Source: Hester Peirce and Benjamin Klutsey, eds., *Reframing Financial Regulation: Enhancing Stability and Protecting Consumers*. Arlington, VA: Mercatus Center at George Mason University, 2016.

CHAPTER 9 The Past and Future of Exchanges as Regulators

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If the Exchange had been nothing more than a meetingplace for buyers and sellers of securities, and the borrowers and lenders of funds based on securities—a huge automatic dial to register vibrating values, and a legalized centre of speculation—it would even then have been worthy of an important place in the national annals. But though created only for these functions, it has come to discharge another and more striking one. In so doing it has formed that connection with the country's development which may be reckoned the most valuable feature in its history.

-Edmund Stedman and Alexander Easton¹

ell-functioning stock markets benefit investors, publicly traded companies, and the financial intermediaries who bring them together. They help individual investors become involved with large-scale commerce without requiring them to be involved in any details of the company, and they vastly expand firms' access to capital. Stock markets, however, have the potential to expose investors to financial mismanagement or outright fraud from the company selling shares or from any number of financial intermediaries. Fraud not only harms the investors who lose, but it scares away future investors and reduces the pool of capital and business opportunities for legitimate enterprises and financial intermediaries that serve them. How can the good aspects of markets be encouraged and the fraudulent schemes or lesser forms of self-dealing be reduced? Most people assume that the only or best way to deal with fraud is with government rules or regulations. University of Chicago professors Rajan and Zingales² maintain that "market transactions require a central authority to enforce them promptly and at low cost" and "politics—for better or worse—lays the foundations for markets, and thus for prosperity."³ Such thinking is also behind those who have advocated more government regulation of markets with the 2002 Sarbanes-Oxley Act (also known as the Public Company Accounting Reform and Investor Protection Act) and the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (Dodd-Frank).

Yet if one looks at the history of all the world's first successful stock markets one can see that they were regulated in a very different way—privately. In seventeenth-century Amsterdam, eighteenth-century London, and nineteenth-century New York, government officials commonly viewed stock markets with suspicion and passed various laws that made most of the sophisticated transactions in stock markets unenforceable. Despite government not enforcing entire classes of contracts, trading in stock markets continued and actually thrived. Rather than relying on government, market participants relied on various private enforcement mechanisms, or private governance, to mitigate fraud and facilitate exchange. Stockbrokers adopted private rules and regulations, not because they were required to, but because they wanted to make the markets more attractive for themselves, companies, and investors. The regulatory environment can best be viewed as open and competitive with different broker groups experimenting with different types of rules in order to attract business to their market.

Relying on the market to regulate the market was not a short-lived historical anomaly. Instead private rules and regulations underpinned all of the world's first stock markets for hundreds of years.⁴ Studying the history of private rules and regulations helps us see how markets can operate without government oversight and how market incentives have led markets to find ways to reduce fraud and facilitate trade. Rules ranged from rules about trading, which help ensure contractual compliance among brokers, to rules about listing requirements for publicly traded firms. A system of competitive and private regulation offers an attractive alternative to one-size-fits-all and often heavy-handed government regulation advanced in recent years. Economists⁵ describe exchange-created rules as the microstructure of markets; Mahoney refers to the role of the exchange as regulator; and Romano outlines how such competition encourages exchanges to create rules that investors trust.⁶

A 2007 McKinsey and Company report sponsored by former New York City Mayor Michael R. Bloomberg and Senator Charles Schumer interviewed fifty financial services CEOs and surveyed hundreds of others and found that burdensome government regulations are making American financial markets much less competitive than they could be. Five percent of Americans work in financial services, and the sector represents 8 percent of GDP,⁷ not to mention *all* of the private enterprise made possible because of financial intermediation and other financial services. Yet many suggest that government rules and regulations have gone overboard and are bogging down markets. Bloomberg and Schumer state:

> The findings are quite clear: First, our regulatory framework is a thicket of complicated rules, rather than a streamlined set of commonly understood principles, as is the case in the United Kingdom and elsewhere. The flawed implementation of the 2002 Sarbanes-Oxley Act (SOX), which produced far heavier costs than expected, has only aggravated the situation, as has the continued requirement that foreign companies conform to U.S. accounting standards rather than the widely accepted—many would say superior international standards.⁸

Respondents told McKinsey that compared to London, New York is lacking on the following issues: "government and regulators are responsive to business needs," "fair and predictable legal environment," and "attractive regulatory environment."⁹ Policymakers appear to have gotten us into this problematic situation by overestimating the efficacy of government rules and regulations and ignoring many costs. Unfortunately, legislators and regulators who write statutes and regulations that end up costing investors and provide negligible benefits receive little market feedback and are not penalized for any harm they impose on investors, companies, or financial intermediaries.

An alternative to the heavy-handed approach of government is to move back to the system that enabled all the world's first successful stock markets to thrive: allow investors and their agents to opt into or out of competitively provided regulatory regimes that cater to investor wants. A system of private regulations encourages market participants to search for rules and regulations that help investors. Those that fail to offer basic assurances to investors or have rules and regulations that are onerous and provide few benefits will lose market share, and those that offer better protections gain. Instead of subjecting everyone to government mandates regardless of their efficacy or costs, there is the option of moving back to a system of freely adopted private rules and regulations that made all the world's successful stock markets possible.

LESSONS FROM THE HISTORY OF STOCK EXCHANGES As privately governed clubs¹⁰

Private Rules and Regulations in Seventeenth-Century Amsterdam

Although most people believe that commandments like "Thou shalt not steal" are just and ought to be followed, exactly how a market deals with problems like underperformance or nonperformance of a contract are open questions. What should the repercussion against nonperformance be? Should a market have retribution, restitution, or simple expulsion for underperformance, default, or fraud? Should an unintentional defaulter be treated the same as an intentional defaulter? If fines exist, should they be flat or graduated, and who should determine them? What should happen when a defaulter has no funds to pay? If market participants rely on expulsion, should expelled members ever be let back in, and if so under what circumstances? These are all tough questions that could long be debated in legislative chambers, regulatory hearings, courts of law, and academic journals, but instead the private governance in stock markets left the judgment to the market. The broker who reported to customers, "I didn't think about our counterparty default risk, and I don't actually have the shares that you paid for," would be at a severe disadvantage to brokers who traded in venues that minimized such problems. As such, market participants had incentive to search for rules that would make their market more orderly and more attractive.

Companies with transferable shares may date back to ancient Rome,¹¹ but the first stock market with a considerable secondary market was in seventeenth-century Amsterdam. The Dutch East India Company, created in 1602, was originally intended as short-lived endeavor, but by 1609 the company directors made it an ongoing venture. The modern notion of having shares in a company evolved gradually, starting as "'paerten,' 'partieen,' or 'partijen,' the word being taken over from the practice of 'participation' in the shipping business," and was eventually referred to as an "actie" or share by 1606.¹² Investors wishing to sell their shares had to go with a buyer to the company's offices and pay a fee to have the shares transferred. There is nothing inherently wrong with going to headquarters to transfer shares, but imagine having to go to Redmond, Washington, anytime you wanted to buy or sell your Microsoft shares. The East India Company charged transfer fees and did not have a streamlined process. Neal describes the process:

The transfer books were available 4 or 5 days a week and recorded the ledger entries for both the seller and the buyer, the amount of stock transferred, and the names of two witnesses and the clerk. A very small transfer fee was charged per share. Delays did occur due to the sloppiness of the clerks in recording entries and the necessity of checking to make sure the seller had at least the number of shares being sold to his or her credit in the main ledger.¹³

Over time, however, an independent secondary market for shares emerged.

Brokers who had specialized in trading in commodities or other financial instruments began specializing in trading shares and would keep track of their transactions and settle at *rescontre* dates established every three months.¹⁴ At settlement time, brokers would net out the shares they owe and could either hand over shares for cash or settle using payment of differences. For example, suppose you make a contract to buy a share from me for 3,000 guilders in three months, but at settlement the current price turns out to be 3,300. I (with a short position) could procure the share for 3,000 guilders. An easier way of settling such a trade would be to have a payment-of-differences contract, where I would simply pay you 300 guilders and we would call it even. Contracts with future

settlement dates, whether with delivery of shares or payment of differences, eliminated the need to go to the company's office after each trade and pay fees. But moving away from the equivalent of a spot market with immediate settlement introduced the possibility for unintentional default or intentional fraud come settlement date. If I owed you 300 guilders but at settlement date I simply did not show up, what would you do?

A modern reader may assume that you need to take the defaulter to court to get your money back. But as Petram points out, "lawsuits that were ultimately brought before the Court of Holland could take anywhere between three-and-a-half and twelve years."¹⁵ More important, however, a three- to twelve-year trial was not even an option for the majority of transactions. In 1608 shares in the East India Company fell by 35 percent and officials believed that outlawing short selling would prevent further price drops.¹⁶ Officials passed ordinances against short sales, prohibiting selling "in blanco" (selling something you do not own) as well as "windhandel" (trading in wind). The new ordinances required that only owners of shares could make sales and that sellers had to actually transfer their shares within a month.¹⁷ In the following decades official prohibitions continued; additional ordinances were passed in 1621, 1623, 1624, 1630, 1636, and 1677¹⁸ that outlawed all but the simplest transactions. Many contracts had uncertain legal status while others such as short sales were outright prohibited.

Despite the unenforceability of most contracts, trading in such transactions continued and actually thrived. In addition to forward contracts with long and short sales, brokers developed many other sophisticated transactions including options, hypothecation (where people can pledge stocks as collateral for a loan), and other derivatives that enabled people who could not purchase a full share to trade. How is that possible? One seventeenth-century stockbroker, de la Vega (1688),¹⁹ wrote a book describing the market and throughout he high-lights the unenforceable status of most of these contracts. But he also describes informal private mechanisms that brokers used for encouraging contractual performance. Consider Adam Smith's commentary on why people would follow through on an unenforceable contract:

> Of all the nations in Europe, the Dutch, the most commercial, are the most faithful to their word. . . . This is not at all to be imputed to national character, as some pretend. . . . It

is far more reduceable to self interest, that general principle which regulates the actions of every man, and which leads men to act in a certain manner from views of advantage, and is as deeply implanted in an Englishman as a Dutchman. A dealer is afraid of losing his character, and is scrupulous in observing every engagement. When a person makes 20 contracts in a day, he cannot gain so much by endeavouring to impose on his neighbours, as the very appearance of a cheat would make him lose.²⁰

Trading never takes place in a vacuum, and those who want to conduct business must persuade others to deal with them. Parties can cheat, but when they do so, they not only sour the relationship with their victims, but they sour their relationship with everyone else who finds out.

Greif²¹ refers to this as a multilateral reputation mechanism, and in many circumstances it takes the place of formal enforcement. Even if two parties have never interacted before and have no intention of interacting again, both will think twice about damaging their reputation for a short-run gain. Many passages in de la Vega illustrate the importance of reputation and the need to follow through with one's word to remain in business.²² As de la Vega explains,

He states, "[To be sure, there is widespread honesty and expedition on the Exchange. For example,] the business in stocks and the bustle of the sales which are made when unforeseen news arrives is wonderful to behold. Nobody changes the decisions which he makes in his momentary passion, and his words are held sacred even in the case of a price difference of 50 per cent; and, although tremendous business is done by the merchants without the mediation of brokers who could serve as witnesses, no confusion occurs and no quarrels take place. . . . Such honesty, co-operation, and accuracy are admirable and surprising."²³

How successful was this market? De la Vega describes how people talked about the market for shares all over the city. By the end of the seventeenth century the Dutch East India Company had 20,000 employees, over 300 ships traveling between the East Indies and Europe,²⁴ and some estimate that it had the equivalent market capitalization of \$7 trillion in modern US dollars, making it the most valuable company in history. The East India Company helped make the Golden Age possible, and it financed Henry Hudson's voyage where he charted Manhattan in 1607. The Dutch West India Company also founded New Amsterdam (New York) in 1624, so the influences of the Dutch stock market are long lasting. None of this would have been possible without a market for secondary shares, and that market was only made possible because of the informal rules and regulations on these markets.

Private Rules and Regulations in Eighteenth-Century London

The world's second major stock market developed in London starting at the end of the seventeenth century, and, as in Amsterdam, government officials were hardly supportive of it. England's first major joint stock company was the "Mystery and Company of Merchant Adventurers for the discovery of regions, dominions, islands, and places unknown," founded in 1551 (and later known as the Muscovy Company, chartered in 1555), and other major English companies included the Levant Company, the English East India Company, and the Virginia Company, chartered in 1581, 1600, and 1606, respectively.²⁵ By the end of the seventeenth century the number of joint stock companies increased and people began specializing in trading stocks.²⁶

In 1696, however, the government passed an act "To Restrain the Number and the Practice of Brokers and Stockjobbers." Stockbrokers were prohibited from trading at the Royal Exchange, so instead congregated by "Change Alley around Cornhill and Lombard streets."²⁷ Especially after London prohibited them from congregating on the street in 1700, their main trading venues became Jonathan's and Garraway's coffeehouses. One broker had put out the following advertisement in 1695 in *Collection for Improvement of Husbandry and Trade*: "John Castaing at Jonathan's Coffee House on Exchange, buys and sells all Blank and Benefit Tickets; and all other Stocks and Shares."²⁸ Another successful stockbroker was described by his peers as "the leader and oracle of Jonathan's Coffee House."²⁹

Government officials always looked down on this trade, as Sir Robert Walpole made clear in 1716: "Every one is aware how the administration in this country has been distressed by stock-jobbers."³⁰ In addition to passing rules restricting stockbrokers, the government all but outlawed the formation of new joint stock companies in 1720 with the passing of the Bubble Act. This 1734 bill, "[t]o prevent the infamous Practice of Stock-jobbing," also banned options, forward contracts, and margin trading, and government animosity toward stock traders persisted for well over a century.³¹

The government considered most contracts with future settlement dates as illegitimate. In his 1766 *Lectures on Jurisprudence*, Adam Smith wrote:

This practice of buying stocks by time is prohibited by government, and accordingly, tho' they should not deliver up the stocks they have engaged for, the law gives no redress. There is no natural reason why 1000£ in the stocks should not be delivered or the delivery of it enforced, as well as 1000£ worth of goods. But after the South Sea scheme this was thought upon as an expedient to prevent such practice.³²

Palgrave describes that time bargains referred to any contract that did not involve immediate settlement, and that includes long and short forward contracts and options contracts:

> Time bargains are contracts entered into between two parties for the transfer at a fixed price of a certain quantity of a commodity, security, or right from one to the other on a specified future date or within a specified time from the date of the contract. In colloquial language they fall under two heads, viz. (1) sale or purchases for "future" or "forward" delivery; (2) options.³³

These advanced contracts were pervasive, as Palgrave explains: "on the stock market all contracts are for future delivery unless otherwise specified."

Another interesting distinction that government officials made, most likely due to a poor understanding of economics and finance, was between trades with settlement involving (1) actual delivery of the stock in return for money versus (2) cash settlement or payment of differences between the previously agreed on price and the market price on settlement date. Leaving aside the major transaction costs of handing over the shares or other contracted item, contracts with physical or cash settlement have near identical economic effects on each party and the market as a whole. Many British officials, however, considered a contract with physical settlement to be a "bona fide contract," whereas a "time bargain for payment of differences" was a form of "gaming or wagering."³⁴ The same was true in America, and Freedman³⁵ describes how in the latter half of the nineteenth century the Chicago Board of Trade helped promulgate the argument, likely with hopes of having government restrict the activities of its "bucketshop" competitors.

Although British officials made most contracts that occurred on the exchange illegal, Smith wrote that the law "proved ineffectual." Contracts were unenforceable but not punishable, so stockbrokers engaged in them anyway:

In the same manner all laws against gaming never hinder it, and tho' there is no redress for a sum above 5£, yet all the great sums that are lost are punctually paid. Persons who game must keep their credit, else no body will deal with them. It is quite the same for stockjobbing. They who do not keep their credit will be turned out, and in the language of Change Alley be called lame duck.³⁶

Stockbrokers initially relied on the discipline of repeat dealings and reputation mechanisms similar to brokers in Amsterdam. Calling someone a lame duck sounds pretty damaging!

Over time brokers began to create more formal private rules and regulations to deal with unintentional default or intentional fraud. To do this brokers decided to transform coffeehouses into private clubs. In 1761 Thomas Mortimer wrote, "The gentlemen at this very period of time . . . have taken it into their heads that some of the fraternity are not so good as themselves . . . and have entered into an association to exclude them from J——'s coffee-house."³⁷ In 1762, one hundred and fifty brokers formed a club and contracted with Jonathan's Coffeehouse to use it exclusively. Creating this exclusive club, or privatizing the commons, was not without controversy. A 1772 letter in *Town and Country Magazine* writes critically that "the brokers at Jonathan's admit none but their own fraternity into their coffee-house, which to prevent strangers intruding amongst them."³⁸ One excluded broker ended up going to government and suing to break up this newly formed club. Government intervened and declared that Jonathan's Coffeehouse

did not have the right to exclude outsiders. In 1773, as an alternative strategy, brokers organized and purchased a building for their own use. This new building was known as New Jonathan's and was open to anyone who paid the daily admission fee, which covered expenses such as rent.³⁹ In 1773 the *Gentlemen's Magazine* reported, "New Jonathan's came to the resolution that instead of its being called New Jonathan's, it should be called The Stock Exchange, which is to be wrote over the door."⁴⁰

Brokers experimented with different rules and regulations, and documented many of them in their first rulebook in 1812. The stated resolutions were "but an attempt (the first indeed that has ever yet been made in this House) to reduce into a regular method the rules and regulations, by which so very important a class of society is to be governed."⁴¹ Although the Committee said some disputes can be settled within the exchange using "the known Laws of the Land," they added that "many others (which, form their nature and extent, preclude the possibility of forming any general laws on the subject, so as to meet every contingency) may also be adjusted by the known custom and practice of the market."⁴²

To give an idea of how their rules worked, consider a few of the Committee's 1812 resolutions passed for "the safety and protection of the property and interests of the members of the Stock-Exchange." The Exchange had rules in the following categories:

Admissions	(14 resolutions)
Bargains	(10 resolutions)
Clerks	(8 resolutions)
Committee	(18 resolutions)
Failures	(12 resolutions)
Partnerships	(1 resolution)
Puts and calls	(1 resolution)
Passing of tickets	(3 resolutions)
Quotation of prices	(5 resolutions)
Settling days	(3 resolutions)

Without writing in a legalistic way, they stated they wanted to make the resolutions "as clear and comprehensive as possible."⁴³ The need to attract business made the Exchange act in a judicious manner.⁴⁴

How did the London Stock Exchange enforce its rules? Its main ruleenforcing body was the Committee for General Purposes, which had thirty members, a chairman, and a deputy-chairman elected by the members each year. The Committee would deal with "management, regulation, and direction" of the Stock Exchange. The secretary of the Committee would keep records of applications and report "the name of every defaulter that may have been declared in the Stock-Exchange, and insert the same into the minute book."⁴⁵ The Committee had "the right to expel any of their members from the Committee who may have been guilty of dishonourable or disgraceful conduct; or who may be otherwise highly objectionable to them" provided they created a subcommittee to vote on the matter and two-thirds agreed.⁴⁶

The Committee also dealt with membership applications, which had to be renewed each year. All new applicants had to be recommended by two members who "have knowledge of the party and his circumstances"⁴⁷ and could explain them to the admission committee. Anyone who objected to a new member could express that to the Committee for consideration. People whose membership was not accepted could reapply after thirty days, and if rejected again they would have to wait until the next year. At any point in time, "Every defaulter ceases to be a member." Losing membership was not necessarily permanent if a defaulter rectified certain wrongs. The rules and regulations stated, however, certain actions could lead to expulsion: "Every member, who may be guilty of dishonourable or disgraceful conduct, or who may violate any of the fundamental laws of the Stock-Exchange, shall be liable to expulsion."⁴⁸ The expulsion process required a hearing before a committee where at least three-fourths of the members voting decided on expulsion.

Members could also request to have clerks admitted, and members were required to assume responsibility for their clerks. A list of approved clerks and their employers "shall be put up and remain in a conspicuous part of the House." To get permission the member "must send the name of such a clerk to the Committee for General Purposes for their approbation; without whose consent no such clerk shall be admitted."⁴⁹ Clerks were not permitted to trade on their own account and would be expelled if they did. Clerks were generally forbidden to engage in time bargains (i.e., forward contracts or options) unless approved by the Committee. They stated "a list of such clerks shall be put up and remain in a conspicuous part of the Stock-Exchange, together with the names of their employers." Given that time bargains involve considerably more risk, one can understand such a rule.

The Exchange had rules about settlement⁵⁰ and what would go wrong in the event of a dispute. The rulebook stated that "[a]ll disputes between individuals (not affecting the general interests of the Stock-Exchange) shall be referred to arbitration" and added "the Committee [for General Purposes] will not interfere in such disputes, unless that resource may have proved ineffectual, or unless arbitrators cannot be found ready and willing to determine the case." Here brokers appear to have two levels of adjudication within the Exchange.

The Exchange also had various rules about what would happen to defaulters. All creditors whose counterparty defaulted were required to report the default to the Committee for General Purposes. Any creditor who violated the rule would have his name "affixed in a conscious part of the Stock-Exchange."51 Other rules specified the equivalent of rules for bankruptcy proceedings. If someone in default was scheduled to be paid money from another set of trades, the proceeds would go the creditors of the defaulter and split equally among them. This prevented a strategic defaulter from reneging on some contracts but collecting on others. A defaulter would lose his membership but could reapply for membership if he furnished "his books of accounts and a statement of the sums owing to him and owed by him in the Stock-Exchange" and met a few other conditions. A defaulter applying for readmission "shall have his name fixed in a conspicuous part of the Stock-Exchange, at least eight days previous to the application being considered during this Committee." If any members reported "that the conduct of such defaulter has been dishonourable, or marked with any circumstances of impropriety," readmission would be denied and the name of the person would be written on "the Black Board in the Stock-Exchange."52

The Committee stated that "order and decorum" were "so essentially necessary to be observed in all places in this business" and that they needed to inhibit "rude and trifling practices" that would be "injurious to the best interests of the House."⁵³ The Exchange had fairly strict rules, but none of them seem draconian. As long as defaulters repaid their debts (indicating they had not acted with bad intentions when they defaulted) they could be let back in. The rules seem to be adopted to inhibit bad behavior and encourage good behavior. The rules have continued to evolve over time, and to this day the London Stock Exchange is experimenting with different levels of strictness between its Main Market and its more flexible Alternative Investment Market (AIM). As the London Stock Exchange did a couple hundred years ago, it has rules of conduct to retain membership and has procedures against those who violate them.

London was the financial capital of the world, at least until World War I, and the London Stock Exchange, with its system of private regulation, played a crucial role. In 1877 one government report stated that the Stock Exchange's rules "had been salutary to the interests of the public" and that the Exchange acted "uprightly, honestly, and with a desire to do justice." It concluded saying that the Exchange's private rules were "capable of affording relief and exercising restraint far more prompt and often satisfactory than any within the read of the courts of law."⁵⁴

Private Rules and Regulation in Nineteenth-Century New York

Similar to its European counterparts, the New York Stock Exchange (so named since 1863) evolved over time and also was privately governed. The earliest available written agreements between brokers date to 1791, when signatories agreed to fourteen rules about trade, and 1792, when twenty-four brokers signed the Buttonwood Tree Agreement, where they agreed to "solemnly promise and pledge ourselves to each other."⁵⁵ An association of merchants created the New York Tontine Coffee House Company between 1791 and 1792, and opened the Tontine Tavern and Coffee House in 1793 "for the purpose of a Merchants Exchange with 203 subscribers at \$200 each."⁵⁶ In 1794 one commentator wrote,

The Tontine Tavern and Coffee House is a handsome, large brick building; you ascend six or eight steps under a portico, into a large public room, which is the Stock Exchange of New York, where all bargains are made. Here are two books kept, as at Lloyd's, of every ship's arrival and clearing out. This house was built for the accommodation of the merchants, by Tontine shares of two hundred pounds each. It is kept by Mr. Hyde, formerly a woolen draper in London. You can lodge and board there at a common table, and you pay ten shillings currency a day, whether you dine out or not.⁵⁷

Brokers adopted a "Constitution And Nominations of the Subscribers To The Tontine Coffee-House" as early as 1796, and by 1817 brokers created a more formal membership club and trading venue, the New York Stock and Exchange Board.⁵⁸ The 1817 "Rules to be adopted and observed by the 'New York Stock and Exchange Board'" were quite simple and included "fines for non-attendance at the calling of the Stocks" and guidance on how "any member refusing to comply with the foregoing rules may have a hearing before the Board, and if he shall still persist in refusing, two-thirds of the Board may declare him no longer a member."59 Members added different resolutions over the years, and by the 1860s, in addition to blacklisting those who did not follow through with their contracts, they had rules prohibiting "indecorous language" (suspension for a week), fines for "smoking in the Board-room, or in the ante-rooms" (five dollars), and fines for "standing on tables or chairs" (one dollar), as such rules made sure everyone was proper.⁶⁰ By 1865 the initiation fee was \$3,000 and by 1868 one's membership seat became a valuable property right that could be sold to potential members.⁶¹

In 1899, accounting author David Keister⁶² reported, "The rules of the Stock Exchange are very strict; a high standard of integrity is maintained, and all disputes are settled by a committee of arbitration." In 1922 an economist for the New York Stock Exchange stated,

The regulations of the Stock Exchange relating to the business conduct of its members go beyond the common law in the earnest attempt to maintain "just and equitable principles of trade," and that these regulations are immediately and thoroughly enforced. From the inherent nature of the transactions which take place in an organized securities market, such a high and ethical spirit of legislation is necessary. The general recognition of this necessity by Exchange members, in fact, is responsible for the severe and instant punishment to which they have voted to make themselves liable.⁶³

In addition to having rules of membership, the New York Stock Exchange started having rules about the securities that could be listed. Letting any "enterprise," including likely fraudulent ones, approach investors had the potential to create a tragedy of the commons situation where the fraudulent ventures crowded out the good. To deal with this problem, the Exchange adopted listing and disclosure requirements to make the market more transparent.

By 1865 the New York Stock Exchange had two lists of securities, the regular list and the secondary list, and the first list would be called at the "First Board." Similar to over-the-counter or pink sheet stocks in modern times, the secondary list did not have strict listing requirements. The stocks traded on the regular list had more liquidity, and members had to attend the morning session for their trading. To be on the first list, companies had to give their "applications for placing of Stocks on the regular list, [which] shall be made directly to the Board, with a full statement of capital, number of shares, resources, &c."⁶⁴ The financial journal *Bradstreet's* reported, "The New York Stock Exchange has, to a certain extent, taken upon itself an important public duty in requiring companies, whose securities are to be placed on its lists, to make much fuller statements of their organization and affairs."⁶⁵

The New York Stock Exchange later adopted stricter listing requirements and required companies to maintain a transfer agency and registrar that is approved by the Exchange⁶⁶ to obtain permission from the Committee on Stock before issuing initial or subsequent shares;⁶⁷ and to comply with various rules of the New York Stock Exchange Governing Committee, which had the authority to suspend dealings or remove a company's shares from the exchange.⁶⁸ By the 1920s, the New York Stock Exchange⁶⁹ (1925) required various reports and disclosures from companies. Before the passage of the Securities Act of 1933 and the Securities Exchange Act of 1934, all firms listed on the New York Stock Exchange provided information about assets and liabilities and were audited by certified public accountants.⁷⁰ Firms that no longer met the requirements would be suspended or delisted or, as they referred to at the time, "stricken from the list."

Although each listing and disclosure requirement involves costs to listing firms, requirements can bestow certain benefits to investors and listing firms alike.⁷¹ One can think of the New York Stock Exchange as solving a collective-action problem between individual investors and firms. A listing firm nominally bears the costs of compliance, but it willingly does so because the rules increase the value of its stock. If investors value transparency through listing or disclosure requirements, the New York Stock Exchange can require them. That means individual investors need not visit a company's offices if investors know that a stock exchange and auditors have reviewed the company's books.⁷²

Adopting stricter rules had the potential to attract more market participants or it had the potential to push them away to less strict competitors. The New York Stock Exchange always had to compete for business and throughout the years faced competition from the Open Board of Brokers, which merged with the New York Stock Exchange in 1869;⁷³ the Curb Market and its more formal outgrowth, the New York Curb Exchange (founded in 1921 and renamed the American Stock Exchange in 1953); the Consolidated Stock Exchange of New York (founded in the 1880s, it included many mining companies); and regional exchanges including the Boston Exchange and Philadelphia Stock Exchange (founded in 1834 and 1754, respectively, the latter in London Coffee House). Investors also could have focused on "the Coal and Iron Exchange, the Coffee Exchange, the Cotton Exchange, the Maritime Exchange, the Metal Exchange, the New York Insurance Exchange, and the Leaf Tobacco Board of Trade,"⁷⁴ to name a few.

Those running the New York Stock Exchange made a lot of good choices, and by World War I, the New York Stock Exchange surpassed the London Stock Exchange as the most important exchange in the world. The New York Stock Exchange with its system of private rules and regulations helped finance American industry to become the economic powerhouse that it is today.

LESSONS FROM HISTORY FOR TODAY: LETTING PEOPLE OPT INTO OR OPT OUT OF DIFFERENT REGULATORY REGIMES

Private governance of stock exchanges underpinned the world's three most successful stock markets for centuries when government officials were unknowledgeable about or uninterested in supporting stock markets. Although many people assume that rules and regulations to underpin markets must come from government, the history of stock markets shows rules and regulations coming from markets themselves. When rules and regulations enhance market transparency and the value of markets, market participants have incentives to search for them.

What are some potential policy implications? In modern times, a system of private regulation would allow stock exchanges to compete on various margins to help improve the microstructure of their markets. Private rules and regulations could govern everything from different ways of matching and filling orders to what firms can become listed. Historically, exchanges bundled various sets of rules, although there is no reason that listing requirements and market design need to be decided by the same entity. A New York Stock Exchange or London Stock Exchange could compete to offer various listing and disclosure requirements and either require all of its listed firms to be traded on that exchange or allow some or all of its listed firms to be traded in various exchanges such as Bats Global Markets, an electronic communication network founded as Better Alternative Trading System in 2005, or newer exchanges like IEX Group. Yale Law School professor Jonathan Macey, for example, has discussed how exchanges can offer a bundle of off-the-rack rules of corporate governance and serve as reputational intermediaries for listed firms, and more recently he has proposed having an increased number of stock exchanges be exclusive forums for listed stocks.⁷⁵ Think of a stock exchange as acting like the Underwriters' Laboratories to help set standards for, certify, and put a stamp of approval on member firms.

In each case a private regulator must offer a set of rules that is ultimately attractive to investors and the publicly traded firms that want to cater to them. For example, the London Stock Exchange's AIM provides a much more flexible approach for firms that want to go public and gives firms a "comply or explain" option for many rules that allows listed firms to give reasons why complying with a certain guideline does not make sense for them.⁷⁶ Rather than having to pass a litany of bureaucratic rules, firms simply must have the seal of approval of a Nominated Adviser, a third-party financial company approved by the London Stock Exchange, to go public and remain publicly traded.⁷⁷ For any potential rule for publicly traded firms, such as recent proposals to require firms to rotate auditors, stock exchanges would be allowed to experiment with having or not having the rule. Those that adopt rules that benefit investors would see an increased demand for their market, and those that adopt onerous rules would see a decrease in demand. The process of competition would thus encourage stock exchanges to offer the set of rules and regulations that investors want. Recently proposed rules like auditor rotation need not be mandated for all firms.

For those who believe that the current set of government regulations is always, or at least sometimes, beneficial, it would be quite easy to keep most regulations in existence but at the same time let investors opt out of them if they desire. Just as international investors are allowed to invest in (and have been investing in) foreign markets over American ones, and just as institutionally qualified investors are able to invest in companies that do not follow all of the rules for publicly traded companies, ordinary Americans need not be deprived of those same liberties and investment options. For example, the US Securities and Exchange Commission's 500-page Regulation NMS (National Market System) includes a set of provisions that mandate that all investors get the "best price" for orders of publicly traded securities, but it neglects the wishes of investors who want to opt into venues that optimize on other margins. "Best price" regulations both undermine the time-tested specialist system of the New York Stock Exchange and act as a hurdle for newer exchanges like IEX attempting to devise systems to match orders in a potentially more orderly way. My modest proposal would allow some exchanges to advertise that they are compliant with Regulation NMS and others to say they are not and offer the choice to investors. Such a setup would require stock exchanges to get approval from their customers (i.e., their rules would need to pass the market test), not the SEC, for offering a set of rules and regulations that differs from their competitors'.

The New York Stock Exchange, now publicly traded as part of the Intercontinental Exchange Inc., is still tremendously important and can be even more important in the future, but since 2000, prosecutors and regulators have stripped the New York Stock Exchange of much of its power to regulate its market. For example, before Regulation NMS mandated immediacy and "best price" of order execution over all other factors, the New York Stock Exchange, NASDAQ, and other trading venues competed to offer attractive ways of executing orders (e.g., the individual specialists in the New York Stock Exchange versus the plethora of market makers in NASDAQ), and the market decided what venue was best. One-size-fits-all regulations like Regulation NMS, however, both undermine the specialist system of the New York Stock Exchange⁷⁸ and preclude many other types of innovation and experimentation from competing electronic communication networks.⁷⁹

Another way to move away from monopoly mandates would be to allow private regulatory organizations like the Financial Industry Regulatory Authority (FINRA) to continue to do most of what they do, but not mandate their authority on all securities firms.⁸⁰ To the extent that consumers want to deal with firms that comply with and are monitored by FINRA or another competitor, firms will opt into the system. A voluntary and competitive system would contrast with the current system that relies on society-wide mandates of previously untested but subsequently difficult-to-repeal government rules, no matter how bad they turn out to be. Those who believe the existing set of regulations are beneficial to investors can willingly comply with the Securities Act of 1933 and the Securities Exchange Act of 1934 or the thousands of pages of government regulations added since. If government regulations were anything close to as good as public officials say, then safety and returns in these markets would be superior and investors would flock to them. The fact that investors are not given this choice is, however, prima facie evidence that these rules and regulations would be unable to pass any market test.⁸¹ A major advantage of private over government regulation is the former's flexibility and ability to more fluidly evolve over time. Like generals preparing for previous wars, government regulators often devise plans to deal with old problems and do a poor job at predicting future ones. Regulators are also often slow to eliminate antiquated and unnecessary regulations. Instead of having a set of rules and regulations to solve problems at hand, markets are often left with layers of legalistic mandates that offer few benefits for companies or investors.

Moving to a system of regulatory competition would allow investors to opt into sets of rules and regulations that they consider best, and competing stock exchanges to provide that option. In much the same way that car buyers do not need to evaluate each of the 30,000 parts in their car, investors need not evaluate every single rule or regulation in the market they are opting into. Competing stock exchanges help provide an off-the-shelf package of rules for corporate governance, and the costs and benefits of that package become internalized within each exchange. And in much the same way that a competitive market for automobiles gives us far superior cars than if all cars were produced by the government, the same was and can again be true with rules and regulations provided through the market.

NOTES

- 1. Stedman and Easton, "History of the New York Stock Exchange," 18.
- 2. Rajan and Zingales, Saving Capitalism from the Capitalists.
- 3. Likewise Mancur Olson writes that without "institutions that enforce contracts impartially," a society loses "most of the gains from those transactions (like those in the capital market) that require impartial third-party enforcement." See Olson, "Big Bills Left on the Sidewalk," 22. Israel M. Kirzner writes, "Without these institutional prerequisites—primarily, private property rights and freedom and enforceability of contract—the market cannot operate. It follows that those institutions cannot be created by the market itself." See Kirzner, *Driving Force of the Market*, 83.

4. This chapter focuses on the world's three most successful stock markets and identifies many similarities between them. Another set of useful research could look for patterns in the economies that did not end up developing successful stock markets. For example, a century and a half before the stock market in Amsterdam, Antwerp had what many consider the first successful bourse, albeit not one with a major market for equities. Having the Antwerp bourse grow into one with a flourishing secondary market for equities could have been a natural extension. But the government eventually passed a series of economically illiberal policies, which included expelling the Jewish population (Bloom, Economic Activities of the Jews, 181) and banning ships traveling directly to the city (Israel, Dutch Primacy in World Trade, 30). Around that time many of those people and commercial enterprises moved up to Amsterdam. Elsewhere, the Hanseatic Stock Exchange (referring here to a bourse that did not trade equities at its formation) at Hamburg was founded in 1558, the Frankfurt Stock Exchange was founded in 1585, and the Berlin Stock Exchange was founded in 1686, but they only began listing equities in the early nineteenth century; see Baker, German Stock Market, 35-36. Neal, Concise History of International Finance, discusses how in seventeenth-century France, the financial "innovation" was simply government efforts to increase taxation rather than to create opportunities for people to invest in private enterprise. They had "no Stock Exchange or bank" (67) and did not develop a capitalism for the people, a term used by Luigi Zingales.

The legal origins literature—see Glaeser and Shleifer, "Legal Origins"—hypothesizes that successful stock markets can be attributed to more legal protections for shareholders in common law countries and fewer in civil law countries. Although a large degree of correlation between common law and present stock market development may exist, the story glosses over the fact that stock markets were invented in a country without a common law tradition and that legal mandates that allegedly protect shareholders are a relatively recent invention. Four centuries ago, Amsterdam was home to an eighty-year Dutch revolt against Spain, but not home to an advanced legal origins hypothesis is the fact that up until a hundred years ago, many of the world's most developed stock markets were in civil law countries; see Musacchio, "Can Civil Law Countries Get Good Institutions?" Ultimately I believe McCloskey (*Bourgeois Virtues*) makes a compelling case that the Netherlands and England became the centers of early modern capitalism because their people embraced individualism and markets. I will add that a tremendously important factor that enabled these markets to grow was the existence of stock markets.

- O'Hara, Market Microstructure Theory; Carlos and Neal, "Micro-Foundations of the Early London Capital Market"; Neal and Davis, "Evolution of the Rules and Regulations"; Neal and Davis, "Evolution of the Structure and Performance."
- 6. Mahoney, "Exchange as Regulator"; Romano, "Empowering Investors."
- 7. McKinsey and Company, Sustaining New York's and the US' Global Financial Services, 7.
- 8. Ibid., ii.
- 9. Ibid., 65.
- 10. Much of this section draws from my book *Private Governance*. Readers looking for more details are invited to read that work, too.
- 11. Malmendier, "Law and Finance at the Origin"; Romano, "Empowering Investors."
- 12. See Kellenbenz, "Introduction to Confusion De Confusiones," 134. The other main publicly traded company was the Dutch West India Company, founded in 1621; see Israel, *Dutch Republic*, 326–27. The Dutch West India Company attracted a similar amount of initial capital, but it was never as successful as the Dutch East India Company.
- 13. Neal, Rise of Financial Capitalism, 195.
- 14. Neal, "On the Historical Development of Stock Markets," 62.

- 15. Petram, "World's First Stock Exchange," 92.
- 16. Kellenbenz, "Introduction to Confusion De Confusiones," 134.
- 17. Wilson, *Anglo-Dutch Commerce in the Eighteenth Century*, 14; Kellenbenz, "Introduction to Confusion De Confusiones," 134–35.
- 18. Dehing and Hart, "Linking the Fortunes," 55; Garber, "Tulipmania," 78; De Vries and Van Der Woude, *First Modern Economy*, 151.
- 19. de la Vega, Confusion De Confusiones.
- 20. Smith, Lectures on Jurisprudence, 538.
- 21. Greif, "Contract Enforceability and Economic Institutions."
- 22. For example, de la Vega writes, "The Exchange business is comparable to a game. Some of the players behave like princes and combine strength with tenderness and amiability with intelligence, but there are some participants who lose their reputation and others who lack devotion to their business even before play begins" (*Confusion De Confusiones*, 172). Who wants to deal with an untrustworthy broker? De la Vega writes, "Since the status, the insignificant capital, the low reputation, and the limited trustworthiness of such people are well known, they do not dare attempt to carry on any considerable business" (201).
- 23. Ibid., 172.
- 24. Israel, Dutch Primacy in World Trade, 258; and Dutch Republic, 942.
- 25. Many of these companies were given privileges by government, but those protections were not unlimited. For example, the English East India Company faced competition from the Dutch East India Company, the Danish East India Company, the French East India Company, the Portuguese East India Company, and the Swedish East India Company. If one goes by the dictionary definition of monopoly as "exclusive supply," then no monopoly existed.
- 26. Kindleberger, Financial History of Western Europe, 96.
- 27. Reed, History of James Capel & Co., 5.
- 28. Reprinted in Mirowski, "Rise (and Retreat) of a Market," 564.
- 29. Morgan and Thomas, London Stock Exchange, 46.
- 30. Francis, Chronicles and Characters of the Stock Exchange, 23.
- 31. Harris, Industrializing English Law, 225.
- 32. Smith, Lectures on Jurisprudence, 538.
- 33. Palgrave, Dictionary of Political Economy, 542.
- 34. Law Times Reports of Cases, 612.
- 35. Freedman, Introduction to Financial Technology, 164.
- 36. Smith, Lectures on Jurisprudence, 538.
- 37. Reprinted in Smith, "Early History of the London Stock Exchange," 215.
- 38. Anti-Lounger, "Letter to the Printer," 525.
- 39. Wincott, Stock Exchange.
- 40. Reprinted in Jenkins, Stock Exchange Story, 45.
- 41. Committee for General Purposes of the Stock-Exchange, Rules and Regulations, 10.
- 42. Ibid.

- 43. Ibid., 6.
- 44. Boot, Greenbaum, and Thakor, "Reputation and Discretion in Financial Contracting."
- 45. Committee for General Purposes of the Stock-Exchange, Rules and Regulations, 33.
- 46. Ibid., 31.
- 47. Ibid., 17.
- 48. Ibid., 18–19.
- 49. Ibid., 23.
- 50. Ibid., 20.
- 51. Ibid., 34-35.
- 52. Ibid., 36-37.
- 53. Ibid., 46.
- 54. Reprinted in Wincott, Stock Exchange, 27.
- 55. Banner, *Anglo-American Securities Regulation*, 250–51, argues against the somewhat popular belief that these agreements cartelized markets.
- 56. Werner and Smith, Wall Street, 216.
- 57. Quoted in Bayles, Old Taverns of New York, 360-61.
- Tontine Coffee House, Constitution and Nominations of the Subscribers; Stedman and Easton, History of the New York Stock Exchange, 62.
- 59. Stedman and Easton, History of the New York Stock Exchange, 64.
- Hamon, New York Stock Exchange Manual, 26–29; New York Stock Exchange, Constitution and By-Laws, 31–33.
- 61. Hamon, New York Stock Exchange Manual, 12; New York Stock Exchange, About Us/History/ Timeline.
- 62. Keister, Keister's Corporation Accounting, 260.
- 63. Meeker, Work of the New York Stock Exchange, 352.
- 64. New York Stock Exchange, Constitution and By-Laws, 16-17.
- 65. "Restrictions for Company Promoters."
- 66. New York Stock Exchange, Constitution of the New York Stock Exchange, art. XXXIII, sec. 1.
- 67. Ibid., sec. 2, sec. 5.
- 68. Ibid, sec. 4.
- 69. New York Stock Exchange, Constitution of the New York Stock Exchange (as Revised in 1925).
- 70. Benston, "Required Disclosure and the Stock Market," 133.
- 71. Manne, "Hydraulic Theory of Disclosure Regulation."
- 72. Macey, Death of Corporate Reputation.
- 73. Stedman and Easton, "History of the New York Stock Exchange," 214.
- 74. Markham, Financial History of the United States, 6.
- 75. Macey and Kanda, "Stock Exchange as a Firm"; Macey and Swensen, "Cure for Stock-Market Fragmentation."

- 76. Stringham and Chen, "Alternative of Private Regulation."
- 77. The London Stock Exchange, *Guide to AIM*, 6, reports that firms listed on the AIM face "no minimum market capitalization, no trading record requirement, no prescribed level of shares to be in public hands, no prior shareholder approval for most transactions, [and] admission documents [are] not pre-vetted by the Exchange nor by the UKLA [United Kingdom Listing Authority] in most circumstances."
- 78. Arnuk and Saluzzi, Broken Markets, 14.
- 79. White, "ECNs RIP."
- 80. Because private regulatory groups like FINRA are state sanctioned and must comply with government rules, many people infer that private regulation is only possible because government ultimately enforces it. Historically, however, many private regulatory groups had rules that were at odds with the laws of the land. As Neal points out, "the formal self-regulation of the London Stock Exchange evolved circumspectly to avoid state-regulation." Because government considered most of the trading on the exchange as a form of illegal gambling it is clear that these private regulatory groups were not made possible because of government. See Neal, "Evolution of Self- and State Regulation," 300.

Evidence from countries with more obviously less developed legal systems is also revealing. For example, after the fall of communism, the law often offered little protection for most market participants; see Frye, *Brokers and Bureaucrats*. Although the outcomes were far from perfect, stock markets in these countries emerged and helped encourage the privatization process. See Stringham, Boettke, and Clark, "Are Regulations the Answer?" But the amount of support from government is questionable at best. Consider the fate of Yukos Oil, which had its CEO jailed and \$50 billion assets expropriated, or the holding company Sistema, which also had its CEO arrested and billions of dollars' worth of oil assets expropriated (see Davies, Stubbs, and Escritt, "Court Orders Russia to Pay \$50 Billion"; Bashneft Is Notified of a Change"). Cases like these cast doubt on the claim that successful publicly traded companies are only possible because of government rules and regulations.

81. A more explicitly paternalistic argument posits that typical investors are not smart enough to understand what stock exchange is likely to offer them attractive sets of rules. But if one wants to push this line of thinking, how will these same people be smart enough to select politicians with even a basic understanding of economics? While each investor has to bear the cost of his good or bad decisions, and thus has incentives to become more informed and make good decisions, individual voters do not bear the full cost of voting for economically ignorant politicians; see Caplan, *Myth of the Rational Voter*; Caplan and Stringham, "Privatizing the Adjudication of Disputes." If one assumes, as paternalists do, that the average person is ill-informed or even stupid, that is one of the best arguments for taking important financial and regulatory decisions out of the hands of the masses. Personally, I believe I am much more qualified to decide where to invest my money rather than being forced to have 12 percent of my lifetime income "invested" in an unfunded and actuarially unsound Social Security system.

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