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The London Stock Exchange in the 19th Century: Ownership Structures, Growth and Performance

Larry Neal

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Editorial

On the 30th of September and the 1st of October 2005 the first Economic History Panel: Past, Present, and Policy, co-sponsored and hosted by Oesterreichische Nationalbank was held in Vienna. The Economic History Panel is a project that is jointly sponsored by the Institut d'Etudes Politiques de Paris and the Center for Economic Policy Research in London. Its motivation is the considerable advances that Economic History has achieved in the past, and the growing recognition of its contribution to shape policy responses and to inspire new theoretical research.

The first meeting on the topic "International Financial Integration: The Role of Intermediaries" was jointly organized by Marc Flandreau (Sciences Po, Paris and CEPR) and Eduard Hochreiter (Oesterreichische Nationalbank). Academic economists and central bank researchers presented and discussed current research and tried to review and assess the historical role of financial intermediaries in shaping the patterns of financial globalization. A number of papers and the contributions by the discussants presented at this panel are being made available to a broader audience in the Working Paper series of the Oesterreichische Nationalbank. A selection of these papers will also be published in the *European Review of Economic History*. This volume contains the eighth of these papers. The first ones were issued as OeNB Working Paper No. 107-109 and No. 111-114.

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The London Stock Exchange in the 19th Century: Ownership Structures, Growth and Performance

Paper prepared for the "Past, Present, and Policy" CEPR Conference
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ABSTRACT

Over the course of the nineteenth century the London Stock Exchange evolved from a market dealing primarily in new issues of British government debt to become the preeminent exchange of the first global capital market. By 1914, one-third of the public capital available to investors anywhere in the world was listed and traded on the London Stock Exchange. In contrast to these examples of spectacular growth of the business conducted within the exchange, however, the microstructure of the London Stock Exchange remained remarkably constant over the entire century.

The remarkable expansion in scale and diversification of activity in the London Stock Exchange was sustained over the century with such minimal organizational change due to three factors. First, the evolution of the London Stock Exchange's microstructure was path dependent – the initial conditions for membership set the incentives for the owners and operators of the exchange, and these determined how they responded to successive shocks over time. Second, the continued success of the exchange was due to the peculiar structure of property rights in the exchange. Ownership of the exchange by the Proprietors was separated from governance of the operation of the exchange by the Members. Innovations were spurred by the owners of the exchange, who sought constantly to expand the membership. Newer members were then induced to take risky searches for new sources of revenue. This is how foreign securities were added permanently to the listings of the exchange in the 1820s. The third factor, the exchange’s insistence on separating members in to two classes – brokers and jobbers (dealers) – with different incentives led to the increasing ineffectiveness of the exchange over time.

By the turn of the 20th century, brokers increasingly outweighed jobbers within the membership and exercised their political power to restrict membership, enforce minimum commissions, and confine arbitrage to a limited class of members. In short, the adverse consequences of a self-regulating club of self-interested members began to appear, but only after a century of remarkable growth, innovation, and effectiveness in mobilizing the savings of the world to realize the material benefits of the first industrial revolution.

1. Introduction

The global financial market created in the last quarter of the 20th century, with all its challenges and opportunities for mobilizing capital across national borders, still pales in size and significance relative to the international capital market that arose in the last quarter of the 19th century.[1] During the classical gold standard period, 1880-1913, industrializing nations, led by Great Britain and followed in turn by France, Germany, and the United States, exported capital on a scale that still has not been approached in terms of the importance of the capital exported relative to either national capital stock or national product. These immense flows of capital were mainly funneled through organized stock exchanges; and, because of their interposition, portfolio investments were made readily available to millions of investors around the world, regardless of whether or not those investors were citizens of the country where the security was issued or even of the country where it was traded. In addition, recent research has yielded increasing estimates of the amount of foreign direct investment that also took place in this period – investments that accompanied the massive waves of migration that were a unique adjunct to the gold standard epoch.[2] An ardent evangelist of the benefits of overseas investing for the British public, Henry Lowenfeld, writing in 1910, counted 89 principal stock exchanges around the world, with 56 percent in Europe, mainly Western Europe, and the rest largely in areas of European settlement.[3] Together, those markets allowed some 20 million investors to trade holdings in over $160 billion (nominal value) of securities. The French authority on stock exchanges, Alfred Neymark, estimated that British investors held 24 percent, Americans 21 percent, French 18 percent, and Germans 16 percent of the world stock of securities.[4]

It is clear that the London Stock Exchange was the key to the rise of the first global capital market. It exercised a virtual monopoly over the trading of securities in London, and its services were available to investors world-wide who might choose to direct their business through London rather than a local exchange, even when investing in securities issued in their home country.[5] At the outbreak of World War I, the London Stock Exchange listed almost one-third of all the public and private securities in the world, while the New York Stock Exchange and the Paris Bourse each listed about one fifth of that $159 billion total. The three stock exchanges commonly traded both government issues and the stocks and bonds of private railroads, utilities, and commercial and industrial enterprises. Moreover, the three were linked to a set of local securities markets in Europe and North America. That network can be viewed as a precursor of the global capital market that arose in the 1990s. Indeed, it can be argued that the development of telegraph connections linking the major exchanges with each other, and providing instant communication between the major exchanges and regional exchanges within each country, was the precursor of the information-communications technology revolution of the 1990s, and with similar effects.

Despite the apparent economic benefits that may be derived from the existence of well-functioning stock markets,[6] the revolutionary changes in information technology and the spread of globalization in recent decades have raised challenges to existing stock exchanges and theoretical questions in the minds of economists. Should stock exchanges continue to be mainly self-regulated organizations or should they be placed under more government regulation? Should stock exchanges continue to be mutual societies operating as not-for-profit organizations or should they become joint stock corporations operating for the profit of shareholders? Recent literature (Pirrong, Hart & Moore, di Noia, C. J. Green et al.,) has begun to examine the theoretical implications of these alternative modes for the internal

organization and external regulation of stock markets. Not surprisingly, they find that there are tradeoffs in answering any of these questions. Restricted membership in an organized exchange reduces counterparty risk but may raise the probability of rent-seeking. Open membership, by contrast, may increase the depth of liquidity in the dominant market but may also raise costs of congestion. Ownership of an exchange by the stockbrokers leads to redistributive issues among the members; outside ownership leads to monopoly practices. Either alternative can increase transactions costs and thereby limit the social benefits that can be derived from an efficient secondary market in securities.

The conclusion of this paper, studying the evolution of the microstructure of the London Stock Exchange over the "long" nineteenth century, is that separation of ownership from operation of that stock exchange was the fundamental factor accounting for its success as the world's leading stock exchange in the first era of global financial markets. The shareholders in the corporation responsible for construction and maintenance of the physical facilities that housed the stock exchange were limited in how much stock they could hold so group agreement had to be reached on any change in marketing strategy. Their continued fear that a competing stock exchange could arise within London if they restricted membership or raised annual subscription fees significantly restricted their profit-seeking strategies to ways to increase the total number of subscribers rather than increasing the subscription fees. The subscribers, paying only nominal fees for access to the exchange while meeting the approval of their peers each year for renewal of their membership, sought constantly to cultivate new sources of income.

Income for the members was derived either from commissions for brokers, bid-ask spreads for jobbers (dealers), or underwriting fees for promoters. Given the large and growing number of members competing within the exchange for each source of income, each class of members was compelled to innovate continually. Brokers sought to widen their customer base, either by broadening their client pool or by increasing the variety of financial products they offered each client. Membership in the exchange, however, required that no off-site banking services be offered by a broker to any client. Jobbers likewise tried to increase the volume of their transactions rather than their spread while concerned jointly to minimize market volatility, because volatility would increase inventory costs for them. Promoters, drawn mainly from brokers who were the less well-capitalized members among the subscribers, increased the number of listings, often engaging in trade in unlisted companies while the governing committee of the exchange tried to ensure the quality of those companies that did get listed.

The argument below is developed in stages. First, I describe why the original organizational structure was devised in the context of the British legal system and the increased demands of the government for finance during the Napoleonic Wars. Then, the implicit vitality of the original microstructure is illustrated by its response to the financial shocks of the 1820s. A battle among the membership broke out over the issue of whether the exchange should outlaw dealings in options among members, just as they were then outlawed by statute among the general public. Competition for business in foreign securities also arose next to the stock exchange. In both cases, the desires of the proprietors to expand membership prevailed over the desires of many members to limit membership in order to stabilize their incomes from commissions. The dominance of the interests of the owners of the stock exchange over those of the operators of the exchange laid the basis for continued

growth and diversity of the exchange over the remainder of the "actual" nineteenth century, demonstrated in Section 4.

The crises of the 1890s, presumably staved off by the successful refinancing and reorganization of Barings in 1890, progressively undermined the efficacy of the rules of the stock exchange, especially in protecting the sources of income for the brokers, whose numbers had swelled enormously over the previous decades. Section 5 describes how the rules were changed to limit membership, change the financial basis for expansion of the facilities from issuing new capital to issuing new debt, enforce minimum commissions for brokers, limit the opportunities for mixed jobber-broker activities in arbitrage, and further restrict new listings. The conclusion argues that these changes were all detrimental for the social benefits of the stock exchange, but, unfortunately for its future prosperity and that of Britain, were solidified in the rules and regulations with the outbreak of World War I. As opposed to the effects of the Napoleonic Wars and their finance on setting up an efficient and effective organization of the London Stock Exchange, the effects of World War I served to entrench the inefficient and encrusted regulations that the LSE imposed upon its members. Some obvious lessons for today's emerging markets are suggested in the conclusion.

2. How the Rules and Regulations of the London Stock Exchange Emerged

In January 1801 a conjoint Committee of Proprietors & Members of the Committee for General Purposes of the existing stock exchange maintained in the "Stock Exchange Coffee House," where it had moved indoors from Sweeting's Alley, was appointed to assist in carrying the plan of converting the Stock Exchange into a Subscription Room. They agreed.

1) The subscription of Members to be 10 guineas, Clerks 5 guineas (which remained the subscription fees at least through 1860!)
2) Members to be nominated & elected by ballot.
3) Rules to be drawn up.

The Proprietors in the meantime had raised £20,000 in 400 shares of £50 each to build the New Stock Exchange.

The change in wording from calling "the House" a "Stock Exchange" to calling it a "Subscription room" was deliberate, probably so that habitués of the House could not claim a right to enter the new stock exchange when it was completed on the same terms as they had been using the previous facility. In the event, not all the traders were happy with the new terms or willing to accept the authority of the new governing committee. Moreover, a question arose whether the rules adopted to govern the House as "Stock Exchange" were now null and void with respect to the House in its new nomenclature as "Subscription room."

At the meeting of subscribers on March 4, 1801, David Ricardo carried a motion "that no proprietor of the Stock Exchange shall have a right to vote for the election of new Members or any regulation respecting the Stock Subscription room unless he be elected of the Committee by the Subscribers at large." In these various ways, the powers of the Proprietors, delegated to the Trustees and Managers of the new stock exchange, were separated from the powers of the Subscribers, which were delegated to the Committee for General Purposes. From this initial separation of the rights and responsibilities of ownership from the rights and responsibilities of operation, the path dependency of the governance structure was determined for the rest of the 19th century.

But first, the new governance structure had to establish its legitimacy. It took another 30 years before the governance structure was solidified in the face of repeated shocks to the

market for securities. Discontent resurfaced periodically among the stock traders, some of whom found supporters in Parliament. In 1810 an attempt was made to form a rival stock exchange. A petition was first presented to make the House an open Market. This failed, and a bill was then brought before Parliament to establish a National Fund Exchange for dealings in government securities. Although passed by the Commons, the bill was rejected by the House of Lords. Faced with repeated challenges to its preeminence as the central market for secondary trading in securities, especially in the huge amount of new national debt issued by the government during the course of the Napoleonic Wars, both the Proprietors (the owners of shares in the co-partnership of the new stock exchange) and the Subscribers (the operators of the exchange engaged in trading, whether as brokers, jobbers, or clerks for a broker or jobber) took preemptive steps.

The challenge of a competitive exchange in 1810, for example, motivated the Committee for General Purposes, representing the Subscribers, to set out clearly the rules and regulations under which the exchange operated. Further impetus was provided by a letter addressed to them by the Managers, representing the Proprietors, in which they noted that they had been humiliated by being forced to appear at Old Bailey in response to a charge brought against them by a defaulter whose name had been posted in the House. While the defaulter did not press charges and the Managers were found Not Guilty by order of the presiding magistrate, they suggested that more precise rules should be promulgated "so that none might plead ignorance of the law." The Committee immediately resolved that it had the right to post publicly in the House the name of any defaulter whose creditors found his conduct dishonorable or "marked with any circumstances of impropriety," (Guildhall Ms. 14600/7, April 22, 1811)

In February, 1812, the first fully printed rules and regulations of the London Stock Exchange appeared. The publication of the printed *Rules and Regulations adopted by the Committee for General Purposes of the Stock Exchange* in February 1812 officially declared all previous rules to be null and void and the new rules to be fully in effect as of February 10, 1812. The new rules printed covered 10 topics, presumably in order of importance as seen at the time. The headings, with the number of resolutions recommended (and then adopted) under each heading were:

Admissions	14
Bargains	10
Clerks	8
Committee	18 (1 added later)
Failures	12
Partnerships	1
Passing of Tickets	3
Puts and Calls	1
Quotation of Prices	5
Settling Days	3

Admissions were at the absolute discretion of the Committee for General Purposes and were renewed annually, although the subscription price was set by the Trustees and Managers. Stock brokers and jobbers were distinguished; new members had to be recommended by two members of two years standing, no member could be admitted who was "engaged in business" or whose wife was so engaged. "Business" was determined to include bill and discount brokers by resolution of the Committee. The Committee could

expel any member guilty of "dishonourable or disgraceful conduct, or who may violate any of the fundamental laws of the Stock Exchange", but such expulsion had to be approved by a three-fourths majority of the Committee present at a meeting specially called to consider the expulsion. No foreigners were allowed, unless they were already naturalized citizens or had Letters of Denization.

Bargains were to be made between members of the Stock Exchange only, the Committee removed itself from considering any disputes that arose between members over the terms of any bargain, unless efforts at arbitration proved ineffectual or no arbitrators could be found. Buying-in and selling-out when a counterparty failed to deliver either the security in question or the money for payment was specifically allowed – after two o'clock for selling out and after eleven o'clock for buying in. Any loss incurred as a result was the liability of the delinquent counterparty. Premium or discount on any loan was to be calculated on the principal sum subscribed, and not on the stock produced by the subscription.

Clerks also had to be approved by the Committee for General Purposes and a list was posted permanently of the eligible clerks. Special attention had to be paid to those senior clerks who were authorized to deal for time and a separate list was also permanently posted of those individuals. Each full Member was responsible for the dealings of his clerks, and no clerk could deal on his own account. No mention was made of qualifications, whether by age, recommendation, or training.

Committee for General Purposes, consisting of thirty Members, was re-elected annually, the election overseen by two (later three) Scrutineers appointed by the Committee itself, (but in practice from the Trustees and Managers). Both Subscribers and Proprietors could vote, but ballots had to have exactly 30 names of eligible Members to be valid. The Committee was "to have sole management, regulation, and direction of the concerns of the undertaking, except the treasureship thereof, and the management and direction of the buildings." (Rule 5) The latter responsibilities were retained by the Proprietors and exercised by the Trustees and Managers.

Failures were to be announced as soon as possible by the Committee to the entire membership, and members were required to inform the Committee immediately upon the default of any other member. The Committee would take responsibility for settlement of all accounts of the defaulter with other members of the stock exchange, putting everyone on an equal footing. No other member could act for the defaulter or do any business with him, until he was readmitted to the stock exchange. Readmission required special notice so that any dissatisfied creditor could object, and a letter signed by a majority of the creditors, both in number and in value of their claims, had to recommend readmission. Dishonorable conduct by a defaulter, when determined by the Committee, meant that his name would be posted on the Black Board of the Stock Exchange.

Partnerships among members of the stock exchange had to be listed publicly and any change communicated first to the Committee so they could alter the public list. But it was up to the members to determine the terms of their partnerships with each other.

Passing of tickets referred to authorization to transfer stock registered in the ledger books of a company, each of which determined its own schedule of transfer fees. The buyer had to give the necessary transfer tickets to the seller or pay 2 shillings 6 pence for each transfer involved. In the case of stock in the Bank of England, the East India Company, or

the South Sea Company, however, the buyer had the right to demand as many transfers as there were even thousand pounds of stock in the bargain from the seller.

Puts and calls were mentioned only to note that differences arising from expired options with a defaulter would not be admitted as valid claims against the defaulter. And any payments made on options by the defaulter had to be made good to the creditors. Apparently, this was the extent to which Barnard's Law [a law passed in 1734 intended to outlaw speculative forward dealings in securities] was effective in limiting dealings among members of the stock exchange at the time. The issue would come up later when the business of dealing in options became an important part of the business of the stock exchange members at the end of the Napoleonic Wars.

Quotation of prices were to be published "from time to time" (twice a week until 1825 when a daily price list first appeared). Prices had to reflect actual spot bargains struck between Members of the Stock Exchange and both parties had to attest to the price. Moreover, the bargains had to be for minimum amounts, typically £1000 for government securities (Bank of England and South Sea stocks were the exception at £500), and for public companies the amount had to be the minimum required for a stockholder to vote at the general meetings. No change in prices less than 1/8 per cent was to be quoted, implying a minimum level of commission or bid-ask spread of 1/8 per cent. (The early minutes of the Committee included an appeal by a member not to allow changes of less than ¼ percent, which was voted down by an overwhelming margin of the Committee at the time.) (Guildhall Ms. 14600/7, April 21, 1810)

Settling-Days referred at this time mainly to settling bargains made in omnium (the scrip for new issues of government debt). Other settling days depended upon the days set for shutting or opening the transfer books of the Bank of England, the East India Company, the South Sea Company or any other public company by the directors of the companies. If they changed the dates of their transfers, the Committee had the right to change the settling day for bargains among the members of the Stock Exchange.

3. Owners vs. Operators

Such were the minimum set of rules felt necessary then by the elected overseers of the microstructure of the London Stock Exchange. The most dramatic test of the governance structure of the formal organization of the London Stock Exchange came in 1822; its resolution set the pattern for enlargement and innovation in the membership for decades to come. It concerned the issue of dealing with the spate of defaulters among the younger, under-capitalized members of the stock exchange during the volatile period of 1819-1822. As many of the defaulter's were younger, under-capitalized members, who had laid off their risks with option contracts made with older, better capitalized members, the Committee for General Purposes resolved to outlaw any dealings in options among members of the exchange. There ensued a vigorous battle within the membership of subscribers for control of the Committee at the next election. Essentially, the battle pitched the older, better-established jobbers against the younger members, usually brokers. Abraham Montefiore, brother-in-law of Nathan Rothschild, was a leader of the "anti-optionist" or "constructionist" faction, while Jacob Ricardo, nephew of the deceased David Ricardo, was the outspoken leader of the "optionist" faction. Ricardo's arguments, reproduced in full in the minutes of the Committee for General Purposes, were obviously directed at the Proprietors and their interests in maintaining a large membership of subscribers to the exchange. He argued that options were especially necessary for the younger members of the exchange and the less

wealthy members during periods of price turbulence, such as had been experienced with the resumption of the gold standard, declared by Parliament in 1819, but not taking full effect until 1821. In the event, his argument was compelling and the Managers saw to it that the Committee for General Purposes elected in 1822 was dominated by Ricardo and his allies.[7] The compelling interest of the Proprietors to maintain a substantial membership was even more clearly demonstrated shortly afterwards, with the rise of interest in foreign securities, especially the bonds that were issued from 1822 on by the seceding colonies of the Spanish Empire in America.

4. The rise and demise of the Foreign Stock Exchange, 1822-1832

For the decade comprising the boom and bust in Latin American bonds, the attention of the Committee was diverted to an entirely different issue – how to cope with the demands of an entirely new group of traders who wished to trade in foreign securities, both the bonds issued by the newly-independent states of Spanish America and the shares in the newly-privatized mines expropriated by the rebellious colonists. Again, the Proprietors with their eye on the revenues to be obtained from an expanding membership, who would have to engage in an extended range of activities to earn a living, were favorable to the requests of these traders for expanded, and preferably separate, facilities for carrying on this new trade. At least four of the new members of the Committee supporting the "optionists" were Proprietors. The strict constructionists, as a matter of principle, raised the objection that the Deed of Settlement only referred to dealing in "British stocks" so they feared that dealing in foreign stocks would be illegal for the Stock Exchange. The "optionists", again with recourse to legal counsel, argued that while the Deed mentioned British funds, it did not forbid dealing in foreign stocks. Rather than resume warfare on this issue, however, the Committee compromised by referring the matter to the Trustees and Managers. The agents of the Proprietors responded quickly by renting an adjacent building, dedicating it to dealing in foreign stocks, and taking responsibility for admitting the members to the Foreign Exchange but on the same terms as used by the Committee for General Purposes for admitting members to the British exchange. In their report to the Committee on January 6, 1823, they reassured them that they had carefully vetted the applicants and admitted no fewer than 120 with many others applying. They went on to lay out the ground rules for operating the new adjunct to the Stock Exchange.

> "It is their opinion, that the transactions of this new Establishment, ought to be limited solely to Foreign Securities: & that the persons admitted, ought to confine their dealings in them to that house alone, without frequenting any other places now used, or that may hereafter be opened for that purpose; it being indispensably necessary, that the public should be informed as nearly as possible of the actual prices of the various securities which cannot be done with precision, when more than one market exists."
>
> "And they are also of opinion that the house shall be opened for business at 10 o'clock in the morning, & continue open until half past 4 o'clock in the afternoon – and this extension of time beyond the hours of the Stock Exchange, they are only inclined to concede, in order to suit the convenience of merchants, whose transactions oblige them to remain on the Royal Exchange until that hour."
>
> "Finally, The Managers have the satisfaction to state: that although they only took possession of the New Room on the 25th of December; yet, it was opened

> on the 1st instant with every suitable accommodation. That already, transactions to a very considerable amount have taken place there and they have reason to hope that, with the liberal & effectual cooperation of the Members of the Stock Exchange, (whose interests are so immediately connected with the undertaking) it will ultimately prove successful, notwithstanding the powerful opposition with which it is menaced."
> (Guildhall Ms. 14600/9, f. 321.)

The Committee then, with only 14 members present, formally rescinded the "constructionist" resolutions of the previous year, placing themselves on record for the upcoming election in 1823. Turnout for the election was heavy; 340 ballots were submitted with 117 names and only five lists were judged imperfect. The optionists had confirmed their ascendancy. Moreover, the new Committee joined with the Trustees and Managers and 7 members of the Foreign Exchange to admit the members of the Foreign Exchange for the coming year. (Guildhall Ms. 14600/9, f. 349.) James Wetenhall, responsible for publishing the twice-weekly *Course of the Exchange* as the official price list of the Stock Exchange, was authorized first to include the most active foreign stocks in his regular price list, and then, at the request of the Managers, began publishing a daily price list for just the Foreign Market.

Trouble quickly loomed, however, when the subscribers to the Foreign Market refused to elect seven members from the fourteen names presented them by the Committee. There followed a battle of wills between a deputation from the Foreign Stock Exchange and the Committee, as the Foreign Stock Exchange tried to establish its freedom from governance by the Committee and the Committee tried to maintain control of its market place by ensuring the Foreign Stock Exchange did not usurp its premier role in determining the price of British securities. The overlapping membership of the two exchanges was a cause of concern on both sides.

As long as the boom in foreign securities lasted – that is until the autumn of 1825 – the representatives of the Foreign Stock Market found their membership increasing and consequently they held fast to their determination for establishing independence from the Committee for General Purposes. By the election of 1823 the Foreign Stock Market had its own governance system, the Foreign Committee. Faced with new securities devised by the London merchant banking houses eager to exploit the fabled (and much exaggerated) riches of Spanish America, the Foreign Committee proved to be the source of several innovations that were later incorporated into the rules and regulations of the London Stock Exchange. For example,

> The Foreign Committee on 27 April 1824 resolved "That this Committee seeing the impropriety of Members dealing & marking bargains in Foreign Loans & other securities previous to such Loans or Securities being contracted in, do recommend that in future the members will not bargain or deal until such loans or securities be finally contracted for & replies sent to Letters of Applicants for subscriptions. Resolved that this Committee will not recognize or take notice of any bargains made previous to such contracts & the answers being returned to Application."
> (Satterthwaite ms.)

This was the first listing requirement formally stated by the governing committee of either exchange, but was later incorporated into the rules and regulations of the London

Stock Exchange proper. But this requirement alone was insufficient; in August 1825 the Foreign Committee resolved, "That this Committee will not recognize any bargains done in the shares of any Company unless it shall be satisfactorily proved to them that such company is really formed & that directors are already engaged in carrying the objects in to effect." This resolution was in response to a long letter from Wilks & Verbeke, solicitors, in which a scheme to create a mining company called the Guanaxuato Mining Association had been proposed to them in which it transpired that no directors were actually committed to the project. Wilks & Verbeke, moreover, published their letter in the *Times* in July.

Then, again in February 1826, the Foreign Committee issued two notices in quick succession, the first resolving,

> "That the Purchasers of all foreign securities or shares in British Joint Stock Companies be recommended to use due diligence in ascertaining the authenticity of the documents that may be handed to them whether under the denomination of Scrip Certificates, bankers Receipts, Debentures or others. And unless notice be given to the Committee of the wont of such authenticity within 12 months after the purchase they will decline interfering on the subject except for the purpose of discovering an intended fraud." (Satterthwaite ms.)

And the second, after a number of Latin American bonds had defaulted and most mining ventures proved uneconomic,

> "that the committee will not sanction or take any cognizance whatever of Bargains that may be made in New Bonds or Stock or any other Securities issued by any Foreign Government that has not duly paid the dividend on former loans raised in this country unless that government shall have effected some satisfactory arrangement with the holders of the Stock Bonds or other securities on which the Dividends have been left in Arrear." (Satterthwaite ms.)

All these measures were to be taken as well by the London Stock Exchange, especially as the Foreign Stock Exchange was formally absorbed by it after a general meeting of the subscribers to the Foreign Exchange resolved on March 24, 1828, to "surrender the whole management of the affairs of the Foreign Stock Market to the Committee for General Purposes of the Stock Exchange." (Satterthwaite ms.) The Foreign Committee, however, continued to meet until 1831 as the affairs of the Foreign Exchange were wound up.

By 1827, with membership in the Foreign Exchange dwindling and the business of both Committees taken up with sorting out the claims upon numerous defaulters in both houses, the Foreign Committee proposed consolidation. The Committee for General Purposes, however, having recently increased the sureties required of their Members to three separate recommenders each posting bonds of £300, thus nearly doubling the guarantee required of new Members, had no wish to allow the members of the Foreign Exchange into the House without similar guarantees. Only if the members of the Foreign Exchange had been members for at least three years and not failed at any time, could they be admitted on the terms that had applied previously to members of the English Exchange, namely two bonds of £250 each. This was a significant increase for the members of the Foreign Exchange and they naturally objected, but to no avail. And members of the Foreign Exchange of less than three years standing had to come up with the new level of guaranties,

three bonds of £300 each. (Guildhall Ms. 14600/11, ff. 193, 197, 222, 224, and 253.) The power of the Committee for General Purposes, and the preeminence of the London Stock Exchange was affirmed, and would not be challenged for decades to come. Nevertheless, in their meeting of July 30, 1831 they unanimously approved including the appropriate rules on Bargains and Quotation of Prices from the Rules and Regulations of the Foreign Market. (Guildhall Ms 14600/12.)

5. The Rules and Regulations from 1832 to 1878

The new rules printed up in 1832 had the same structure and headings as the original rules of 1812, with one exception. The brief rule about puts and calls in the accounts of a defaulter was omitted. The rubrics, then, were: Admissions, Bargains, Clerks, Committee, Failures, Partnerships, Passing of Tickets, Quotation of Price, and Settling Days. Such were the minimal set of rules codifying well-established practices that had evolved over the previous century and a half, now articulated and enforced by an annually elected body of 30 respected practitioners from among the 800 regular subscribers to the London Stock Exchange. Over the next half century, as the London Stock Exchange continued to play a pivotal role in the railway mania of the 1830s and 1840s, the increasing number of listings after general incorporation was enacted in 1854, and various mining booms throughout the world, the Proprietors continued to prosper as the membership and revenues of the exchange increased (see chart 1).

The subscribers, however, continued to grow in number, so they were forced to compete with each other more vigorously as more companies and more securities from more corners of the world were brought to the floor of the exchange. The continued restrictions on size of partnerships and on access to other forms of business than that conducted on the floor of the exchange, however, meant that failures of individual members became a growing problem. For example, the financial panic of 1839 led to more failures on the Stock Exchange. The Committee responded to plug up loopholes in the Rules that had been exploited by failing Members of the House. A new Rule 24 under Failures was approved in August 1839 that was to remain thereafter in the rules of the Stock Exchange:

> "Any member who shall have received a consideration for any prospective advantage, whether by a direct payment of money, or by the purchase or sale of stock, at a price which either exceeded or fell short of the fair market price at the time the bargain was contracted, or by any other means, prior to the day for settling the transaction for which the consideration was received, shall, in case the party from whom he received it became a defaulter, refund the same for the benefit of the creditors at large. And any member who shall have given a consideration for the purpose, and in the manner above stated, shall again pay the same to the creditors, so that, in each case, the parties may stand in the same situation in respect to the creditors at large, as if no such consideration had been paid or received." (Guildhall Ms. 14600/16, August 17, 1839.)

Then the Official Assignees were instructed to take note of all bargains in a defaulter's accounts that were effected at prices different than the ruling prices of the day, and if any consideration was given for the unusual price, that was to be entered in the accounts so that the new Rule 24 could be enforced. The Committee later instructed the Official Assignees not to collect any differences in a defaulter's estate until they were due.

Some confusion then arose over what claim could be made on a defaulter's estate by a Member who had loaned money to the defaulter upon the collateral of securities whose market price had fallen so the lender could not recover the full value of the loan. It was agreed that he should be able to join the creditors when he did sell the collateral, but the Committee waffled on what the restrictions should be, probably varying with the composition of the members of the Committee who happened to be in attendance. Loans made at more than 5% interest were first excluded, then ignored, and then lenders were excluded from future assets of the defaulter that might arise from differences being paid in when those contracts fell due. Ultimately, the rule that appeared in the Rules and Regulations of the spring in 1839 read:

> "In case of loans of money made upon securities valued at less than market price, the lender shall be entitled to avail himself of such additional Security, and shall be entitled to prove his Balance against such portion of the Estate of the Defaulter as shall arise from assets paid by him into the Stock Exchange; but he shall not be entitled to participate in any monies received in the Stock Exchange for Differences" (Ms. 14600/16, November 6, 1839.)

There followed in the recovery of the 1840s, the railway mania that led to the construction of much of Britain's rail infrastructure – and to novel forms of financing that elicited continued concern from the Committee. Starting in 1844, the Committee added to Rule No. 1 under "Quotation of Price," that "no securities shall be inserted in the authorized list, until previously sanctioned by the Committee," implying that some railway securities had been listed without the formal approval of the Committee. Then, the Committee felt obliged to warn against the increasingly common practice among the Members of dealing not just in shares of companies before they were vetted the Committee, or even subscriptions to offerings of shares in new companies, but in the original letters of allotment issued before subscriptions were taken. The Committee issued a general warning, that, " the attention of the Committee having been drawn toward a custom which appears recently to have been practiced by a few members of the Stock Exchange, namely the dealing in letters of allotment; the Committee feels it necessary to state that such practice is highly detrimental to the reputation of the, Stock Exchange, and injurious to the interests of the Public." (Ms. 14600/18, November 25, 1844.) Moreover, the rules on buying-in and selling-out were expanded to include provisions for unfilled contracts among Members dealing in "foreign stock, unregistered or scrip shares." (Ms. 14600/16, February 24, 1845.) But in 1845, the Committee had to strengthen its warning against dealing in letters of allotment, the riskiest form of trading available to members, and the one most attractive precisely to the weakest firms.[8]

6. The problem of failures

The other major exchanges in the industrial west, of course, were also expanding their listings of railroads, mines, and new incorporations during the general expansion of the corporate form of business enabled in all industrial countries during the 1850s. But the problem of failures was unique to the London Stock Exchange. Other exchanges placed much greater restrictions on the capital required for membership, either formally as in the case of Paris, or through restriction of membership as in the case of New York. Then, as contemporary analysts argued, the settlement time of two weeks for dealings among members of the house seemed uniquely designed to increase the likelihood of either a broker or jobber failing due to counterparty risk when dealing with customers outside the exchange.

By 1873, the tribulations of the members due to the worldwide string of stock market crises that erupted that year, led to tightened requirements for Membership and more attention to the increased problem of defaulters. In 1874, the age requirement was raised from 16 to 17 for unauthorized clerks and to 20 years of age for authorized clerks. (Ms. 14600/39, December 23, 1874.) Earlier, in 1871, it had been raised to 16 from 15 for unauthorized clerks and to 18 for authorized clerks. Moreover, the surety bonds put up by recommenders were increased in 1872 from £300 to £500 each and in the case of clerks with four years service the recommenders now had to pledge £350 instead of £250. (Ms. 14600/36, June 18, 1872.) In 1874, these amounts were increased again, from £500 to £750, and from £350 to £500, no doubt the result of realizing the increased scale of business carried on by those firms now defaulting after the crisis of 1873. (Ms. 14600/38, May 19, 1874.) However, these amounts were again reduced to their previous levels by decision of the Committee in 1879. (Ms. 14600/44, January 21, 1879.)

By contrast, an *agent de change* in the Paris Bourse at the time had to post a large bond permanently with the government, and then show his accounts annually to the governing *Chambre Syndical* of the Bourse. Each *agent* was the active partner in a *société commandite* that he created to raise the necessary capital from a limited group of wealthy investors, whose business on the exchange was obviously directed through the *agent.* Moreover, each *agent* had to contribute annually a share of his revenues to the communal fund of the Bourse, which was used to cover the debts of defaulting, absconding, or deceasing *agents* when needed. Indeed, when major defaults occurred during the infamous crash of the *Union Générale* in 1882, the *chamber syndicale* able to raise a large loan from the public based on its credit and ability to extract regular payments from the members.[9] Such was not to be the case for the London Stock Exchange, indeed, until after World War II!

The New York Stock Exchange also limited the number of its members, but at a much higher number, first 530, then 1060 after merging with the Open Board of Brokers and the Government Bond Department in 1869, increasing to 1100 in 1879 to raise funds for enlarging the Exchange's building.[10]. Partnerships could expand, indefinitely, however, and even establish partners in regional exchanges to tap into investors nationwide. The rising price of membership ensured that new members would have adequate capital resources as well. Moreover, each member of the New York Stock Exchange could act either as a broker, deriving his income from a stream of commissions, or as a dealer, making money from the difference in buying and selling prices. And, a firm could derive substantial underwriting fees from taking responsibility for an initial public offering of a new security.

But beyond the capital structure of the individual firms making up the membership of the respective exchanges, a second factor apparently limited the number of failures in New York and Paris compared to London. This was the peculiar feature of London's microstructure that settlement of bargains among members should be made every two weeks. One British observer felt that *agents* in the Paris Bourse, with a monthly settlement for the bulk of their securities dealings, had a longer period in which they could buy or sell at advantageous terms, than was the case in London, with its bi-monthly settlement.[11] An interesting counter-argument in favor of New York's practice of daily clearings, however, was made by van Antwerp. He argued that daily clearings minimized a New York dealer's temptation for overextending his speculative position, compared to the fixed two week settlement period in London. An additional complication for the London members was that

options were made for the settlement dates and, while they were by the rules of the exchange only enforceable for one or two periods ahead, they had to be settled – either paid up or prolonged – on the settlement date, which limited the opportunities for taking advantage of market movements over the period of the option.

By the end of 1874, it was clear that the administration of defaulters' estates had to be re-organized, a solicitor engaged to deal with the numerous legal issues that were arising, and to increase the compensation for the Official Assignees. (Ms. 14600/39, November 10, 1874.) A detailed report to this effect was then adopted by the Committee in early December 1874, which made the Official Assignees a full-time position, well-compensated. Initially, a flat sum of £800 annually was to be the salary for the Official Assignee and for his Assistant Assignee, but each salary to be supplemented by ½ percent of the assets receivable during each year after deducting the £1600 for the two Assignees. The percentage payment was to be divided 5/8 for the Official Assignee and 3/8 to the Assistant Assignee. (Ms. 14600/39, December 4, 1874.) Later, as the business of the Assignees increased, they had to post bonds of £1,000 each, and their emoluments confirmed at the level of £800 plus their share of the ½ percent of the assets they managed each year. By 1881, however, the scale of fees for compensating the efforts of the Official Assignees, now two with equal status, was raised to:

From £1 to £100 collected 5 per cent,
From £100 to £5000 collected 2 per cent,
From £5000 collected 1 per cent." (Ms. 14600/47, April 7, 1881.)

The Crises of the 1890s

Throughout the 1890s, the international connections of the London Stock Exchange became increasingly evident, and not just with New York and Paris. In 1889, a letter from the Amsterdam Bourse was read to the Committee that inquired about its Rule 124 regarding French and Egyptian securities to bearer, asking whether the reason for adopting such paragraph lies in the fact that those two countries have special laws on the subject. The Committee replied that was, indeed, the reason. (Ms. 14600/56, 3 June 1889.) In 1890, a copy of the Rules was sent to the Antwerp Bourse in response to their inquiry regarding Rule 122 relating to drawn Bonds. (Ms. 14600/57, 16 June 1890.) In December 1892, Lord Rosebery himself asked the Committee to give the German government the information they desired about the operations of the stock exchange in London to aid them in their examination of the operation of the German exchanges. In particular, the German government requested specific statistics on:

> e.g., the number of stocks issued between the years 1866 and 1892, and the number of stocks to which quotations were granted during the same period, in such a shape that the extent of the issues and the classification of the stock may be seen at a glance. Another point as to which the Commission desire information is the number of members who frequent the Stock exchange, and how many Members have been expelled since the year 1866, together with the grounds of their expulsion. (Ms. 14600/60, December 5, 1892).

This was really too presumptuous of the Germans, in the minds of the Committee, so they limited themselves to sending the German Ambassador a list of the Members of the Stock Exchange, a copy of Rules and Regulations, 6 copies of the Official List, and copies of the Weekly Official Intelligence. Future historians of the London Stock Exchange can only regret the recalcitrance of the Committee in this affair!

Fortunately for us, however, the incidence of failures continued to mount over the 1890s, leading to increased work for the Official Assignees, who periodically were granted increased emoluments, based on percentages of the estates of defaulters that they were managing. To justify their last increase in the 1890s, the sub-committee on Official Assignees prepared the summary of failures and the amounts of the estates handled by the Official Assignees over the previous 20 years. The number of failures reached an all-time high of 49 in 1894, but the size of aggregate failures, indicated by the total commissions collected by the Official Assignees, reached its peak in 1896 with only 23 failures.

Table 1. Statistics of the Official Assignees' Office

Years (ending March)	**Total. Comm.** £.s .d	**Number of Failures**	
1879	£693.16.5	30	
1880	£692.11.10	23	
1881	£1,304.10.0	19	
1882	£2,604. 1.11	27	
1883	£3,180.19.9	31	
1884	£2,038.15.8	32	
1885	£1,990.9.11	33	
1886	£1,038.2.10	12	
1887	£1,554.5.3	20	
1888	£1,680.1.9	25	
1889	£987.5.2	17	
1890	£1,247.15.6	19	
1891	£3,164.6.8	37	
1892	£1,105.1.11	22	
1893	£504.15.3	14	
1894	£4,298.7.10	49	(£151,000 pd. in div. at cost of £2.16.6 p.c.)
1895	£763.7.8	10	
1896	£4,416.12.8	23	(£208,000 pd. in div. at cost of £2.2.6 p.c.)
1897	£1,592.16.6	10	
1898	£1,354.1.5	19	
1899	£3,193.18.3	18	

(Source: Ms. 14600/65, February 15, 1897.)

As had been the case in earlier episodes when the market for established securities faltered and failures rose among the Members of the House, increasing attention was paid to new securities, securities that promised potentially high returns, but which were inherently risky. Foremost were the so-called kaffirs, or shares in new mining ventures in South Africa. But reorganization of existing corporations and conversion of family firms into public limited corporations were also an important source of new securities. The advent of these new financial assets on the exchange required the Committee to make repeated adjustments in the rules in two important categories: Settlement procedures, given the immense volume and generally small denomination of mining shares; and Listing Requirements, given the proliferation of new forms of securities entering the market.

But the major change was in the works – a complete recasting and elaboration of Rule 136 containing the listing requirements for new shares, debentures, or securities of any description that a company wished to see traded in the London Stock Exchange. This new rule elaborated not only the materials to be submitted by the company to the Secretary of the Share and Loan Department, but also the corroborating materials to be submitted by the company's bankers and brokers, including specimens of the new securities to be issued. (Eventually the listing requirements become so extensive that they have to be relegated to a separate index.) In February 1899, the new rule 136 was confirmed, now expanded to include a section on debentures. This replicated the requirements already stated for shares, in case any misunderstanding of the vaguer wording previously proposed might be argued by a company wishing to issue publicly traded debentures on the stock exchange. [Ms. 14600/68, February 6, 1899. The expanded rule had to be altered again shortly, after the Companies Act of 1900 was passed by Parliament, but the changes required then turned out to be minor, but added yet more specificity to the listing requirements. Now the exact numbers on the shares issued to the public had to be specified as well as the serial numbers on the share issued to vendors. Further, an official Certificate that the company was entitled to do business now had to accompany all the other documents. [Ms. 14600/70, November 26, 1900.][12]

In the face of the increased number of members, securities, and possibilities for speculation, the stock exchange had to either expand its facilities, or limit its members. Only Proprietors could achieve the first solution; only the Members could carry out the second. In fact, the Committee for General Purposes now attempted the second, while initiating negotiations with the Trustees and Managers to try to accomplish the first. The first step was a proposal by the Chairman of the Committee for General Purposes to require new members to acquire a share in the Stock Exchange as well, although he had to get approval from the Trustees and Managers for the exact form of the shares to be issued. [Ms. 14600/69, January 3, 1900.] The issues now being raised were clearly contentious; evidence came in the turnout for the next Committee for General Purposes election as 2,196 members voted. But the methods of limiting the rise in membership were not decided until the meeting of March 6, 1901 when the full Committee met to consider the proposals laid before it by the Conjoint Committee of the Committee for General Purposes and the Managers, which had been meeting throughout the previous year.

The changes that could be agreed were relatively modest, limited mainly to Clerks. Their age requirements were raised again, their length of service and number and size of sureties needed before they could be nominated as Members were increased, and the number of Clerks that a Firm could employ was reduced from seven to five, although the number of those clerks who could be Authorized to carry on business in the name of the Firm was increased from two to three. Finally, on the recommendation of the Managers, a new class of Clerks was created to help in the increasing volume of work in the Settlement Rooms. But they would be restricted to work only in the Settlement Rooms. [Ms. 14600/70, March6, 1901.]

The new Committee, elected with another very high turnout of 2,371 voters, had to defer the implementation of the new Rules on Clerks, given that the terms of the Deed of Settlement kept the Managers from making the necessary changes in the layout of the Settlement Rooms before January. But, they now had to confront the reorganization of the Stock Exchange as proposed by the Conjoint Committee. This Committee was charged to

make every Member a Shareholder and to give Subscribers a marketable value for their Membership – all this without, of course, making the Stock Exchange a public corporation, which had been recommended by the Royal Commission back in 1878. They proposed to do this by expanding the capital stock of the existing Stock Exchange, from £240,000 in 20,000 shares to £500,000 in 5,000 shares (with power to increase), and by increasing the debt of the Stock Exchange by issuing £3,000,000 in 3% irredeemable debentures and another £2,000,000 in 4% non-cumulative preference stock redeemable at 105 after 1925. [ms. 14600/71, April 11, 1901.] The intent, clearly, was to buy out the existing Proprietors who were not Members at attractive terms. Their shares, which were unmarketable at present but had given them substantial dividends over the years, would now be converted into non-voting debentures and preference shares, both of which were marketable, presumably at substantial premiums.

In March 1902, however, the Proprietors rejected this proposal, on grounds that their dividend had actually been £9, instead of £8:10s. anticipated by the Conjoint Committee at the time. A counter proposal to pay off the old shareholders with £6,000,000 in 3% redeemable annuities was suggested, keeping the 5,000 shares intact, albeit with only £10 payable on allotment. The Committee, however, split evenly on whether to approach the Managers with this proposal or any proposal to end dual control "on an amicable basis." [Ms. 14600/72, March 1, 1902.]

The speculative activities of members who had failed in the previous years now caused the sub-committee on Rules and Regulations to modify rules that had effectively discouraged options beyond one month duration in the past. Instead of bluntly stating that "The Committee will not recognize any bargain for a future Account, if it shall have been effected more than Eight days previously to the close of the pending Account," (Rule 79, *Rules and Regulations*, 1897), the Rule was altered to read, "Any claim arising from a Bargain effected more than eight days previously to the close of the pending account will not be allowed to rank against a defaulter's Estate until all other creditors have been paid in full." [Ms. 14600/71, June 19, 1901.] Even longer term options for period beyond the next two accounts could be allowed, once all other creditors had been paid in full. Moreover, claims arising from bargains in new securities before a date for Special Settlement had been fixed could now be allowed, again only after all other claims had been paid in full. Finally, the Committee just eliminated the Rule 60, which refused to recognize any dealing in letters of allotment. [Ms. 14600/73, July 7, 1902.] Clearly, this form of business was too important for too many Members for the Committee to not sanction it. This led to a further modification in Rule 108 dealing with settlement of bargains in new securities issued in place of old, which now provided procedures for any two members of the Committee to set a temporary settling price on new securities for which Letters of Renunciation could not be obtained from the company and the full Committee had not yet set a Special Settling date. [Ms. 14600/73, December 10, 1902.]

Discussions about how seriously to limit new Members occurred, but any motion to commit the Committee for General Purposes to a specific course of action, even if only for the coming year, was voted down. It was still too delicate an issue to confront boldly, so only limits on the number of Clerks that Members could employ and on the terms they had to fulfill for becoming full Members could be agreed upon. This was an issue that would not go away. The next election of the Committee for General Purposes drew another high turnout, 3,165 voting in 1904, but again with little turnover in membership. This Committee was

confronted again with the issue of reorganizing the Stock Exchange to eliminate Dual Control, a goal that was not to be accomplished until business resumed after World War II. But in the course of dealing with the issue, the Committee received valuable information from the Conjoint Committee that was still wrestling with the issue and making proposals that could be rejected by either the Proprietors or the Subscribers. The existing shares had only limited turnover, with very few going to new members, so the process of making the body of Proprietors the same as the body of Subscribers was going to take a very long time. The data for the past five years showed this clearly:

Table 2. Transfer of Stock Exchange Shares

Year	Transfers	Number of Shares	From Dead or Retired	To Members in 1st Year
1899-1900	369	1,375	273	54 to 17 members
1900-1901	292	989	195	17 to 11 members
1901-1902	292	1,216	412	37 to 17 members
1902-1903	258	1,162	689	16 to 10 members
1903-1904	341	1,421	426	9 to 7 members.

The number of Clerks having served 2 years and eligible for Membership with 2 or 3 sureties, and therefore eligible to apply for full Membership was 2,099 with another 568 Unauthorised Clerks having served less than 2 years, who would become eligible for full Membership shortly. In light of these numbers, the Conjoint Committee now proposed to limit Members to 5,000 and Clerks to 3,000 after 1905. Their data showed that this limit was likely to be reached in the current year, despite increases in subscription and entrance fees that had occurred over the past 10 years.

Recasting the Deed of Settlement in order to buy out the old Proprietors proved to be very difficult. In the end, the Committee accepted the proposal of the Trustees in December 1905. The final arguments were over the voting rights that should be attached to the new shares. Previously, Proprietors holding 1-4 shares had one vote, those holding 5-9 shares had two votes, and anyone holding 10 shares or more had three votes. The Managers proposed that with the new shares, each shareholder be entitled to one vote per share up to 25 shares and then 25 votes only for shareholdings above 25. The Chairman of the Committee for General Purposes (Hichens) proposed a similar scheme but the cutoff would be at 20 votes for 20 shares and above. A compromise was suggested, to extend the present system by giving shareholders with 10-14 shares 3 votes, those with 15-19 shares would get 4 votes and those having 20 or more shares would have 5 votes. In the end, the existing system was kept, and the only (inconsequential) alteration made in voting power was that no single shareholder could have more than 200 shares. [Ms. 14600/78, December 21, 1905.]

The Committee could, however, set limits on the number of members and this they proceeded to do, step by step. A series of new rules in the section on Members was proposed by the Chairman in October 1904, designed to limit the eventual total number of Members by requiring new members to get nominations from retiring, former, or the representatives of deceased members. Uncertainty over the eventual number still remained, however, because of the existing rights, and expectations for eventual membership, of the over 2,000 Clerks who had already served the requisite number of years to apply for preferred entry into full Membership. This was dealt with for the time being by Rule 26 that had the Committee set the number of new Members they would admit the following year in each December. The Clerks eligible for Membership with two sureties were then assigned to a waiting list. [Rules

and Regulations, 1906, Rule 26.] Twenty was the number set for the year ending March 24, 1905, and this proved to be the usual number thereafter.

Extensive changes were then made in the Rules, mainly because there were 10 new rules inserted in the section on "Re-elections, Admissions, and Re-Admissions." But some were clearly designed to block off potential loopholes that might be used to circumvent effectively the limitation on members and, therefore, continue the unwanted competition from non-members. For example, a new Rule 68 was inserted in the section on "General Rules," forbidding Members to advertise for business purposes or to issue circulars to persons other than their own principals. The intent, apparently, was to discredit competing stockbrokers outside the Stock Exchange who were forced to advertise but it seems more likely that it was to discourage Members engaged in shunting from seeking new contacts. The Rule on Limited Partnerships was strengthened by permitting such partnerships only between Members or Firms who each deal and settle bargains in their own name. This was objected to by a petition signed by 402 members, noting that it was seriously disadvantageous to small firms and added unnecessary expense for larger firms by eliminating their use of clerks in such partnerships. Nevertheless, the Committee confirmed the change, 18-3. [Ms. 14600/77, June 26, 1905.]

Apparently overwhelmed by the number and implications of new rules, only 12 members voted in the election of the Committee in March 1906. The entire Committee was re-elected, so it could turn its attention to the issue of Commissions. It is obvious from the figures reported annually to the Trustees and Managers that the stock market panic in New York in October 1907 had caused a number of stockbrokers in London to fail. Membership slumped in 1908, beginning a decline that would persist throughout the twentieth century. How to take advantage now of the reduced numbers and internal competition, while maintaining the profitable links with provincial and foreign exchanges for the remaining members?

8. Minimum Commissions at last.

The first step was to cut off the leakage of brokerage commissions that occurred through the practice of "shunting," when dealers shared profits with brokers in provincial exchanges. Brokers on the London Stock Exchange could participate in this subterfuge as well by directing, for a price, their business to colleagues in provincial exchanges or in London offices outside the exchange. Rule 75 in the 1906 version of the Rules and Regulations simply stated, "Members or their Authorised Clerks may not act in the double capacity of Brokers and Dealers." In 1908 it was replaced by no fewer than eight rules designed to close all the loopholes that had appeared in practice over the years and especially in the last decade. Contracts could still be made by Members, whether they were Brokers or Dealers, with non-Members, but they had to be documented as such and sharing of commissions, or charging extra commissions to the principals, was explicitly forbidden. Dealers carrying on arbitrage operations with correspondents in foreign exchanges were allowed, however, to continue operating in double capacity as was required by the nature of their business – simultaneously buying securities in one market and selling them in another meant that time was of the essence if they were to make money on each operation. But this was a potential loophole through which arbitrageurs could facilitate shunting through their foreign correspondent, so each arbitrageur was required to get the Committee's official permission to continue its business with each year's re-election to membership. The new rules were approved, 16-9 or 17-8, and then in the same meeting confirmed as well, 15-7, to

come into effect March 24, 1909 when the next round of annual elections and reelections of members would commence. [Ms. 14600, 82, July 23, 1908.]

By October 1909, the Sub-Committee presented an elaborate scale of commissions, suggesting only that they be shown to the Council of the Associated Stock Exchanges before final adoption. In the event, they were adopted in full, as printed in the 1911 Rules and Regulations, which included also the scale for commissions between brokers on the London Stock Exchange and members of the Provincial Stock Exchanges, which simply halved the London scale to give the two brokers in such contracts equal shares of the full commission. A minority report written by the old guard who had remained on the Committee called the whole enterprise "an act of madness," especially as the recent Finance Act had increased the stamp duties on Stock Exchange transactions. Mr. Inglis, chair of the full Committee for General Purposes, expressed the minority view vehemently, “Owing to the present freedom from restraint as to Commission charges, The London Stock Exchange is *the* market of the world. Begin to tamper with that freedom and I do not hesitate to express my firm belief (and I have been over 50 years in the business) that The Stock Exchange will receive a check from which its Members may never recover.” [Ms. 14600/85, October 4, 1909.]

By February 3, 1910, a new section on Commissions with 16 new rules and an appendix with the specific Scale of Commissions was passed (8-2, 16 present) and confirmed in the first meeting of March. The new Committee elected in 1910 had only two new members. From this point on, the business of the Committee as far as considering rules and regulations was concerned, focused on tweaking the various commissions and closing various loopholes that appeared in practice. Repeatedly, votes were taken of the members who were self-designated as brokers and each time that the members approved a given scale or set of rules, even if only by narrow margins, the Committee confirmed them. Business with the provincial exchanges was sustained when the Council of the Associated Stock Exchanges recommended that their members adopt the same Scale of Commissions as applied in London, thereby acknowledging the primacy of the London market.

On foreign exchanges, the major threat to securing the revenues of the arbitrageurs came from the New York Stock Exchange. An exchange of telegrams between George W. Ely, Secretary of the NYSE and Edward Satterthwaite, Secretary of the LSE, were read to committee in February 1911.. They all dealt with the issue of Arbitrageurs operating out of London. Ely asked whether any Members were exempt from Rules 80 & 86 that outlawed double capacity? Satterthwaite replied “None exempt.” But Ely pressed, “Can a Broker or Dealer get permission on a joint Arbitrage account to charge one-eighth per cent commission?” And Satterthwaite replied “No case has been submitted to the Committee deciding the point raised in your telegram. They have made no definition of the word Arbitrage.” Ely continued: “Is it recognised that a Dealer carrying on an Arbitrage business with a Non-Member has the right to charge a Commission for transactions made for that account in London?” Satterthwaite asked Committee how to reply to this last, and they directed him to stonewall by saying “Committee regret that in the absence of any decision on a concrete case they are unable to give a general answer to your question.” [Ms. 14600/88, February 13, 1911.]

The action taken in response to the implied threat of New York traders replacing the London operators of arbitrage operations was to allow the London arbitrageurs, still subject to annual renewals and inspections of accounts by the Committee, to employ "remisiers" in the foreign exchanges. Remisiers had long been employed by *agents de change* on the Paris

Bourse to bring in business both from the informal coulisse market in Paris and from foreign exchanges, so the practice was well-known and understood. Now it was formally regulated by the Committee and a new appendix appeared in each subsequent copy of the Rules and Regulations with the requirements laid out for remisiers to be employed by those members licensed to engage in arbitrage business, whatever that was. (The Committee refused to be constrained by a specific definition, even one stated in the broadest possible terms.)

9. Conclusion

So stood the affairs of the world's largest, most active, and most innovative stock exchange over the course of the long nineteenth century at the eve of the Great War. The shock of World War I in July 1914 disrupted connections with foreign exchanges entirely until the government specified the terms on which trading with the New York Stock Exchange could be resumed. But foreign dealings were on the government's terms, which were designed to eliminate the possibility of war finance for the enemy. Membership plummeted as younger members, especially clerks, were called to service. But lucrative business in retailing the large issues of new government debt sustained the revenues of the remaining members, much to their satisfaction. The longstanding efforts of the brokers and dealers to stabilize their sources of income and minimize their risks from promoting new issues of securities in the London marketplace were now fully realized, but with unintended consequences that were to plague the revival of the British economy for most of the remaining century.

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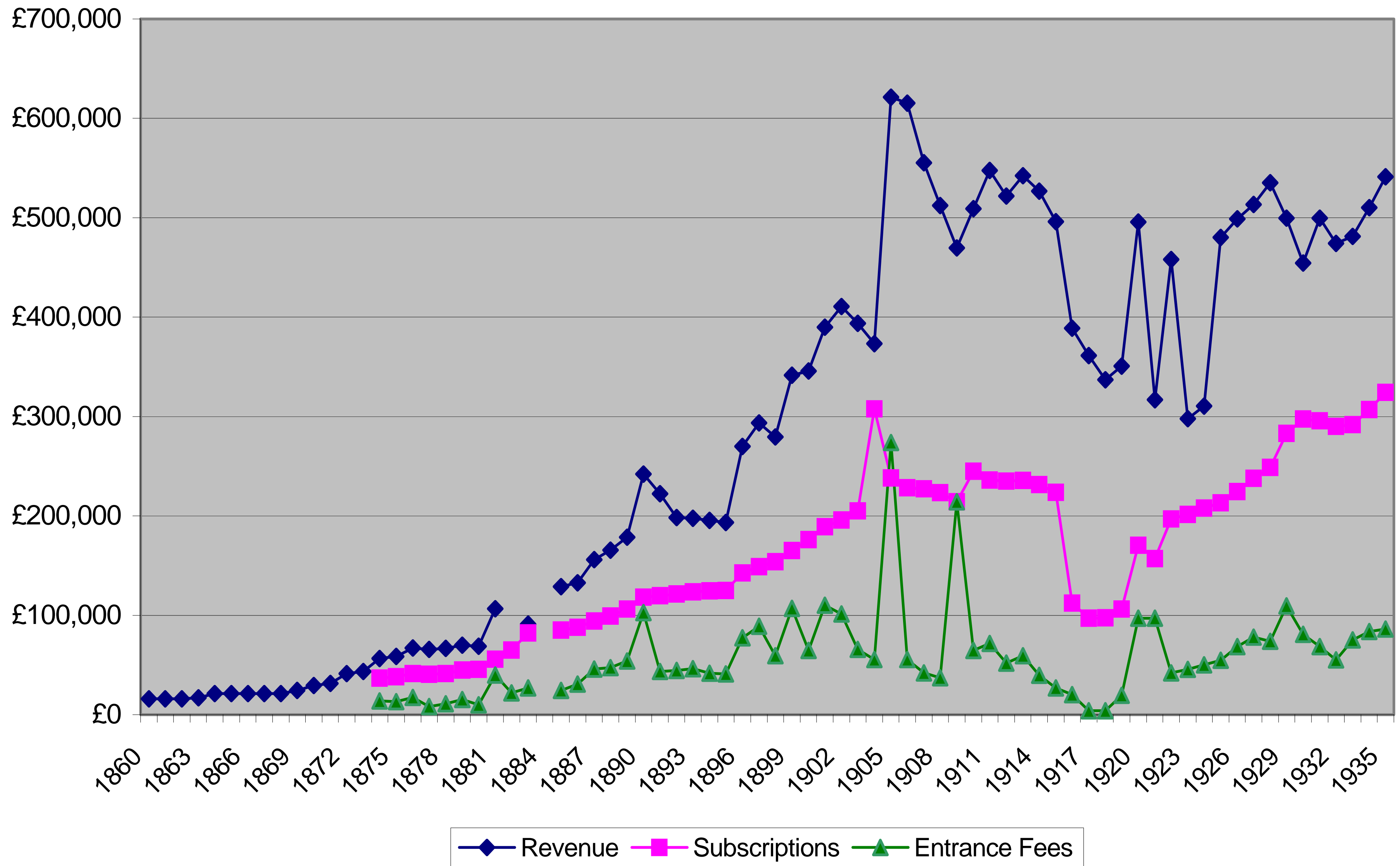
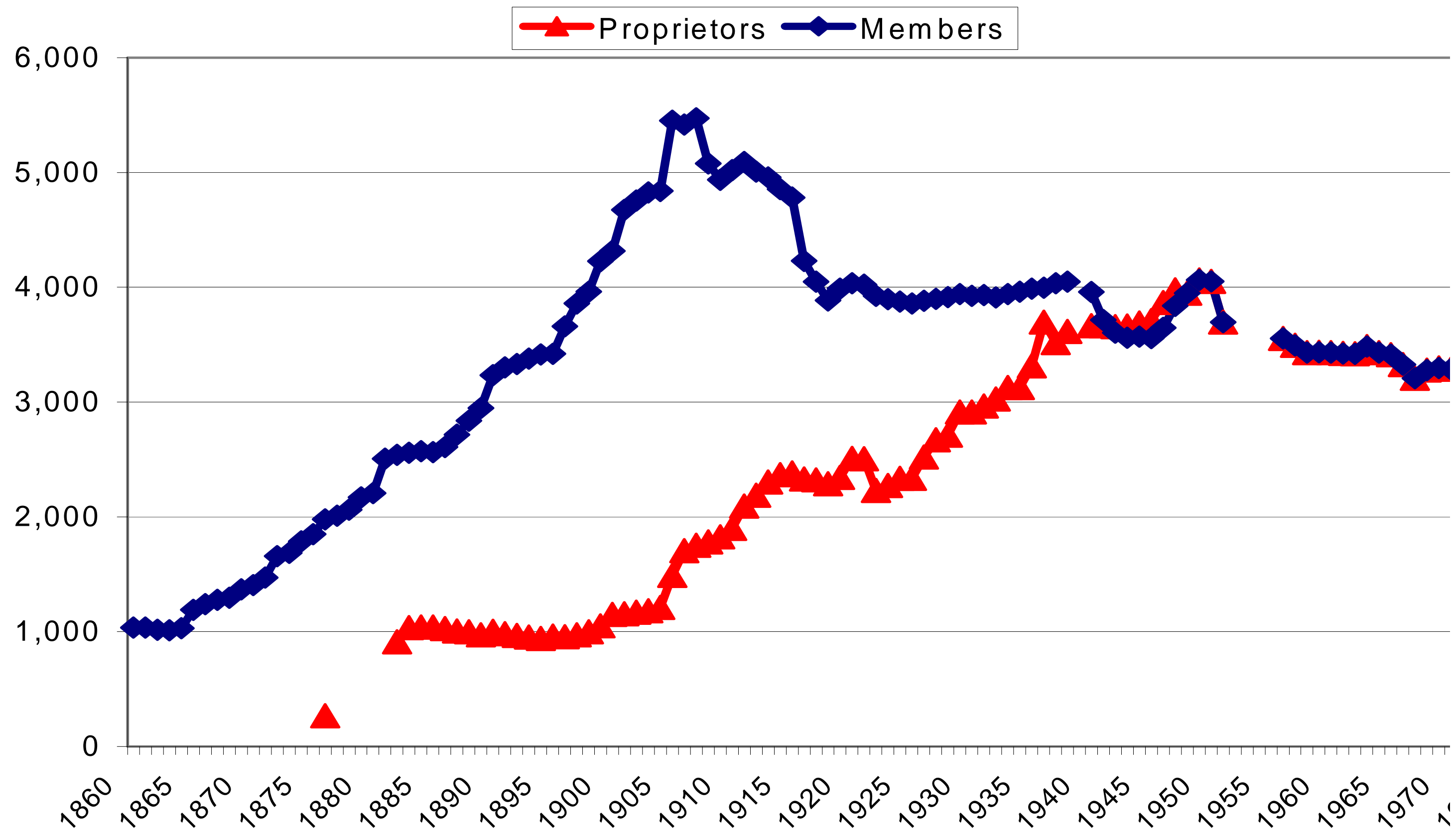


Figure 1. Revenue:Subscriptions & Entrance Fees, London Stock Exchange
£700,000
£600,000
£500,000
£400,000
£300,000
£200,000
£100,000
£0
1860
1863
1866
1869
1872
1875
1878
1881
1884
1887
1890
1893
1896
1899
1902
1905
1908
1911
1914
1917
1920
1923
1926
1929
1932
1935
Revenue
Subscriptions
Entrance Fees

Figure 2. Members & Proprietors of the London Stock Exchange



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2 Mira Wilkins and Harm Schröter, eds., *The free-standing company in the world economy, 1830-1996,* (New York and Oxford: Oxford University Press, 1998).
3 Henry Lowenfeld, *All About Investment,* 2nd. Ed., London: The Financial Review of Reviews, 1910. Lowenfeld also wrote *The Investment of Trust funds in the Safest and Most Productive Manner,* (London: Effingham Wilson, 1907), in which he demonstrated the risk-return advantages of an internationally diversified portfolio for British investors in the first global capital market.
4 M. A. Neymark, *La Statistique Internationale de Valeurs Mobilières,* (La Haye, 1911).
5 D. C. M. Platt, Foreign Finance in continental Europe and the United States, 1815-1870: quantities, origins, functions, and distribution, London: G. Allen & Unwin, 1984.
6 A spate of recent literature has identified stock markets as an important feature of economies that experience modern economic growth, both historically (Rousseau, 2003; Rousseau and Sylla, 2001; Neal, 1990) and comparatively in recent decades (Levine, Rajan & Zingales). Initial purchasers of new debt or equity issues are more willing to purchase if they have better assurance that they can resell their holdings as a whole, or in part, at any time they choose in the future. Effective secondary markets in financial instruments therefore create better primary markets for financial instruments. Another reason, perhaps less obvious, is that active secondary markets in widely held securities enable the holders to post their assets as collateral to raise private debt for any purpose whatsoever. This means that the range of investment activities supported by, say, a secondary market for just one type of government debt can extend throughout an entire economy. Finally, it may be that the use of capital markets for financing the changes necessary for an economy to respond effectively to external shocks (e.g., from war, famine, disease, or technological change) helps to preserve both product and labor markets from excessive regulations and restrictions.
7 While 419 ballots were cast, all but 4 were declared ineligible by the scrutineers from the Managers. Those 4 ballots determined that the new Committee would have a majority of "optionists", headed by Jacob Ricardo.
8 "That the practice of dealing in unallotted shares is injurious to the character of the House and reflects with danger to the parties concerned in it. That the committee therefore feels that it is their duty to urge upon brokers the propriety of declining to execute orders in such shares, and upon jobbers, to abstain from dealing in them. That no bargain in such shares can be recognized by the Committee (in conformity with the Law No 14 in regard to bargains in loans not contracted) and that they will adopt every means in their power to discourage a practice which they feel must ultimately prove injurious to the best interests of the Stock Exchange." (Ms. 14600/19, September 12, 1845.)
[9] See Eugene N. While, "The Krach of the Union Générale and the Paris Bourse," NBER working paper, 2004.
[10] James E. Buck, ed., *The New York Stock Exchange, The First 200 Years*, Essex, CT: Greenwich Publishing Group, 1992, p. 71:
[11] Maddison, E. C., The Paris Bourse and the London Stock Exchange. A comparison of the course of business on each Exchange, London, 1875, p. 16.
[12] A comparison of the London Stock Exchange's listing requirements with those created in New York, Paris, and Berlin is contained in Davis, Neal, and White (2003).

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