

Managerial Finance

A Multi-Dimensional Enterprise

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Brokers, Bureaucrats and the Emergence of Financial Markets¹

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Introduction

When managers wish to raise external capital, investors must be able to trust that brokers and managers will not cheat them out of their money. To what extent is government regulation necessary for the existence of advanced financial transactions and, for that matter, the well functioning of markets in general? A growing literature argues that strong state enforcement is needed to foster financial markets (La Porta et al, 1997, Glaeser et al, 2001). The problem of contractual performance and, more generally, the problem of social order are some of the most enduring questions in the social sciences. German sociologist Georg Simmel may have put it most eloquently in his 1910 essay when he asked, "How is Society Possible?" but the question is rooted in a discourse dating back at least to Thomas Hobbes's (1651) *Leviathan*. Hobbes contended that social order was impossible without external enforcement, and in a similar manner many modern commentators in law and finance maintain that the state must play an active role for markets to function. In his study of emerging financial markets in post-Soviet Russia, Timothy Frye (2000:2) argues that, "politics underpins social order."

This article provides a critical analysis of Frye (2000) and existing theories of self-governance. Following up on the recent studies by Stringham (2002, 2003), we focus our attention on the emergence of financial markets for several reasons. The common perception is that complicated financial instruments require state sanction to emerge. It is widely argued that in the absence of state regulation of financial markets, cheating will be common. We maintain, in contrast, that the evidence does not support this pessimistic view. In fact, markets are capable of endogenously generating the rules that govern their operation and these rules discipline cheating severely. Finally, if we can persuasively make the case that self-governance in financial markets is effective — with the complicated nature of transactions that take place — then the argument for self-governance in economic life, we contend, is much stronger than even classical liberalism has led us to believe.

Frye's work represents a significant step forward in the literature on financial markets in transition economies. Many studies prior to this author insisted that institutions of corporate governance needed to exist *prior* to the introduction of privatization and that the rules which defined these institutions of corporate governance were the appropriate domain of the state (Frydman and Rapaczynski, 1994). Without an activist state establishing the framework and regulating the practices, corporate governance will be ineffective and the market economy will be littered with opportunism and inefficient organizations. Frye does much to dispel this argument. But, despite his advances over the previous literature, we will argue that his introduction of political actors into the discussion of the mechanics of self-governance ultimately confuses the issue.

Types of Analysis of Self-Governing Orders

To motivate his discussion of the emergence of financial markets in post-communist Russia, Frye distinguishes between three different approaches to the study of self-governing organizations: sociological, economic, and political (Frye, 2000:17-55). Self-governance has not gone unrecognized in the modern social scientific literature. Scholars have recognized pockets of self-organization in a variety of walks of life. Most commentators, however, provide arguments for the severe constraints on self-governance becoming a general vehicle for social cooperation. Each of the theories believes that self-governance only works under certain limited conditions. Frye (2000) characterizes the different approaches to self-governance as follows:

Table 1. Theories of When Self-Governance Can Occur			
	Sociological Approach	Mainstream Economic Approach	Political Approach
Requirements for successful Self-governance	· Dense social ties	* Small Groups * Homogenous agents * Low discount rates	* Delegation * Low tax rates * Government Encourages Sharing of Information

Sociological approach to self-governance

In sociological theories the constraint tends to be density of social ties. Cooperation without formal legal arrangements can be relied upon in situations where strong family networks dominate social intercourse. But in many cases these theorists argue that social intercourse with unknown others requires formal law. Two things stand out in the sociologists’ analysis: they challenge an atomistic notion of markets as seen in some economic theories, and they see sharp limits to the benefits of “strong ties.”² As we will discuss below, although we agree that atomistic markets are unrealistic and that it would be unfortunate if trade could only take place between family and kin, we reject the conclusion that self-governance only works in situations of dense social ties. We believe that even in situations involving anonymity, social cooperation can emerge through self-governance.³

Mainstream economic approach to self-governance

Mechanisms of self-governance have not escaped the attention of economists either. Views vary from school to school, but like their sociological counterparts, most tend to be pessimistic about the generalizability of self-governance as well (Hay and Shleifer, 1998; Hayek, 1978). For example, Landa (1995) argues that trades outside of formal law can work provided we are dealing with an ethnically homogenous group in a small number setting. With many shared points of orientation among a population, close knit groups are able to discipline cheaters using ostracism. Economic interactions are self-governing provided the population is homogenous and it is easy to identify cheaters. But what about self-governance when the population is heterogeneous and contains larger numbers? Much of the economics literature believes that in such situations self-governance cannot be relied upon to discipline deviants and that social cooperation will break down unless backed by the state as a third-party enforcer (Greif, 1989; Landa, 1995).

In contrast, we will argue that self-governance can work to promote cooperation even in situations of ethnic diversity and large numbers. Historical evidence suggests that

reputation and formal private rules can create incentives for market participants to follow through with their bargains. The threat of exclusion from the trading group creates incentives for agents to act in a manner that produces social cooperation among agents even in unfavorable circumstances, according to standard theory. It seems that human actors tend to trust and cooperate more than game theory would predict. The economic theory of self-governance has been developed quite far in the past decade, but it must be taken even further if these anomalous results are to be explained.

Political approach to self-governance

Finally, the political science literature has also recognized the importance of self-governance. In fact, the entire discussion of civil society and social capital in Robert Putnam's *Making Democracy Work* (1993) was motivated to a large extent by the discussion of self-governance in Tocqueville's *Democracy in America* (1835). But, in our opinion, the emphasis on bottom-up self-ordering in Tocqueville is often missed in these discussions. Instead, the political science literature tends to focus attention on how the state creates space in the social world for self-governing orders by providing information and delegating authority. In this regard, self-governance is merely an (albeit) important vehicle for reducing the administrative burden of the state sector. Self-governance, in short, supposedly enables the state to concentrate on those aspects of governance that it can accomplish effectively by reducing the administrative tasks of the state. But this position is at once too optimistic and too pessimistic from our perspective. Too optimistic because it holds that if we restrict the scope of government we can minimize the problems of bureaucratic coordination. Too pessimistic because it suggests that self-governance can only take place in the "shadow of the state."

Although the sociological and mainstream economic literatures do not exhaust the manner in which actors develop mechanisms for self-governance, the rampant pessimism is due to a lack of imagination as to how diverse populations can nevertheless come to cooperate. But the political science literature seems to suffer a more fatal flaw than lack of imagination — it actually contradicts itself. The work inspired by Putnam (1993) argues that the bottom-up civil society recognized by Tocqueville as vital for the function of democracy in the US, can only be had through a top down imposition of civic responsibility! Even in Frye's more subtle discussion, he is also nevertheless caught in a contradiction when he tries to argue that politics underpins social order.

For Frye, the state does best with regard to self-governance when it does essentially nothing at all. The government plays an important role by delegating authority, lowering taxes, and generally easing the costs of communication between economic actors and facilitating their private dealings.⁴ If the state does anything at all to *actively* intervene in these private dealings, it undermines self-governing forces. But if it does nothing, we ask how can it in fact be the source of self-governance? Frye's political approach to self-governance is fundamentally incoherent, and ultimately the strengths of his analysis can be traced to his integration of economic and sociological approaches to self-governance that drive his case studies despite his own claims to the contrary.

Frye basically argues that if the state delegates regulatory authority to market participants and keeps taxes low, self-governance will work. It should not be surprising that if the state regulates economic affairs and engages in predatory taxation, that above ground institutions of self-governance will not be able to flourish. By not engaging in

harmful behavior the state encourages participants to share information about their dealings and the reliability of various participants. But here Frye is actually saying that the state can promote self-governance by getting out of the way. If it simply creates space for self-governance, the mechanisms of self-governance still remain to be explained. Frye's political approach does not provide the mechanism for successful self-governance, just a precondition. And, thus, the sociological and economic approaches return to the forefront of the analysis.

An alternative approach to self-governance

We believe that each of these existing literatures is incomplete and fallacious. To demonstrate this claim we will focus on the complicated arrangements that are actually involved in financial markets. Our work can be viewed as a commentary on the growing literature on law and finance and in particular the work on the emergence of financial markets. In countering the argument of Frye and others concerning the essential role of politics, we provide evidence that financial markets have arisen entirely without the assistance of government. The benefits of exchange are too strong to be ignored and the costs of cheating are too great to be tolerated, so financial markets themselves develop elaborate mechanisms to discipline actors. Trading arrangements evolve to select populations of entrepreneurs precisely because of their trustworthiness and promise-keeping skills. Rather than assisting markets, government policies often actually interfere with this process. Bad policies make brokers *less* able to use reputation and exclusion as a means of disciplining trading partners. The institutions of corporate governance, in other words, do not require the state to exist, but once they are incorporated into the gambit of the latter they are often corrupted. The disciplinary function of corporate governance does its job best when it is independent of the state.

The disciplinary mechanism that lies at the core of our basic model of social interaction is reputation and ostracism from future trades. In large-number situations where reputation is more difficult to communicate, we find that emerging financial markets possess ways to provide information surrogates, or proxies, for the face-to-face reputational signals we see coordinating affairs in small-number situations. In the absence of the state, traders, for example, form clubs to provide various goods such as rule enforcement. We illustrate this evolution of markets by way of a historical examination of stock markets in Amsterdam and London in the seventeenth and eighteenth centuries.

Stock exchanges endogenously evolve rules and practices that allow individuals to realize mutual gains and discipline opportunistic behavior. Exchanges may feature exclusion tactics designed to limit the trading opportunities of potentially untrustworthy individuals. Access to the market will be denied, and contracts will not be honored, unless an individual passes a series of tests that first qualify him for membership.⁵ By discriminating between potential trading partners and developing social relationships, this works to pool social interactions between heterogeneous actors into relatively homogenous groupings (at least on the margin that matters for trading). Politics and the state have no role in governing the operation of this interaction, and to introduce them into self-governance is to unjustifiably attempt to capture by public means the process of private want satisfaction. The government has no economic role to serve in this market, except to recognize what is currently being practiced, or to corrupt those practices in a detrimental fashion.

EVIDENCE

We believe that although Frye has done an excellent service by providing many of the details of the Russian experience with financial markets since the collapse of communism, by no means should the various Russian exchanges (commodities, currency and stock) be considered as exemplars of successful financial exchanges. In fact, the volatility in the market that was evident during the 1998 crisis can be traced to the political entanglements which still dominate the commercial landscape in Russia (Gaddy and Ickes, 1998). The continued subsidization of key industries, and the mixed ownership forms which were mistakenly interpreted as privatization resulted in hybrid forms of enterprises that were never truly private, yet now also lacked the previous structure of public oversight. Russian statistics tended to overstate the extent of large-scale privatization, and underestimate the amount of privatization that took place through entry of new enterprises as individuals attempted to hide from the purview of the government their economic activity for fear of public predation through taxation and regulation. However insightful Frye's discussion of the emergence of various exchanges in post-communist Russia may be, the time frame of his analysis is not long enough to offer conclusive evidence.

While the hypotheses Frye raises concerning economic, sociological, and political approaches to self-governance are intriguing, the data he employs from Russia cannot be relied upon to adjudicate between them. The time period of analysis of the development of markets in transition economies is just beginning and his assessment of the role of state policy in self-regulation truncates the story prematurely.⁶ Looking at the history of the more significant stock markets, which operated for far greater time periods, we find a picture opposite of the one drawn by Frye. The conjectures of political approach to self-governance are simply not consistent with the historical record.

AMSTERDAM

First let us consider the world's oldest stock market, that of Amsterdam. The market for equities emerged after the creation of the Dutch East India Company in 1602 (Israel, 1989; 1995). After its inception, investors could transfer the ownership of their shares by going to the offices of the Company and paying them a small fee (Neal, 1990a: 195). This system was quite straightforward and required little trust between the two, since the clerk would look in the books to make sure that *Investor A* really had a share to transfer to *Investor B* at which time *B* would give *A* the money. The downside was that there were significant transaction costs of having to go to the company's offices on each occasion. Exacerbating matters were delays at the East India Company's offices, since it had not anticipated the high demand for transferring shares and was not adept at these tasks.

Brokers, however, figured out a way to eliminate much of these costs. Rather than requiring that investors visit the East India Company for every trade, brokers decided they could make many transactions and then settle with each other on a future date. This provided great savings in transactions costs for the investors, but it introduced a new risk. When shareholders went to the Company to make the trade they knew they would get the share or the money immediately, but when they made a trade with a broker that would be settled at a future date, there were now chances for default.⁶ A broker or another investor could make an agreement and then lose his shirt before settlement, or, even worse, he could engage in intentional fraud and have no intention to actually live up to his side of the bargain.

If Frye is correct that politics underpins social order, we would expect to see these transactions with brokers taking place only after one of two things occurred: either government courts provided enough assurance by effectively enforcing contracts, or government encouraged brokers to form a self-regulating organization that provided those same assurances. In the seventeenth-century the Dutch government did neither. The political authorities considered much of the transactions associated with the stock market as wasteful, manipulative, and immoral (De Vries and Van Der Woude, 1997:150; Garber, 2000:34). Rather than playing an active role to encourage trading, they actually tried to discourage it. Starting in 1610 they passed ordinances against “trading in wind,” (Kellenbenz, 1957, pp. 134-5) which outlawed all but the most straightforward of transactions. Market participants were prohibited from making trades where the shares were not actually transferred within two weeks. These ordinances effectively outlawed short sales, forward contracts, and most everything besides the simplest of contracts. Likewise, government did not play an active role promoting a self-governing organization: anyone could participate and there were no formal rules.

This situation, according to Frye, would be a recipe for disaster. If there were any dealing with brokers it would be limited to the simple transactions where courts would be able to play a role. Although these appear to be the worst possible circumstances for an advanced stock market, in actuality we can see that the market did not remain undeveloped, as Frye’s theory would lead us to believe. Evidence about how the Amsterdam stock market functioned can be found in Joseph Penso de la Vega (1688).⁷ The Dutch government’s wishes notwithstanding, Amsterdam brokers simply ignored the law and went on to conduct numerous types of transactions that were unenforceable in government courts. By the time Vega was writing, a quite advanced securities market had developed. Contracts included short sales, forward contracts, hypothecation, securitization, and options. Since these transactions were actually prohibited by law, we know for certain that Dutch traders were not relying on state courts to enforce their contracts.

How was it possible for the market to thrive if government was not playing an active role? As detailed in Stringham (2003), rather than relying on law, market participants depended on reputation and the discipline of continuous dealings to induce contractual performance (see also Klein, 1997; Smith, 1766). In numerous passages of de la Vega (1688) it is evident that reputation played a very important role. For example De la Vega wrote, (1688:201) “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.”⁸ Word of mouth enabled traders to find who was reliable and with whom they should deal. When traders knew that someone was untrustworthy it would be in their interest to boycott that party (Caplan and Stringham, 2002). The Dutch stock market had an informal reputational network, which emerged with no assistance from the government whatsoever.⁹ In this case, the political approach to self-governance gives the inaccurate prediction: the Amsterdam market should not have been successful, but it was. The mainstream economic and sociological literatures at least have a chance at explaining the success of the Dutch market, but Frye’s political approach to self-governance has none.¹⁰

LONDON

Still it is possible that Amsterdam was an outlier. For this reason it will be useful to examine another market. After Amsterdam the one that comes most readily to mind is the stock

market of London, which developed slightly before the turn of and throughout the eighteenth century. It was at this time when secondary markets matured and began taking a shape more familiar to modern observers. It was also the first major market to have a privately organized stock exchange that created and enforced rules.

Since this is a natural experiment it will be telling to see if government played a useful role assisting this particular stock market. Perhaps Frye's approach will yield more accurate predictions for London. We have already seen in the case of Amsterdam that market participants had an incentive to share information, but was this an anomaly? In London there are several many parallels with Amsterdam; the British adopted many of the practices of the Dutch, notably the rescounter dates where trades would be settled once every three months (Dickson, 1993: 491,507-510). These quarterly settlement dates exposed traders to all of the above mentioned risks of default and we can see this danger cited in early accounts of the stock market. For example in, *Every man his own broker; or, A guide to the Stock Exchange*, a book reprinted throughout the four decades at the end of the eighteenth century, Thomas Mortimer remarked: "problems arise if the person making the trade does not have the ability (cash) to settle, for in many cases a broker and his customer had no money." (Mortimer, 1801:53-4)

The political approach to self-governance suggests that if there were a solution, the state would be at its heart, but in this market too, this is not the case (Stringham, 2002). Looking into the development of secondary markets in London, one is hard pressed to find ways of attributing their success to the state. Frye assigns two positive roles to government for promoting self-governance. The first is enacting policies that encourage the sharing of information. Although we believe he is correct that self-governance rests on the ability of market participants to do just that, nowhere does Frye demonstrate the necessity that the state play a positive role for this to happen. What if government simply does nothing?

English brokers, just like their Dutch counterparts, were actively sharing information about the reliability of others. One of the more prominent pieces of evidence is the use of the term "lame duck." In 1761 Thomas Mortimer described a lame duck as: "A name given in 'Change Alley to those who refuse to fulfil their engagements... There are some at almost every rescounter" (quoted in Morgan and Thomas, 1969:61). Although lame ducks posed problems to trustworthy brokers, just as in Amsterdam, the economic incentives were the same: it paid to investigate the reliability of one's trading partners and to boycott the untrustworthy. We can see evidence of this in various sources such as Mortimer (1761) and Adam Smith's (1766) *Lectures on Jurisprudence*: "They who do not keep their credit will be turned out, and in the language of Change Alley be called lame duck" (Smith, 1766/1982:538). The system of sharing information went beyond a few brokers gossiping over coffee; eventually the system advanced such that brokers would write the names of their unreliable counterparts on a chalkboard in one of the main places of trading (Morgan and Thomas, 1969:61). In contrast to Frye's assertions about the supposed need for government, brokers were readily sharing information without any direction from the state.

The second role Frye would have us assign to the public sector is choosing brokers to form a self-regulating organization. In Frye's NAUFOR example in Russia, the gov-

ernment actively selected the brokers to control the market. Again he implies that entrepreneurs would have been unable to successfully organize without state assistance. The question is whether government needs to play this role. Did the Crown play such a role in London? Once more, we see that the Political Approach to Self-Governance does not accord with the facts. In London, the first self-regulating organization emerged not because of government but in spite of it.

Through the end of the eighteenth century there was no formal stock exchange, so brokers made use of coffee-houses, the most popular of which was Jonathan's. As the market grew, unfortunately traders with less than stellar reliability joined, and it became costly to keep track of everyone. Not surprisingly, the more reputable brokers did not want to be exposed to such elements so they devised a strategy. 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 [Jonathan's] coffee-house" (quoted in Smith, 1929:215). They decided that they would rent out Jonathan's Coffee-House to use it as their exclusive venue. By having the ability to preselect who could enter the club it would free brokers from continually having to be on their guard.

Was it the case, as the Political Approach to Self-Governance would have us believe, that the government was behind such an organization? Very much to the contrary, the government actually acted as a roadblock in this case. Rather than allowing and encouraging the London brokers to police themselves, the courts intervened and declared that the stockbrokers did not have a right to exclude anyone from Jonathan's (Morgan and Thomas, 1969:68; Jenkins, 1973:45). By forcing traders to deal with others against their will, the government can preclude the use of boycott as a non-violent means of enforcement. In this case the state disrupted the burgeoning efforts of private enterprise. But with economic incentives as strong as they were, the brokers did not give up. They ended up constructing their own building, referred to as New Jonathan's and later renamed to The Stock Exchange, which could create and enforce such rules.¹¹ Members who were unruly could be fined and/or kicked out of the club, which created significant incentives for cooperation and honesty. The London Stock Exchange seems to be the archetypal example of successful self-governance and by all accounts we can see that Frye's predictions about the political origins of social order are just plain wrong.

The mainstream economic and sociological approaches, are at least superficially compatible with the successful self-governance in London but ultimately they are also deficient. The London Stock Market clearly was not a close-knit community where each person knew everyone else and their businesses. Were this the case there would have been no reason to write down the names of the untrustworthy or exclude them from the Coffee-house since such measures would be redundant. As a whole, stockbrokers clearly had heterogeneous interests and their community was not limited to a small number of traders. This was, after all, why the more reputable brokers desired to set up a self-regulating organization in the first place: because there were too many people who could not be trusted. By looking at the fuss the less reliable brokers made after they were excluded from Jonathan's Coffee House, we can see that the interests of the large class of brokers were not at all homogenous. Despite this, by creating a self-policing club they were able to overcome these problems.¹²

TABLE 2. Predictions of the Political Approach to Self-Governance

<i>Case</i>	<i>Prediction</i>	<i>Observed Outcome</i>	<i>Correct Prediction</i>
Stock Market of 17 th Century Amsterdam	Failure	Success	Unsuccessful Prediction
Stock Market of 18 th Century London	Failure	Success	Unsuccessful Prediction

Conclusion

Frye's political approach to self-governance, despite the advance it represents in terms of previous discussions of the emergence of financial markets in post-communist economies, fails to improve upon the mainstream economic and sociological approaches. A better understanding of self-governance will come not from incorporating the political element into the analysis, but instead by clarifying with theoretical and empirical work the various mechanisms through which heterogeneous agents in large group settings actually produce cooperation without coercive command.

We have argued that the existing literatures on self-governance are by far too pessimistic about the ability of individuals to form self-governing organizations that provide the framework within which complicated economic relationships can be forged. In addition, we have demonstrated that the political approach to self-governance, specifically, is either redundant or contradictory. Market participants find creative ways to self-police their interactions beyond the limited scope predicted by the standard economic and sociological approaches. Self-interest can work as a powerful mechanism for social cooperation without a government enforcer, even in situations earmarked by anonymous dealings. Moreover, in the historical examples of the emergence of financial markets, economic actors found ways to share information among market participants regarding disciplinary deviants. With regard to the emergence of complicated financial arrangements the evidence suggests that when government does nothing, self-organization of markets works. Systemic instability of financial markets results when the state intervenes in the private sector and distorts the signals that economic actors follow in trying to realize gains from trade. In short, governments aid markets most effectively by getting out of their way, allowing economic actors to pursue their plans as they see fit, and leaving the market alone to develop its own rules and mechanisms for dealing with cheaters and opportunistic behavior.

According to the standard line of classical liberalism from Hume and Smith (1776) to Hayek (1960) and Buchanan (1975), the economic role of the government should be limited to the enforcement of property rights and contracts. But we contend that even this *overstates* the proper role of the state in the development of advanced financial and economic relationships. Historically, such complicated relationships have developed outside the shadow of the government in many sectors. In short, markets are more robust vehicles for social cooperation than even most economic liberals recognize. They work to coordinate financial affairs among actors even in large groups or in the absence of full information. Moreover, actors come to tacitly recognize the property rights of others well before the state formally recognizes their existence. Exchange relationships and social cooperation under the division of labor exist prior to, and anterior to, the formal rules of the government. Thus, the economic role of the state we contend is at best redundant and more often detrimental to economic and financial cooperation.

Endnotes

1. The present authors wish to thank several anonymous referees for their helpful suggestions.
2. One of the main contentions of economic sociology is that economic success requires not strong social ties, but weak ones. Successful job search, as examined by Mark Granoveter (1995), for example, consists not so much in your cousin or best friend getting you a job, but that a friend of a friend's friend knows of a job you might like. It is the "strength of weak ties" that leads to individual success in the market setting.
3. The classic reference on this is Adam Smith where he states that the number of exchanges and economic relationships that must be forged in order to provide even the most basic goods and services to the common day laborer "exceeds all computation." Men are constantly in need of the services of their fellow men for their survival. "In civilized society he stands at all times in need of the co-operation and assistance of great multitudes, while his whole life is scarce sufficient to gain the friendship of a few persons. In almost every other race of animals each individual, when it is grown up to maturity, is entirely independent, and in its natural state has occasion for the assistance of no other living creature. But man has almost constant occasion for the help of his brethren, and it is vain for him to expect it from their benevolence only." (Smith 1776: 11, 14). Also see Mises (1949:143-176), where he shows the applicability of the law of comparative costs to a general theory of social cooperation. For an application of these principles to a number of areas see Rothbard (1970, 1978).
4. Frye writes "state policy can be an important promoter of self-governance and social capital. By organizing brokers and providing resources that reduced the costs of sharing information, state agents helped brokers trade in the absence of reliable third party enforcement." (2000:141)
5. Alternatively, exchanges may allow anyone to join without some prior set of qualifications, but may require individuals to post an upfront deposit of a significant sum, for example when individuals are required to purchase a seat on the exchange. Violations of the trading rules will then result in forfeiture of the deposit.
6. See Frye (2000:165-192) for a discussion of the role of state policy in promoting self-governance, and in particular a case study of NAUFOR, a Russian self-regulating organization. To reiterate, Frye emphasizes the following positive role state policy can play in promoting the emergence of self-governance: delegation of authority, low taxes, and policies that encourage information sharing among members of the self-governing organization. The criteria of success Frye employs are contract compliance, reporting rates, and longevity of the self-governing organization. We must, however, keep in mind that in the context of the socialist economies, where state-owned enterprises were inefficient, or worse, negative value-added, survival of an enterprise during the transition period is not necessarily a positive sign. In fact, inefficient organizations should be shut down, rather than sustained, and thus, the survival of inefficient firms could even be interpreted as lack of reform, not success of reforms. This is not only relevant to former state-owned enterprises, but also to various banks and firms within the financial sector in general. In a profit/loss system, firms enter and exit continually. To give another example, the development of trade associations in the former socialist economies is interpreted as the devel-

opment of a vibrant civil society. Evidence can be provided that firms that joined trade associations have fared better in the transition process than firms that did not join. However, is this evidence of civil society bolstering a competitive market economy, or the forming of interest groups to protect firms from the rigors of competitive pressure?

7. Depending on the arrangements and who bore the risks, there could be three additional parties who could default: one's broker, the other investor, or the other investor's broker.

8. As one passage of the text states, the descriptions are offered "so that knowledge of the stock exchange, about which nobody has written so far, might become more general." (De la Vega, 1688:168)

9. See also De la Vega (1688:150, 172, 176, 201).

10. It may be important to note that the Dutch stock market started to decline in importance towards the end of the seventeenth century, which was a time when the Dutch government raised taxes on financial transactions. (Barbour, 1976:77-8) This would fit with Frye's prediction that the government can take actions that hamper markets but not his conjecture that they can play a role assisting them.

11. A sociologist could maintain that it was dense social ties that enabled the Amsterdam stock market to function and a traditional economist might aver that it was a small enough group, with homogenous members who had low discount rates. Still it is not clear that these explanations are accurate. First it is questionable how dense the social ties really were. Although many of the stockbrokers were of sephardic origin it does not appear that this constituted the vast majority of the profession. Vega has no apparent references to religious or social sanctions and the only reference to Judaism's influence is that on Saturdays fewer people attend the market. Later estimates put the percentage of Jewish shareholders at twenty-five (Bloom, 1969:190) so it may be the case that Jewish investors used Jewish stockbrokers, but of the other three quarters it seems unlikely that native Dutchmen had close religious or ethnic ties with their brokers. By 1688 the population of Amsterdam was two hundred thousand, which included residents of various religions originating from places such as Germany, Portugal, and Scandinavia (Israel, 1995:621-7). This seems too diverse to depend on close-knit ties or religious bonds for cooperation.

12. These facts also bring into question whether the market worked because it was a group with homogenous agents. The Amsterdam Bourse was by no means a closed club, and although there was a brokers' guild, it was common for brokers to be unlicensed and conduct business anyway. For example, De la Vega (185) wrote, "There exists an infinite number of these free brokers. This occupation is [in many cases] the only recourse for impoverished [businessmen], and the best place of refuge for many ruined careers." De la Vega (1688:190) talks about how there were many sorts of brokers with disparate income levels, so it does not seem likely that they were able to self-govern because of a small numbers situation where everyone was alike. Including non-stockbrokers there were likely over one thousand brokers, about one tenth of whom were stockbrokers, in and around the Amsterdam Bourse (Bloom, 1969:183). It might be claimed that there was a small enough group of traders so this potential explanation cannot be ruled out completely. But this would not be able to address the large number of retail clients who made

trades, which according to De la Vega was quite large and included “old men, women, and children.” (De la Vega, 1688:185-8; Israel, 1995:346)

13. After the completion of New Jonathan’s, brokers who were excluded attempted to use the government to break open this private club, but in this second case they were unsuccessful (Morgan and Thomas, 1969:72).

14. De Jasay (1996:117) writes, “In the Great Society, most people may well be anonymous to most others, because they have no profitable occasions to get acquainted; but since they have no such occasions, it does not matter that they are anonymous. However, few people or none can remain anonymous to the handful of others with whom they interact in making the market order go round. That handful gets selected spontaneously, and is always a ‘small group.’ There *is* no anonymous, large-group interaction because it would be too numerous to permit it. Its individuals interact in several ‘small groups’ whose membership may be partly overlapping, partly different.”

References

- Barbour, Violet (1976) *Capitalism in Amsterdam in the Seventeenth Century*. Ann Arbor: University of Michigan Press.
- Bloom, H.I. (1969) *The Economic Activities of the Jews of Amsterdam in the Seventeenth and Eighteenth Centuries*. Port Washington, NY: Kennikat Press.
- Buchanan, James (1975) *The Limits of Liberty*. Chicago: University of Chicago Press.
- Caplan, Bryan, and Edward Stringham (2003) "Networks, Law, and the Paradox of Cooperation," *Review of Austrian Economics* 16(4): forthcoming.
- De Jasay, Anthony (1996) "Hayek: Some Missing Pieces." *Review of Austrian Economics* 9: 107-118.
- De la Vega, Josef Penso (1688/1996) *Confusion de Confusiones*, trans. Hermann Kellenbenz, ed. Martin Fridson, New York: John Wiley & Sons.
- De Vries, Jan and Ad Van Der Woude (1997) *The First Modern Economy: Success, Failure, and Perseverance of the Dutch Economy, 1500-1815*. Cambridge: Cambridge University Press.
- Dickson, PGM (1993) *The Financial Revolution in England: A Study in the Development of Public Credit 1688-1756*. Aldershot, Hampshire, England: Gregg Revivals.
- Frydman, Roman and Rapaczynski, Andrzej (1994) *Privatization in Eastern Europe : Is the State Withering Away?* Budapest: Central European University Press.
- Frye, Timothy (2000) *Brokers and Bureaucrats*. Ann Arbor: University of Michigan Press.
- Gaddy, C. and Ickes, B. (1998) "Russia's Virtual Economy." *Foreign Affairs* (September-October).
- Garber, Peter (2000) *Famous First Bubbles*. Cambridge, MA: MIT Press.
- Glaeser, Edward, Johnson, Simon, and Shleifer, Andrei (2001) "Coase versus the Coasians." *Quarterly Journal of Economics* 116: 853-899.
- Godwin, W. (1793) *Enquiry Concerning Political Justice*. London: Penguin.
- Granoveter, M. (1995) *Getting a Job: A Study of Contracts and Careers*, 2nd Edition. Chicago: University of Chicago Press.
- Greif, Avner (1989) "Reputation and Coalitions in Medieval Trade: Evidence on the Maghribi Traders." *Journal of Economic History* 49: 857-882.
- Hay, Jonathan and Shleifer, Andre (1998) "Private Enforcement of Public Laws: A Theory of Legal Reform." *American Economic Review* 88: 398-403.
- Hayek, F. A. (1960) *The Constitution of Liberty*. Chicago: University of Chicago Press.

- Hayek, F.A. (1978) *New Studies in Philosophy, Politics, Economics and the History of Ideas*. London: Routledge.
- Hobbes, Thomas (1651) *Leviathan*. New York: Cambridge University Press.
- Israel, Jonathan (1989/1991) *Dutch primacy in world trade, 1585-1740*. Oxford: Oxford University Press.
- Israel, Jonathan (1995) *The Dutch Republic: Its Rise, Greatness, and Fall 1477-1806*. Oxford: Oxford University Press.
- Jenkins, Alan (1973) *The Stock Exchange Story*. London: Heinemann.
- Kellenbenz, Hermann (1957/1996) "Introduction to Confusion de Confusiones," in *Confusion de Confusiones*, ed. Martin Fridson, New York: John Wiley & Sons: 125-146.
- Klein, Daniel (1997) *Reputation*, Ann Arbor: University of Michigan Press.
- Landa, Janet. (1995) *Trust, Ethnicity and Identity*. Ann Arbor: University of Michigan Press.
- La Porta, R. Lopez-de-Silanes, F. Shleifer, A. and Vishny, R. (1998) "Law and finance." *Journal of Political Economy* 106: 1113-1155.
- Locke (1681/1986) *The Second Treatise on Civil Government*. Buffalo, New York: Prometheus Books.
- Mises, L. (1949/1966) *Human Action*. Chicago: Henry Regnery.
- Morgan, E.V. and Thomas, W.A. (1962/1969) *The London Stock Exchange*. NY: St Martin's Press.
- Mortimer, Thomas (1801) *Every Man His Own Broker; or, A Guide to the Stock Exchange. 13th ed., considerably improved, republished*. London: W. J. & J. Richardson.
- Putnam, Robert (1993) *Making Democracy Work*. Princeton: Princeton University Press.
- Rothbard, Murray, (1970/1977), *Power and market: government and the economy*. 2nd ed. Kansas City: Sheed Andrews and McMeel.
- Rothbard, M.N. (1978) *For a New Liberty: The Libertarian Manifesto*. NY: Libertarian Review Foundation.
- Simmel, G. (1910) "How is Society Possible?," *American Journal of Sociology* 16: 372-391.
- Smith, Adam (1766/1982) *Lectures on Jurisprudence*. Indianapolis: Liberty Classics.
- Smith, Adam (1776) *An Inquiry into the Nature and Cause of the Wealth of Nations*. New York: Modern Library.
- Smith, C.F., (1929), "The Early History of the London Stock Exchange" *The American Economic Review* 19: 206-216.

Stringham, Edward (2002) "The Emergence of the London Stock Exchange as a Self-Policing Club." *Journal of Private Enterprise* 17: 1-20.

Stringham, Edward (2003) "The Extralegal Development of Securities Trading in Seventeenth Century Amsterdam." *Quarterly Review of Economics and Finance* 43(2): forthcoming.

Tocqueville, A. (1835/1961) *Democracy in America*. New York, Vintage Books.