upon shipping, trade, and the related financial institutions that developed to accommodate the Netherlands’ position as an entrepôt for Europe. The Dutch developed a superior fishing industry, characterized by falling capital costs\(^11\) and superior technology. Western European merchants transported “capital-intensive mass consumption goods, such as herring, salt, wine and textiles, traded with Baltic countries, which offered grain and timber in exchange. Trade in bulk necessities is thought to have ‘commercialized everyday life, fostering capitalist relations,’ while inducing regional specialization.”\(^12\) By the seventeenth century, the Dutch herring fishermen had a virtual monopoly.\(^13\) Dutch shipbuilding prowess developed larger and larger vessels which were to prove very successful in defense and in exploiting Asian and Atlantic trade.

With the Dutch Revolt (beginning in 1567 and ultimately known as the Eighty Years’ War), the state was re-constituted. Prior to the revolt,
merchants functioned primarily as agents for merchants in other regions.  

After the revolt, the state and merchants interests were conjoined; “the position of the merchants within the governing coalition, particularly the long-distance merchants of the colonial and rich trades, was greatly strengthened.”

Amsterdam and Dutch primacy was supported by expertise in a myriad of trade-related fields: “[e]xpert knowledge of market conditions the world over, skill in appraisal and classification of merchandise, informed brokerage, commission, and wholesale services, credit, insurance, and exchange facilities—all these were to reach their highest development for the seventeenth century in Amsterdam.”

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 thus:

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 a man’s 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.

14 Trading States, Trading Places, supra note 10, at 325.
15 Id. at 329.
16 VIOLET BARBOUR, CAPITALISM IN AMSTERDAM IN THE SEVENTEENTH CENTURY 21 (1950) [hereinafter CAPITALISM IN AMSTERDAM].
17 FIRST MODERN ECONOMY, supra note 6, at 150.
19 FIRST MODERN ECONOMY, supra note 6, at 150.
20 Id. at 151.
B. Tulip Mania or Innovative Futures Market?

Tulip Mania (1634-1637) is constantly offered as an example of a market truly gone manic. 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 Tulpenwoerde (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 produced a collapse of the economy that took the Dutch years to recover from. 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, bulbs sell at their reproduction cost.”

Even today, rare bulbs can command prices equalling that of substantial homes. Little economic dislocation resulted from tulip

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21 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 can’t possibly continue and selling begins, which causes others to sell even faster because they are now persuaded the bubble has burst.


22 The truth is vastly different. The Dutch were “a great power inside and outside of 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 (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). Peter M. Garber, Famous First Bubbles: The Fundamentals of Early Manias 20 (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.

23 Peter M. Garber, Famous First Bubbles, 4 J. Econ. Perspectives No. 2, 35, 38 (Spring 1990) [hereinafter Garber-1990].

24 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. no. 3, 535, 555 (1989) [hereinafter Garber-1989].
speculation.\textsuperscript{25} The surviving morality tales 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{26}

C. The Fascinating Tulip and Northwest Europe’s Fascination with It

The word tulip is probably derived from the Turkish *tulipan*, or turban.\textsuperscript{27} By the mid-sixteenth century, travellers 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. The tulip was new and valuable as the rising middle class\textsuperscript{28} and aristocracy decorated their ladies with exotic flowers, including tulips.

Cultivated tulips sometimes produce “striking mutations,” caused by a virus. These mutations produced extraordinarily beautiful and rare flowers.

[T]he flower itself had a unique trick which added dangerously to its other attractions. It could change colour seemingly at will. A plain-coloured flower such as Councillor Herwart’s red tulip, might emerge the following spring in 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.\textsuperscript{29}

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

\begin{footnotes}
\item[25] \textit{Famous First Bubbles, supra} note 22, at 23.
\item[26] Save for the plethora of misinformation about its “devastating” bubble which continue to this day.
\item[27] \textit{Devil Take the Hindmost, supra} note 4, at 15.
\item[28] Anna Pavord, \textit{The Tulip 6} (Bloomsbury Publ’g 1999) [hereinafter \textit{The Tulip}].
\item[29] \textit{The Tulip, supra} note 28, at 7-9. \textit{See also} \textit{Famous First Bubbles, supra} note 22, at 39-42.
\end{footnotes}
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.  

D. The Market for Futures in Tulips Develops

There was indeed speculation in bulbs; a tulip bulb futures market developed to fund the horticulture. By the 1620s the tulip had become the flower of fashion.  

A futures market for tulips gradually emerged for professional horticulturists and speculators. 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. But there were substantial and consequential differences as will be seen.

The 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.

As tulips became more popular and democratized, 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 both popularized the wonderful flower and maintained high demand. Very early, they

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30 The Tulip, supra note 28, at 9.
31 Id. at 137-45.
32 Other parties were often involved. “Shortage of 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 any proceeds.” Id. at 151.
33 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 The Tulip, supra note 28, at 7-9.
commodified the trade by selling bulbs by weight. The standard of measure was the azen. Twenty-one azen 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.”

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.”

Both peaked in late winter, just before the delivery of the bulbs.

The premium for the ultra 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.

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 some speculations needed to be tolerated because growth depended upon 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.

Riskier, but critical investments, were the Dutch East India Company and the West India Company. Risky and suspect investments included “windhandel” or “trading in the wind” (trading shares the investors doesn’t possess: think stock options). Such investments were banned by an edict in 1610.

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34 Id. at 6 n.1.
36 This is to be expected in an agricultural market. Prices typically peak when the commodity is in short supply and its quality is unknown.
37 This 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 and enjoying growth of tulip production to serve the rising middle class.
38 FAMOUS FIRST BUBBLES, supra note 22, at 33.
39 Id. at 33-34.
40 Id. at 34.
The tulips 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 fall into the prohibited activity category because most of the speculators would not own the bulbs they were trading. While futures for hedging were permitted, the authorities decried futures trading as immoral gambling and edicts precluded civil enforcement of these contracts. This edict was extended when the war with Spain renewed in 1630, and again in 1636.

Future 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.

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.

E. 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 three guilders for each deal, or “wine money,” a modest

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41 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 §18.3 (1993).
42 FAMOUS FIRST BUBBLES, supra note 22, at 34.
43 Id.
44 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 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 futures contract!
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 repriced according to market fluctuations; there were no margin requirements to prompt compliance; commitments were to individuals rather than an exchange. In modern practice:

The futures exchange has a clearing association that serves as a 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 [and] also serves as a guarantor of every futures contract.

These protections were absent from the Dutch tulip market and their absence 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). In the event of a market collapse, gross, rather than net, above.

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45 FAMOUS FIRST BUBBLES, supra note 22, at 44. See Garber for a description of the trading in the tavern groups called colleges. 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 they would sell for a price that have 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 bid highest at auction. SIMON SCHAMA, THE EMBARRASSMENT OF RICHES: AN INTERPRETATION OF DUTCH CULTURE IN THE GOLDEN AGE 359-60 (1987) [hereinafter EMBARRASSMENT OF RICHES].

46 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 the market and distorted it during the height of Tulip Mania because they had so little at risk.

47 FAMOUS FIRST BUBBLES, supra note 22, at 44-45.


49 FAMOUS FIRST BUBBLES, supra note 22, at 46.
positions would have to be unravelled. We can readily see that the primitive character of the legal and accounting conventions would make any collapse a mess to set right.

Peter Garber speculates that an exogenous event—the Bubonic Plague outbreak—prompted the Tulip Mania and brought common, unsophisticated investors into the futures market. From 1635-1637 the plague devastated the Netherlands. Over 17,000 people were killed in Amsterdam in 1636 (1/6 of the population). Leiden lost over 14,000 (1/3 of its 1622 population). The Dutch faced a heightened probability of death by plague and imminent invasion by Spain during 1635-1637, when Tulip Mania was at its height. The rumors of war and the hideous plague caused a gambling outbreak. Gamblers, with death at the door, would have 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, they could ignore the contract because they did not have to worry about being excluded from the bourse. These Dutch, under perceived death sentence, 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 would cause temporary 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. Major traders possessed substantial capital and enjoyed access to the capital markets. Short sales would also have required substantial capital and sound credit. During most of the tulip speculation, the astonishingly high prices centered on the rare bulbs. Tulip prices collapsed in February 1637. There was a general suspension of settlements for contracts coming due. Florists proposed that contracts before November 30, 1636, should be executed and honored. Later contracts would give the buyer the right to reject the contract on payment of ten percent of the sales price. The Dutch authorities did not

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50 Id. at 45.
51 Id. at 37-38. Pavord speculates that the plague caused a shortage of labor, “perhaps improve[ing] wages so dramatically that, for the first time in their lives, bricklayers, carpenters, woodcutters and plumbers had money to lose[.]” The Tulip, supra note 28, at 159.
52 Famous First Bubbles, supra note 22, at 37.
53 Id. at 46.
54 Id.
55 This was 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 23, at 39.
56 Famous First Bubbles, supra note 22, at 44.
57 Id. at 61.
accept the proposal. 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 instance, 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 worked out.\textsuperscript{61} This modest frenzy, fuelled by novice speculators, immune from enforcement (but not death), petered 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: trade, increased globalization, specialization in commerce and finance, and a rising middle class and prosperous population. The Dutch futures market for tulips was a mechanism for creating wealth and supported a much-coveted product, by transferring risk to willing takers—professional speculators who financed horticulturists (growers) and florists (sellers) and the horticulturalists and florists themselves.

III. WHAT WERE THE PERCEPTIONS OF TULIP MANIA?

We have seen that speculation in tulips and tulip futures were investments that were discouraged because of their risk and probably because of the frivolous association with wealth and luxury. They certainly were not the safest and most respectable investments, like the Bank of Amsterdam or state debt. Nor were they risky investments that were critical for Dutch prosperity like the India Companies, the Baltic grain trade, or the North Sea fisheries. Tulips and, later, coffee\textsuperscript{62} appeared to be dangerous fads—financially and morally.

A. Stock Markets and Speculation

The Netherlands of Tulip Mania already had developed stock markets, alive with speculation. The first chronicler of stock markets was Joseph Penso de la Vega, in \textit{Confusion de Confusiones} (1688).\textsuperscript{63} Vega described the market as a “game [of speculation that] is an affair of fools.”\textsuperscript{64} He further described exchange behavior in actions that can still be found on the floors of the stock and commodity exchanges.

\begin{itemize}
  \item \textsuperscript{58} \textit{Id.}
  \item \textsuperscript{59} \textit{Id. at 61-62.}
  \item \textsuperscript{60} \textit{Id. at 62.}
  \item \textsuperscript{61} \textit{Id.}
  \item \textsuperscript{62} See \textbf{THE COFFEE TRADER}, \textit{supra} note 3.
  \item \textsuperscript{63} \textit{DEVIL TAKE THE HINDMOST}, \textit{supra} note 4, at 11.
  \item \textsuperscript{64} \textit{Id.}
\end{itemize}
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 second handshake. With a new handshake a further item is offered, and then follows a bid. The hands redden from the blows (I believe from 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.65

Speculators were in Vega’s description, “full of instability, insanity, pride, and foolishness. They will sell without knowing the motive; they will buy without reason.”66

B. Tulip Speculation

As the Netherlands became increasingly more prosperous, dabblers entered the tulip markets.67 The movement was not 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.”68 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

65 Id.
66 Id. at 13.
67 Working class laborers and middle class small businessmen entered the risky market, assuring that it would only go up. This is nicely detailed in the novel, Tulip Fever. DEBORAH MOGGACH, TULIP FEVER (Vintage Press 2000). The author’s rendering is based upon Schama and other sources. Her finances and observations on the law are faulty as they are based upon Extraordinary Popular Delusions and the Madness of Crowds CHARLES MACKAY, MEMOIRS OF EXTRAORDINARY POPULAR DELUSIONS AND THE MADNESS OF CROWDS (Templeton Foundation Press 2000).
68 DEVIL TAKE THE HINDMOST, supra note 4, at 17.
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.  

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

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 tons of beer, two tons of butter, three tons of cheese, a bed with linen, a wardrobe of clothes, and a silver beaker.

It is reported that speculators paid no heed to the prices as they intended to sell quickly. Gaergoedt urged Waermondt to invest: "you give no money till it's summer, and then you have sold all your stuff." The over-heated market broke and tulip prices crashed. The tulip investments "violated the Calvinist work ethic." Waermondt has the last word on economics and morality in the Dialogues:

[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?

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

Flora's
Chariot of Fools, the original painting by Hendrik Pot,76 and a popular similar print, entitled Floraes Mallewagen77 (Flora’s Car of Fools), portray Flora in a wind chariot (representing both a varitas allegory and a satire on the trading). Her associates are drinking and travelling light. One of the girls on the chariot is weighing the bulbs while the other 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.78

Thus, contemporary accounts portrayed Tulip Mania as a speculative folly that undermined the economy and the morality.79 They were bereft of any appreciation of the economic role of speculation and the importance of futures, even frivolous tulip futures,80 to the Dutch economy, and ultimately modern economies. Yet these images have shaped our perceptions of futures, speculative investments, and market behavior.

IV. THE SOUTH SEA BUBBLE (1720): AN ATTEMPT TO CORNER THE MARKET FOR GOVERNMENT DEBT81

Common threads run throughout the history of these early market bubbles. New finance instruments were exploited: options in Holland; joint stock shares and national debt refunding in England. All of this was set against a backdrop of developing legal and financial institutions. The 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

76 See THE TULIP, supra note 28, at 175-177 for the painting and symbolism.
77 EMBARRASSMENT OF RICHES, supra note 45, at 365.
78 DEVIL TAKE THE HINDMOST, supra note 4, at 21. Schama describes the allegory behind the artwork in: EMBARRASSMENT OF RICHES, supra note 45, at 363-365. 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 Maurit (a Dutch hero in the long war of independence against the Spanish). Stevin was also famous for his military fortifications. MARIËT WESTERMANN, THE ART OF THE DUTCH REPUBLIC 1585-1717 54 (Laurena King Publ’g 1996).
79 Professor Garber believes that many of the accounts were government propaganda. Chancellor counters that they followed a conventional method of recording events and moralizing, probably containing considerable truths. DEVIL TAKE THE HINDMOST, supra note 4, at 24.
80 Tulips, once a fad and a luxury for the wealthy and nobility, of course became a leading Dutch export.
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 who fled the jurisdiction, members of Parliament who took bribes, ladies in waiting 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

83 Id.
84 Id.
85 Newton initially made substantial profits and then re-invested; he ultimately lost £20,000. JOHN CARSWELL, THE SOUTH SEA BUBBLE 108 (Sutton Publ’g 1960) [hereinafter CARSWELL]. Newton confessed not understanding the market. “When asked about the direction of the market, he reported to have replied, ‘I can calculate the motions of heavenly bodies, but not the madness of the people.’” DEVIL TAKE THE HINDMOST, supra note 4, at 69.
86 John Blunt (1665-1733) was 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. He began his career as a scrivener. 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. 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. As early as 1710 Blunt impressed Chancellor Robert Harley with his ideas on funding the national debt. See generally BALEN, supra note 82, at 22-36. 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 (St. Martin’s Press 1967) [hereinafter DICKSON]. Because of his relatively low birth, Blunt was seen as a classic over-reacher when the bubble burst. He was arrested in 1721 for his role and penalized. At the end of his life he was “prosecuted for misuse of arms in Court of Chivalry.” CARSWELL, supra note 85, at 246.
87 DICKSON, supra note 86, at 111.
88 RICHARD DALE, THE FIRST CRASH: LESSONS FROM THE SOUTH SEA BUBBLE 92 (Princeton Univ. Press 2004) [hereinafter DALE]. Garber states the Company paid £1.3 million in bribes to members of Parliament and the king’s favorites. FAMOUS FIRST BUBBLES, supra note 22, at 111. Bribery for important projects was the coin of the realm. “Indeed, that Parliament and the government supported the funding so enthusiastically must have served as a signal that official cooperation in the South Sea’s ventures had been purchased.” Id. at 112.
89 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. DEVIL TAKE THE HINDMOST, supra note 4, at 79-80.
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. England had been victorious in war. She was expanding her overseas empire. The invasion of the Old Pretender, son of James II, was defeated at Glenshiel in Scotland. The dangerous royal rebel was in exile in France. George I was increasingly secure on the 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 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.

The pump was primed for commercial expansion to bring even greater prosperity to the realm. The joint stock company and the refunding of the national debt (to create capital for investment) would 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. They were traded briskly on ill-organized capital markets. Good stocks and bonds were thought to be a very good substitute for land rents from agriculture. And they were. 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.

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90 DICKSON, supra note 86, at 90.
91 Id.
92 DEVIL TAKE THE HINDMOST, supra note 4, at 58.
93 CARSWELL, supra note 85, at 8.
94 Id.
95 Id.
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 pretence 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, and anti-fraud measures and protections in the market or for face-to-face fraud were non-existent.

A. 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 region. Because of war with Spain, its purpose was frustrated. 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. Short term debt interest was reduced to five percent. Short term annuities at nine percent

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96 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 (Clarendon Press Oxford 1997); JANET GLEESON, MILLIONAIRE: THE PHILANDERER, GAMBLER, AND DUELIST WHO INVENTED MODERN FINANCE (Simon & Schuster 1999).

97 CARSWELL, supra note 85, at 11.
98 Id. at 11.
99 Id. at 15.
100 What is past is prologue. The Special Purpose Entities employed in Enron are modern innovations beyond the edge of law.
101 The company’s coat of arms displayed the motto “A Gallus usque Auroram. From Cadiz [still held to be the empire’s last outpost] to the Dawn.” DALE, supra note 88, at 40; BALEN, supra note 82, at 30-31.
102 BALEN, supra note 82, at 31.
103 BALEN, supra note 82, at 32, 34; DICKSON, supra note 86, at 93; DALE, supra note 88, at 50.
104 DICKSON, supra note 86, at 92.
105 Id.
were refinanced and replaced with long term annuities at seven percent.\textsuperscript{106} 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{107} But “irredeemables” could be exchanged for cash or stock with the consent of the annuitants.\textsuperscript{108} “Redeemables” were short term obligations representing lottery tickets, sailors stubs, scrip, lottery tickets, etc.

During the teens, the South Sea stock saw its value increase, in a large part due to the successful refunding and the conclusion of a peace treaty with Spain in 1719 which 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. So did new threats.

The John Law System for revolutionizing public finance was being implemented in France, apparently with great success.\textsuperscript{109} That could only bode ill for England as France threatened to become the dominant financial power in Europe.\textsuperscript{110} England had great concern about the juggernaut Law was designing and its affect on political power and capital markets.\textsuperscript{111} The British endeavored to counteract it with a refunding system of their own.

B. The South Sea Company of 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 nor the prestige of the Bank of England nor the lucrative monopoly of the East India Company.\textsuperscript{112} Because the 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.\textsuperscript{113} 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 capital markets were linked, and fund transfers influenced these bubbles.)

\textsuperscript{106} Id.
\textsuperscript{107} DICKSON, supra note 86, at 92; DALE, supra note 88, at 73.
\textsuperscript{108} DICKSON, supra note 86, at 92.
\textsuperscript{109} See generally JOHN LAW, supra note 96.
\textsuperscript{110} BALEN, supra note 82, at 66.
\textsuperscript{111} BALEN, supra note 82, at 66-67; DALE, supra note 88, at 73.
\textsuperscript{112} DICKSON, supra note 86, at 93-94.
\textsuperscript{113} Id. at 94.
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, the 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. We still have them aplenty, for example land use exactions required of developers, etc.)

The scheme was noted by Walpole in his minutes to aid commerce and trading by freeing up encumbrances associated with the annuities. 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 margins considerably, gave it less to offer creditors, and less free cash flow from

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114 CARSWELL, supra note 85, at 87.
115 DICKSON, supra note 86, at 102.
116 BALEN, supra note 82, at 76; DICKSON, supra note 86, at 110–12, 119; CARSWELL, supra note 85, at 95.
117 BALEN, supra note 82, 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 86, 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.
118 DICKSON, supra note 86, at 100; BALEN, supra note 82, at 80.
119 Robert Walpole described the scheme thus: [T]o consult the landed and trading interest of the nation, by lessening its incumbrances 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.
120 BALEN, supra note 82, at 80; DALE, supra note 88, at 75.
121 BALEN, supra note 82, at 80; DALE, supra note 88, at 76. I use the convention of assessing the fee at £7.5 million for simplicity’s sake.
which profits were to be derived. For the conversion to work, both the government and the Company required a rising stock market.\textsuperscript{122} 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.\textsuperscript{123}

Company stock was valued at £100 par (and the company was required by law to receive that in consideration for the shares).\textsuperscript{124} 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.\textsuperscript{125} (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, twenty 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 fourteen shares.\textsuperscript{126} As the bubble expanded and fueled its expansion, the Company made generous loans 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 an excellent summary prepared by Professor Richard Dale.

We might ask why annuitants would surrender a seven percent irredeemable for Company stock with a par of £100.\textsuperscript{127} 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. 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

\textsuperscript{122} DICKSON, supra note 86, at 101. 
\textsuperscript{123} Id. at 101. 
\textsuperscript{124} BALEN, supra note 82, at 102. 
\textsuperscript{125} DICKSON, supra note 86, at 104. 
\textsuperscript{126} Id. at 104. 
\textsuperscript{127} 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.

calculated a capital gain as value in excess of par. Further, without violating accounting conventions or the law, joint stock companies could declare dividends from these “profits” which were in reality capital surplus. Investors bought Company stock because of these “profits.” 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.

Nowadays, substantial corporate procedures must be followed to declare dividends out of capital surplus (notice to investors of the source, etc.). We do not treat capital surplus 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.

To review, the scheme came about because the government could not unilaterally abridge or alter the irredeemables or long term debt. A voluntary exchange for capital stock was called for. The government mandated the amount of stock the Company could issue but not the exchange ratios. Indeed, the failure to establish exchange ratios permitted the rapid rise in the stock prices. Both the government and the Company had an interest in this structural shortcoming. It is unclear if it came about by accident or design. My best guess is that it was a “happy

128 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 cannot be cashed out for dividends. Eighteenth century conventions permitted both!

129 Id. at 80.

130 Id. at 101.

131 Id. supra note 88, at 101; DICKSON, supra note 86, at 141.

132 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.

133 Cf. D lapse, supra note 88, at 90. This is one of the reasons why it was so difficult to untangle these bubbles and remains so to this day.

134 DICKSON, supra note 86, at 92.

135 Id. at 92-93.

136 Walpole wanted to lock the Company into a fixed exchange rate. Blunt successfully opposed such a condition. BALEN, supra note 82, at 81.

137 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.
accident” that occurred because accounting rules and financial structures were rapidly evolving. I do not believe the participants engineered the defect. They certainly took advantage of it, however. The Treasury was given some latitude to repay the debt early, cancel stock, or reduce interest—so some genuine risks were also present.

The 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. The Company lacked good internal records of irredeemables offered and share demand. Hence, it couldn’t 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 exchanging stock for annuities and calculating the amount left over (the profit on the arbitrage), the Company continued to offer new, highly leveraged subscriptions.\textsuperscript{138} Ultimately, there were four subscriptions, with the Fourth Subscription asking £1000 per share!\textsuperscript{139} 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.\textsuperscript{140} There was a frenzied competition for Company stock, other joint stock shares, illegitimate Bubble companies, and scrip.\textsuperscript{141}

The Company marketed ever more shares to take advantage of the rising prices and fund the conversion and profits.\textsuperscript{142} Other companies jumped in, including notorious Bubble Companies that had no legitimate investments and were pure swindles.\textsuperscript{143} 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.\textsuperscript{144}

Europe seemed to be awash in magical credit. The Mississippi Company Bubble percolated, and disintermediated funds from Paris and

\begin{footnotes}
\item[138] DALE, supra note 88, at 98-101.
\item[139] BALEN, supra note 82, at 133-34; CARSWELL, supra note 85, at 145-46.
\item[140] DICKSON, supra note 86, at 123.
\item[141] Id.
\item[142] DICKSON, supra note 86, at 123; DALE, supra note 88, 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.
\item[143] BALEN, supra note 82, at 89-92; DALE, supra note 88, at 107-08.
\item[144] Id.
\end{footnotes}
Amsterdam pushed prices even higher.\textsuperscript{145} The shortage of shares and scrip pushed prices even higher.\textsuperscript{146} 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.\textsuperscript{147} Then, the transfer books closed.\textsuperscript{148}

C. The Bubble Act; the Bubble Deflates

Meanwhile, the Company sought to protect itself through the intervention of Parliament.\textsuperscript{149} The result was the Bubble Act of 1720, wherein Parliament outlawed the unchartered Bubble Companies that had arisen to take advantage of the market.\textsuperscript{150} The Bubble Act and the subsequent prosecution of Bubble Companies by the Treasury Solicitor ushered in the fall of the stock.\textsuperscript{151} On August 18, the stock began to fall and hampered the Fourth Subscription, pegged at an astounding £1000.\textsuperscript{152} Desperate attempts were made to staunch the descent.\textsuperscript{153} The Company declared a 30\% Christmas Dividend; it hawked a dividend guarantee of 50\% for the next twelve years.\textsuperscript{154}

The government prosecution of the Bubble Companies had unintended consequences. The smaller bubbles couldn’t be popped without destroying the Company’s Bubble.\textsuperscript{155} Amsterdam’s exchange rate rose sharply against London’s.\textsuperscript{156} Gold flooded out of London.\textsuperscript{157} Londoners

\textsuperscript{145} DICKSON, supra note 87, at 140-41.
\textsuperscript{146} Id. at 144.
\textsuperscript{147} BALEN, supra note 82, at 114.
\textsuperscript{148} DALE, supra note 88, at 106.
\textsuperscript{149} DICKSON, supra note 86, at 147.
\textsuperscript{150} BALEN, supra note 82, at 105-06; DICKSON, supra note 86, at 148.
\textsuperscript{151} DICKSON, supra note 86, at 149.
\textsuperscript{152} Id.
\textsuperscript{153} Id.
\textsuperscript{154} BALEN, supra note 82, at 135; DICKSON, supra note 86, 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 instalment obligation.
\textsuperscript{155} DICKSON, supra note 87, at 150.
\textsuperscript{156} Id. at 151.
\textsuperscript{157} Id.
were selling off their gains to invest in Amsterdam; the Bubble imploded. Prices dropped to £300 by October and settled below £200 by the end of the year (£191 in December 1720—a drop over 600 points since September 1). 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. They stabilized the market and completed the debt conversion.

D. The Bubble Post Mortem

England experienced a normal depression after the collapse, lasting several years. The lasting effect of the Bubble was the Bubble Act which 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 child, the United States, in a large part owing to the legal restrictions placed upon corporate entities in the Bubble Act.

Finally, the South Sea 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.

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158 Id. at 152.
159 Id. at 149.
160 Id.
161 Id. at 158.
162 Id. at 163, 170-72.
163 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.
164 It is still common today, even in the United States and the industrialized democracies, let alone developing nations.
There was a debased public morality and an appetite for gain. All these social factors contributed to gambling in the capital markets.

Yet at the bottom, 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 execution 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 able to book capital surplus as gains and 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, at least 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 behaviour, and promoter cupidity. The schemes were innovative. The concepts 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, but the underlying idea was sound; it was just ahead of its time.

V. WHAT WAS THE PERCEPTION OF THE SOUTH SEA SCHEME AND THE CAPITAL MARKETS?

A. 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 held that money was “a base

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creature whereof never any wise man spake without contempt." "Sir Francis Bacon evoked the morality and Council of Nice to condemn usury, but also explained that high interest rates inhibited agricultural improvements for men would not 'labor upon draying of Marshes, or in any other good or ingenious device, but employ their Money to a more certaine Profitt at use.' A moral economy of biblical balance and certainty was giving way to an economy where individuals had become "subsumed in a depersonalized aggregation," because their "decisions were divorced from their consequences." Debate raged over the power to maximize profits by setting the price. Some saw this economic freedom as preying on the poor; others, such as Joseph Lee, a minister, argued that "if men by good husbandry, trenching, manuring their Land, & do better their Land, is not the Commonwealth inriched thereby?"

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 stated that the Dutch had demonstrated that "private profit led to 'national strength and back to private profit.'" Observers were slowly coming to the belief in the idea of a "personal drive for private gain." By the end of the seventeenth century, "[e]very index of economic growth showed an advance: agricultural output, capital investment, imports from the Indies and the New World, the range and quantity of home manufacturing." Domestic consumption was at a high level. The English were enjoying a much higher standard of living; foreign trade was burgeoning. "Daniel Defoe hailed the period since 1680 as a projecting age when men set their

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166 Id. at 34 (citation omitted). This of course echoes Biblical sentiments. "For the love of money is the root of all evil . . . ." 1 Timothy 6:10.
167 APPLEBY, supra note 165, at 34(citing PARL. DIARY OF ROBERT BOWYER 151 (Wilson ed.)).
168 Id. at 53.
169 Id. at 52.
170 Id. at 62.
171 Id. at 78-79.
172 Id. at 95.
174 Id. at 164.
175 Id.
wits to designing ‘Engines, and Mechanical Motion,’ a propensity greatly encouraged, he noted, by stockjobbing.’’176

B. The Stage was Set: England in the Early Eighteenth Century was in the Midst of the Commercial and Financial Revolutions which were to 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.177 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 average investor.178 By the end of the seventeenth century, England had over one hundred companies engaged in banking, overseas trade, insurance, and industrial profits. Wealth and, with it, power were shifting away from the aristocracy and landed gentry to urban investors, traders, stock-jobbers, and merchants—servants of the 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.179

C. Daniel Defoe, the Speculator

Merchants were undergoing a transformation. In The Merchant, Edward Young compared “merchants favourably with heroes, priests, kings, and even the heat-giving planets.”180 Alexander Pope, Richard Savage, and James Thompson also praised merchants in their works.181 To Richard Steele, “the merchant was ‘the greatest Benefactor of the English Nation.’”182 “In Defoe’s work, the merchant’s virtues almost define an Englishman’s virtues.”183 Later, in the eighteenth century, the glorification began to wane. The ideal of the merchant-prince continued, “but the self-

176 Id.
177 JOHN TRAIN, FAMOUS FINANCIAL FIASCOS 88 (1985).
178 Id. at 88-89.
179 Defoe had high regard for trade and manufacture and sided with those forces over the traditional land-based economy. JOHN ROBERT MOORE, DANIEL DEFOE: CITIZEN OF THE MODERN WORLD 312 (1958) [hereinafter DANIEL DEFOE].
181 Id. at 109-110.
182 Id. at 110 (citation omitted).
183 Id.
made businessman was disdained as an upstart, a social parvenu, a mere
mushroom who threatened the social order.”

In general, the literary merchant characters of the seventeenth
century were praised not for their business sense, but instead for their
gentlemanly qualities. Samuel Foote’s The Naboob (1772) reflected
“the tensions posed by the enormous wealth of the returning naboobs who
threatened the position of the landed classes by their wealth, their newly
acquired possessions, their ostentatious free spending, and their ‘governing
Spirit.’” This was not a problem for Defoe. Defoe 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.”

Defoe also believed that “‘a true-bred Merchant is a Universal
Scholar, his learning excels the meer scholar in Greek and Latin, as much
as that does that of the Illiterate Person, that cannot read or write.’”
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.’”
“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.”

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

Fourteen years later, Defoe invested in the raising of civet cats for
the sake of perfume production, which had become a Dutch monopoly.
However, Defoe had to give up this investment in order to meet prior
obligations, including those that stripped him of his property, during his

\[184\] Id. at 111.
\[185\] Id. at 115.
\[186\] McKendrick, supra note 180, at 112.
\[187\] Id. at 118.
\[188\] Id. (citation omitted).
\[189\] Id. at 118-19 (citation omitted).
\[190\] Id. at 119.
\[191\] DANIEL DEFOE, supra note 179, at 284.
\[192\] Id.
\[193\] Id.
\[194\] Id.
\[195\] Id. at 285.
Defoe ended up losing a total of £1,300 on this venture.\textsuperscript{196} Defoe later invested £800 in stock of the African Company, stock which depreciated to £100 in value when he decided to withdraw his investment in the Company.\textsuperscript{198} Despite this, 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{199} 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{200}

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{201}

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 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{202}

D. 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 critique of the system wrote a newspaper:

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 grained, as shall be 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 the subscribers, will shortly be published, and the Projector will be glad (in the interim) of an Opportunity to confer with any Gentleman of Ingenuity upon so beneficial a Scheme; and for that purpose, will give daily Attendance at Exchange Alley, at the Cock in Birchin Lane.203

E. Bubbles

These new investment schemes were known as “bubbles.” Shakespeare employed “bubble reputation.”204 The Volunteers, or the Stock-Jobbers, a play by Thomas Shadwell (1692), described men who

203 BALEN, supra note 82, at 90-91.
204 Id. at 91.
cheated as “bubbling” each other for profit. 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.”

Stock-jobbing had entered the vocabulary and had many meanings—ranging from trading in stock to cheating on the trades. “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.”

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. Improbable companies proved the inspiration for “A New Pack of Bubble Cards.” 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.

F. The South Sea Company and its bubble

As we have seen in an earlier section, 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, who had already increased its capital to 10 million pounds, wanted to 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

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205 Id.
206 DEVIL TAKE THE HINDMOST, supra note 4, at 39.
207 Id. at 48. See also, STUART BANNER, ANGLO-AMERICAN SECURITIES REGULATION: CULTURAL AND POLITICAL ROOTS, 1690-1860 24-25 (1998).
208 BALEN, supra note 82, at 26 (citing THE PARLIAMENTARY DIARY OF NARCISSUS LUTRELL (Henry Horwitz, ed. 1972).
209 BALEN, supra note 82, at 91. But, alas without their transparency.
210 Id. at 92.
211 Id.
212 LEWIS MELVILLE, THE SOUTH SEA BUBBLE 23 (Burt Franklin 1968) (1921).
landed men and their representatives are the mainspring and stock of the wealth and strength of the Kingdom.\(^\text{213}\)

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.\(^\text{214}\)

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

countenanced 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.\(^\text{215}\)

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.\(^\text{216}\) Also, the artificial rise of Company stock could “decoy unwary people to their ruin . . . .”\(^\text{217}\) Finally, the Company was

\(^{213}\) *Id.* at 24-25.

\(^{214}\) *Id.* at 34.

\(^{215}\) *Id.* at 42-43. Compare this with the lament of Waermondt, the moralist, in the *Dialogues*, supra note 74.

\(^{216}\) *Id.* at 49. And we still fear foreign investment. See the brouhaha over Dubai Ports World.

\(^{217}\) *Id.*
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.

G. 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 that they 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.”

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218 MELVILLE, supra note 212, at 49.
219 Id. at 50.
220 Id. at 50-51.
221 Id. at 53.
222 Id. at 54 (citation omitted).
223 Id. at 55 (citation omitted).
224 MELVILLE, supra note 212, at 56. This quote has been attributed to Defoe. See DANIEL Defoe, supra note 179, at 292-93.
225 MELVILLE, supra note 212, at 56.
226 Id. at 57.
227 Id. at 58.
H. Stock of the South Sea Company Slumps, August – September, 1720

Eustace Budgell, in a statement attempting to lend support to the 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.”

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.” 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.”

He only stated this to “show how unlikely, how improbably, a falsehood the malice of our enemies has invented.”

This prompted one of the directors, Robert Chester, to emphatically rebut the idea suggested by Budgell. 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.

I. The Nation in Distress and Public Outcry, October – November, 1720

The public outcry among the upper and middle classes was enormous during this 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.”

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:

South Sea Project

Directors, thrown into the sea,
Recover strength and vigour there;

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228 Id. at 128.
229 Id.
230 Id. at 129.
231 MELVILLE, supra note 212, at 129.
232 Id. at 139.
But may be tamed another way,
Suspended for a while in air.\textsuperscript{233}

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 \textit{like a Thief in the night}, exactly as it happens in the case of death. Methinks God has punish’d the avaritious as he oftenpunishes 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 . . . \textit{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 \textit{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.\textsuperscript{234}

\textit{A disaster of biblical proportions indeed. Or so it seemed.}\textsuperscript{235}

\textbf{VI. Conclusion}

So what have we here then? Two very different stories of early bubbles. Both the South Sea Bubble and Tulip Mania took place during

\textsuperscript{233} Swift continues for another eight stanzas, containing similar venom. \textit{Id.} at 144.
\textsuperscript{234} \textit{Devil Take the Hindmost}, supra note 4, at 84-85 (citing Alexander Pope, Correspondence, II, at 53-54).
\textsuperscript{235} In fact the downturn following the bubble was average for the English eighteenth century economy. The collapse fell unevenly on the classes. Many of the merchants and city financiers were astute enough to close their accounts. “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, \textit{Financial Crises in Eighteenth-century England}, 2\textsuperscript{nd} Series XXXIX, 1 Econ. Hist. Rev. 39, 48 (1986) (quoting E.P. Thompson, \textit{Whigs and Hunters} 114 (1975)).
periods of dynamic economic, political, and social change. Feudalism was in its death throes. The state and landed gentry were besieged with seemingly grave economic concerns. Industry and trade were on the rise.

Finance responded and fashioned new tools, sophisticated tools. These operated beyond many of society’s controls, certainly beyond its understanding.\textsuperscript{236} The elegant hedging operations in tulips were not understood by common investors and mildly abused during the depths of the plague. Yet, the option and futures market survives and remains a vital financial tool. The South Sea Bubble was the result of grand schemes to refund crippling national debt and spread much needed liquidity. It failed for many reasons, ranging from fraud to lack of transparency to a structure few in the market understood. But the idea of re-funding the national debt was critical to the British commercial and military triumphs that supported the British Empire.

The popular view of these schemes and their bubbles shaped the view of capital markets, both during the events and for posterity. In both bubbles we see people at a loss as fortunes are made and lost in increasingly intangible markets. Society was rapidly changing and new players, speculators and investors in paper, came into prominence and challenged the old order, threatening to turn the world upside down. Were these paper conspiracies concocted to destroy the old order or were they sophisticated, but flawed harbingers of the new? I place my money on the latter.

\textsuperscript{236} Indeed even today economists, historians, and finance experts debate the issue of whether they were even bubbles. As noted, conventional wisdom holds that they were bubbles and that society was drenched when they popped. But economists, finance experts, lawyers and securities experts, and historians see a conflicting record with respect to the market mechanics and their operations. Professors Garber (\textit{Famous First Bubbles: The Fundamentals of Early Manias}) and Shea ("Financial Market Analysis Can Go Mad (in the Search for Irrational Behaviour during the South Sea Bubble)") find rationality in the South Sea Bubble investor behavior. Professor Dale finds the converse (\textit{The First Crash: Lessons from the South Sea Bubble}). Professor Kindleberger (\textit{Manias, Panics, and Crashes: A History of Financial Crises}) ascribes bubble irrationality to the Tulip Mania; Garber does not. I am more persuaded that Garber and Shea hold the high ground.
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, totalling 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 years’ 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% and partly at 4% until midsummer 1727 when interest on all debt owed to the Company would be reduced to 4%.

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.237

237 This text describing the scheme is found in DALE, supra note 88, at 76.