

**Discussion Paper**  
**on**  
**Stock Exchange Demutualization**



**IOSCO**  
**Technical Committee**

**Consultation Draft**

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**Discussion Paper on**  
**Stock Exchange Demutualization**

The Technical Committee (the Committee) of the International Organization of Securities Commissions (IOSCO) has been discussing certain changes that are taking place in the stock exchange industry, particularly the trend towards stock exchanges becoming for-profit enterprises and the increase in competition among exchanges and other electronic networks. The Committee has prepared a discussion paper setting out some of the issues raised and is seeking the views of interested parties on these matters. The discussion paper provides some background to the changes, particularly those regarding the transformation of exchanges into for-profit shareholder-owned companies, which is referred to as demutualization. The paper then canvases issues that these changes raise and notes some responses that have been taken by various IOSCO member jurisdictions.

The key regulatory issue is whether these changes will undermine the commitment of resources and capabilities by a stock exchange to effectively fulfil its regulatory and public interest responsibilities at an appropriate standard. The regulatory questions and concerns identified fall into three areas.:

- a. What conflicts of interest are created or increased where a for-profit entity also performs the regulatory functions that an exchange might have regarding:
  - i) primary market regulation (listing and admission of companies, self-listing);
  - ii) secondary market regulation (trading rules); and
  - iii) member regulation?
- b. A fair and efficient capital market is a public good. A well-run exchange is a key part of the capital market. Is there a need to impose a special regime on exchanges to protect the public interest, such as particular corporate governance arrangements or rules regarding share ownership?
- c. Will a for-profit exchange be run with due regard for its financial viability? Will adequate funding be allocated to regulatory functions, including arrangements designed to manage defaults?

The Committee acknowledges that many of these are not new issues for either stock exchanges or their regulators, but the effect of demutualization and increased competition warrants a re-examination of both the issues and available regulatory responses.

Regulators in a number of jurisdictions are actively considering the issues. They appear to be responding to these challenges in different ways. These differences may reflect differing circumstances or philosophies. Given the importance of an exchange in the

financial and economic system of a country and the additional complexities posed where an exchange becomes a for-profit entity actively competing for business, these issues will continue to demand regulatory attention.

The discussion paper was originally prepared to facilitate discussion at the Committee and does not purport to cover all the issues that may arise, nor be prescriptive about the responses that may be taken.

The Committee seeks comments from all interested parties on any of the issues raised by the demutualization of stock exchanges. In particular, the Committee would be interested in comments regarding the following questions.

1. In your view, what regulation would be needed, adequate and effective to address the possible conflicts of interest that may arise?
2. Should there be special rules to prevent anti-competitive actions by stock exchanges? If so, what rules would be necessary?
3. What other issues or regulatory responses should be discussed?

Please send your comments by February 16, 2001 to:

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## DISCUSSION PAPER ON STOCK EXCHANGE DEMUTUALIZATION

This paper canvases certain issues actively under consideration by securities<sup>1</sup> regulators regarding the regulation of stock exchanges. These issues have been brought to the fore by changes in the industry, particularly changes in the ownership structure of many stock exchanges and the increase in competition among exchanges and other electronic networks. Generally, the changes in ownership structure have involved conversion from a not-for-profit member-owned organization to a shareholder-owned organization, which is likely to be a for-profit corporation. As the specific circumstances of each jurisdiction and exchange<sup>2</sup> will differ, the paper may not address all issues or possible responses that may be relevant to a particular situation.<sup>3</sup> Part I will provide background information and Part II will identify and discuss issues<sup>4</sup> that arise.

### I. BACKGROUND

Historically, most exchanges were not-for-profit organizations owned by their members. Over the past few years, there has been a trend among exchanges to consider alternative governance structures to these traditional mutual or cooperative models. The transformation of an exchange into a for-profit shareholder-owned company is referred to as “demutualization”. In most cases, the demutualized exchange becomes a for-profit enterprise.

A demutualized exchange may take many forms, each raising its own issues. Some exchanges have demutualized and become public companies listed on their own exchanges. Other exchanges have demutualized but have remained private corporations.<sup>5</sup> Still others are subsidiaries of publicly traded holding companies.

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1 For convenience, unless the context does not permit or is specifically limited, in this paper (a) the word “securities” is used to include references to derivatives; the same applies to the terms “securities regulation”, “securities firms” and “securities markets”; (b) “markets” includes securities markets and other regulated markets (such as exchanges), other organised markets and OTC markets at, or through which, either cash or derivatives exchanges.

2 For example, it may make a difference whether or not concentrations or types of ownership interests in the exchange are limited.

3 In particular, the demutualization of a derivatives exchange may raise additional issues or prompt different responses.

4 While some exchanges own clearing houses and these may commonly continue to form part of the exchange group after demutualization, this paper does not address any issues relating to clearing houses which may arise on demutualization.

5 The Australian Stock Exchange is a public company listed on its own exchange. The Amsterdam Exchange and The Toronto Stock Exchange are presently private corporations. The London Stock Exchange arranged for an off-market trading facility for its shares. The Pacific Exchange in the United States converted its equity business into a wholly owned subsidiary of the exchange and the OM Stockholmsbörsen AB is a wholly owned subsidiary of a listed company. A number of other exchanges also are considering or have voted to demutualize.

At last year's annual meeting of the Federation internationale des bourses des valeurs ("FIBV"), it was reported informally that of the 52 exchanges present, 15 had demutualized, 14 had member approval to demutualize and 15 were actively contemplating demutualization. The trend towards stock exchange demutualization is being driven largely by changes in technology and competition. New technology does not come cheaply, highlighting the need for broader access to capital. Increasing competition between exchanges and other trading systems requires exchanges to become more efficient in all activities, including their decision-making processes. In addition, demutualization may facilitate alignments and mergers between exchanges.

The distinguishing feature of a mutually owned exchange is that the owners of the enterprise, its decision-makers and the direct users of its trading services usually are the same persons: the member firms<sup>6</sup>. Decisions are usually made on a one-member, one-vote basis,<sup>7</sup> and often are made by committees of representatives of member firms. Ownership rights may not be freely tradeable<sup>8</sup> and terminate with cessation of membership. Mutuals seldom are able to raise capital from anyone other than members.

In contrast, most for-profit enterprises are organized, as corporations with share capital under which the owners of the company, its decision-makers and its principal customers may well be three separate groups. The shareholders vest decision-making power for the company in a board of directors who are subject to election and removal by shareholders<sup>9</sup> and this power is exercised on a day-to-day basis by the management of the corporation. The voting rights of shareholders usually are commensurate with their economic interest in the company: one share, one vote<sup>10</sup>. The economic interests represented by shareholdings constitute property rights, which are distinct from the interests of members. Share enterprises may raise new capital in a variety of ways and from various sources.

As competition increases and exchanges move from mutual or cooperative entities to for-profit enterprises, new elements enter into the environment. The interests of the owners of the exchange may diverge from those of the principal customers of its trading services. The commercial nature of the exchange becomes more evident: maximizing profits becomes an explicit objective. These changes raise a number of questions and concerns, including:

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6 Frank Donnan, *Self-regulation and the Demutualisation of the Australian Stock Exchange* (1999) 10 Australian Journal of Corporate Law at page 3. In the U.S. over the past 20 years, it has been common to lease seats on exchanges. When a seat is leased, the ownership interest is split from the trading right.

7 The ability to influence the decisions of the enterprise is thereby separated from the level of economic interest a member may have in the exchange.

8 Often the only permitted purchasers are other member-dealers or others who qualify to become member-dealers.

9 Donnan, page 4.

10 As for other companies, there may be many variations, such as multiple voting rights, golden shares, caps on shareholdings and other arrangements

- What conflicts of interest are created or increased where a for-profit entity also performs the regulatory functions that an exchange might have, especially primary market regulation (listing and admission of companies), secondary market regulation (trading rules) and member regulation?
- A fair and efficient capital market is a public good. A well-run exchange is a key part of the capital market. Is there a need to impose a special regime on exchanges to protect the public interest, such as particular corporate governance arrangements or rules regarding share ownership?
- Will a for-profit exchange be run with due regard for its financial viability? Will adequate funding be allocated to regulatory functions, including arrangements designed to manage defaults?<sup>11</sup>
- Many of these are not new issues for stock exchanges, but demutualization and increased competition may exacerbate some of them, warranting a reexamination of both the issues and available regulatory responses.

At its heart, the issue is:

whether the commercial pressures [or governance structure] of a for-profit entity will undermine the commitment of resources and capabilities of the exchange to effectively fulfill its regulatory and public interest responsibilities to an appropriate standard.<sup>12</sup>

Part II of this paper will discuss the issues. It should be noted that the issues that arise and regulatory responses taken are somewhat interdependent, i.e., the choice of a way to address a particular issue may affect the existence or intensity of other issues. For example, if the ownership of the exchange is limited to securities firms that the regulator licenses as fit and proper to do business in the jurisdiction, the potential problems regarding who controls the exchange may be lessened. Also, the issues and their intensity may be affected by the form that a demutualized exchange takes, i.e., whether the exchange becomes a private company comprised solely of its former members or a widely held listed company. Finally, the appropriate responses may vary depending on the nature of the activities carried on by the demutualized exchange, i.e., the need for regulatory intervention in the activities of the exchange may be lessened where the exchange performs few regulatory functions.

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11 A key exchange function is the effective management of failures, whether market failures or defaults by market participants. This is particularly true where the exchange operates as the central counterparty in transactions. The emphasis on minimizing costs associated with a for-profit structure may put pressure on the exchange's ability and inclination to fulfill this role

12 Australian House of Representatives, Main Committee, Official Hansard, 27 November 1997 at p.11541 (from the speech presenting legislation authorizing demutualization of Australian Stock Exchange).

It should be no way assumed that workable solutions are not available for the issues and concerns identified in this paper. Many jurisdictions, after due consideration of the specific circumstances, have addressed these concerns. The responses vary widely.

Set out in Appendix A is a summary of the approaches that have been taken in some jurisdictions dealing with demutualization. Appendix B contains a list of sources used in preparation of this discussion paper.

## **II. DISCUSSION**

### **CONFLICTS OF INTEREST**

An exchange, demutualized or not, fulfills several roles.

- It is a commercial entity carrying on the business of running a stock exchange and seeking to protect and promote its business.
- It also supports the integrity and efficiency of capital markets by setting and enforcing appropriate rules to regulate its market.

Exchanges around the world have a variety of responsibilities. These may include:

- devising rules for trading and ensuring that they are observed;
- determining qualifications for listing or admission to trading and ensuring continuous disclosure of material information to the market by listed entities;
- adopting and enforcing rules for the conduct of members of the exchange;
- setting qualification and financial standards for securities industry professionals;
- conducting surveillance of the market and its participants; investigating violations of exchange rules and disciplining violators;
- monitoring and regulating daily trading and the operation of the market to ensure its integrity; and
- acting generally in the interests of the public.<sup>13</sup>

The regulatory and public interest role of an exchange may be contrasted with its commercial role and objectives.<sup>14</sup> The commercial role of an exchange is to provide services to generate revenues. Exchanges generate revenues<sup>15</sup> from listings, trading services, settlement fees, fees for membership and charges for the sale of market

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13 Donnan, page 12.

14 Donnan, pages 12-13.

15 In providing a number of services, the exchange may be a competitor of certain of the listed companies and member firms that it regulates.

information. This revenue is derived directly from those who use or purchase services or information from the exchange: the dealers, intermediaries, listed issuers and information vendors; and indirectly from the investing public. The range and quality of listings and other services on an exchange and the ability of an exchange to attract and retain quality listings is critical in determining the level of total operating revenues.<sup>16</sup>

It is not a new observation that exchanges, which have historically operated as self-regulatory organizations, are subject to conflicts of interest. Conflicts arise because the members are being asked to: a) set rules in the public interest that may negatively affect their own commercial interests; and b) monitor and enforce rules against each other. The compensation for these conflicts lies in the expectation that self-regulation produces better rules as industry participants have the necessary expertise and knowledge of the industry. The members are also more likely to follow rules that they have participated in developing. In a member-owned exchange, the members share the financial and reputational risks of a failure to regulate appropriately. Finally, the bulk of the cost of regulation is likely to be borne by the regulated industry.

Demutualization may lessen some of the self-regulatory organization conflicts. Where demutualization leads to a separation of the owners of an exchange from its members, the interests of the owners may act as a constraint on actions that would benefit the interests of the member firms. Where a reputation as a fair and efficient market is seen to be a competitive advantage (or the lack of one as a significant disadvantage), a for-profit exchange may have more resources available and greater incentives to devote those resources to activities that enhance that reputation. Some have even suggested that a for-profit exchange might pursue its enforcement activities more diligently than a traditional exchange, as the fines may be another potential revenue source.

However, the more commonly expressed concern is that in a demutualized exchange, the drive for profit increases both the scope and the intensity of the conflicts. In a not-for profit environment, the focus is on generating sufficient fees to meet the budget for expenses, capital investments and other outlays. In a for-profit environment, the revenues must meet the budget **plus** produce an acceptable rate of return to investors. The revenue and outlay decisions are driven by the expected effect on the bottom line of the financial statement. While both parts of the cost/benefit equation are fairly straightforward in the commercial operations of the exchange, only the cash outlays on regulatory functions are clear.<sup>17</sup> The benefits of good regulation are harder to quantify and therefore may not be given full weight. A for-profit self-regulatory organization therefore may be unwilling to commit the resources that vigorous self-enforcement would require. Due to increased pressure to

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16 Donnan, page 13

17 The cost/benefit equation may also differ by regulatory function performed. Some regulatory functions may produce more benefits than others.



generate investment returns<sup>18</sup> for shareholders, a for-profit exchange may be less likely to take enforcement action against customers or users who are a direct source of income for the exchange. By similar reasoning a for-profit exchange may be less likely to suspend trading in the more liquid securities listed on its markets where this may impact adversely on transaction fees it would otherwise generate.

The conflicts inherent in an exchange regulating its competitors become more apparent where the exchange is also a for-profit enterprise<sup>19</sup>. Where the exchange is the only provider of a particular required service, this monopoly<sup>20</sup> position gives it greater ability to influence the actions of its competitors. Moving to a for-profit enterprise allows the exchange to enter into new businesses thereby increasing the opportunities for conflicts between its regulatory role and those as a competitor in the marketplace.

**Self-Listing.** A completely new conflict presented by demutualization is that raised by the exchange listing on itself. One of the key rationales for demutualization is to give the exchange the ability to raise funds through various means including private or public offerings. Listing provides significant benefits to the exchange as a public company, its investors and the market as a whole. The company gains enhanced visibility and liquidity for its securities facilitating further offerings, while investors gain better price discovery and liquidity. The market as a whole also derives benefits from the accountability, transparency and market discipline that may be applied by the listing and market surveillance processes.

If the exchange self-lists, can it function effectively as its own regulator? This is an even more fundamental conflict than those inherent in a self-regulatory organization. Does self-listing make the possible conflicts with overseeing competing entities or business associates that are also listed on the exchange worse? Two factors act as controls against discriminatory treatment of competitors: competition among exchanges for listings - the issuer may just move its listing elsewhere - and the risk to the exchange's reputation as a fair market posed by this behaviour far outweigh the likely benefits. The market disciplines on proper behaviour may not be strong enough where the exchange is being asked to regulate its own listing. Where an exchange's securities are only admitted to trading on its own market, but all listing regulation is done by another exchange or the regulator, some of the potential conflicts may be lessened.

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18 As a for-profit entity, the exchange may also be under pressure to meet investors' other expectations, such as meeting short-term earnings growth targets.

19 Where a dealer operates an alternative trading system or competing liquidity pool and is also a user of the exchange, there may be conflicts of interest in the exchange regulating the dealer providing a competing service. These conflicts could manifest themselves in a number of ways. There could be discrimination through sanctions imposed in disciplinary proceedings, unfairness in not being permitted to participate in particular activities, discrimination with respect to fees charged or failure to make changes to accommodate an entity providing a competing service. Where the exchange is a for-profit enterprise, the pressure to act in the commercial interests of the exchange are increased.

20 Regulators should consider the effect on competition that an exchange's monopoly in a product or service may have.

**Responses.** Although conflicts of interest may never be completely eliminated in a self-regulatory environment (regardless of the form the exchange may take, whether for-profit or not-for-profit), the challenge is to create an environment in which conflicts are recognized, minimized and managed effectively. Most approaches involve one or more of:

- corporate governance requirements, such as requirements for [public directors](#)<sup>21</sup> to increase the likelihood that the board takes its responsibilities for the integrity of the regulatory process seriously;
- rigorous regulatory oversight;
- enhanced transparency regarding the decisions of the exchange, through requirements to publish rules, actions and decisions or otherwise; and
- functional separation of the commercial activities of the exchange from its regulatory functions: from dividing lines of authority and accountability within a single firm, to establishing a separate legal entity, to a transfer of some or all regulatory responsibilities to the exchange's regulator or another body.

Some of these mechanisms may raise other issues. For example:

- an exchange may propose to reduce its conflicts by contracting out some or all of its self-regulatory functions to a third party, such as another self-regulatory organization or commercial enterprise; this may raise questions regarding the regulator's jurisdiction over the entity assuming the tasks, the need to assess the resources, experience and reputation of that entity, the continuing degree of responsibility that the exchange may have<sup>22</sup> for its contractor, how to structure the oversight activities of the regulator and what other issues may be raised<sup>23</sup> where the contractor is now performing these functions; and
- moving the exchange's regulatory functions into the statutory regulator may create challenges for the regulator: does it have or can it obtain the economic resources and expertise to perform these functions?<sup>24</sup> If, as has been suggested,<sup>25</sup> there are

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21 In this discussion, the term "board" is meant to include the different national models of governing structures for companies. In the two tier system found in some countries, "board" would refer to the supervisory board of the corporation.

22 Each jurisdiction would have to assess the degree to which the exchange might be permitted to delegate both the regulatory functions and the responsibility to the contractor. In many cases, the view may be that the exchange must remain responsible for the functions and for the activities of its contractor in performing those functions. Even if a number of functions were outsourced, an exchange would still have a responsibility to maintain orderly markets and financial surveillance sufficient to assure the completion of transactions.

23 For example, questions may be asked about the ability of a contractor to act independently of the interests of the exchange on which the contractor is reliant for the bulk of its income.

24 One of the most often cited advantages of self-regulation is the expertise factor; the rules are made by those with intimate day-to-day knowledge of the market. A statutory regulator assuming these responsibilities will have to find ways to ensure its staff keep in close contact with the market.

synergies between an exchange's regulatory functions and its trade execution or other commercial activities, these will be lost on the transfer of responsibilities.

## **THE EXCHANGE AS A PUBLIC GOOD**

The fair and efficient functioning of an exchange is of significant benefit to the public. The efficiency of the secondary market in providing liquidity and accurate price discovery facilitates efficient raising of capital for commercial enterprises, benefiting both the wider corporate sector and the economy as a whole. The failure of an exchange to perform its regulatory functions properly will have a similarly wide impact.

**Directors.** In recognition of the public good, and the degree of conflict of interest in a member-owned exchange, it has been common for an exchange to be required to have public directors on its board to represent the interests of the community, beyond the member-owners. These public directors generally are expected to serve as a check on conflicts of interest in a self-regulatory organization and promote integrity in the board's decision-making. In contrast, the boards of directors of most commercial enterprises are required to consider only the best interests of the corporation and its shareholders in making decisions.

The issues are:

- does a widely-held demutualized exchange still need to have public directors appointed to its board or have other mechanisms imposed to support the public interest?
- if public directors are required, should they be given specific public interest responsibilities over and above the duties imposed on all directors of the exchange?

The public interest in a fair and efficient exchange continues in the demutualized environment, as does the continuing conflict between the commercial operations and regulatory role of the exchange. This would argue for continuing to require public directors. However, wide ownership of the exchange may bring greater opportunities for the general public interest to be represented on the board through the normal director election process. Also, very few corporations, no matter how important to the economy of a jurisdiction, have similar public director requirements imposed.

It may be noted that similar concerns arise in the privatized utilities sector. Frequently, the response has been to impose statutory duties on all directors of the utility to act in the public interest. These duties are enforced by a statutory regulator. Some securities regulators presently impose similar duties on all directors of exchanges within their jurisdiction.

**Officers.** In a mutual exchange, the key decision-makers are the representatives of member firms who have been elected to the exchange's board and the senior officers of the exchange itself. The firms (and their representatives) usually have been approved, either by the regulator or the exchange, as having a good reputation, sufficient resources and the necessary expertise to carry on business as exchange members (or representatives). With a widely-held demutualized exchange, the key decision-makers on a day-to-day basis are likely to be the senior management of the exchange. The strength of the exchange management team may be subject to regulatory scrutiny on the establishment or recognition of a new exchange, but do these assessments (e.g., “fit and proper”) apply to exchange management on an ongoing basis? Assessing the qualifications and expertise of directors and senior managers of financial intermediaries is a core principle of regulation in the banking, insurance and securities sectors. Given the public interest in an efficient and fair market, the movement from a member-run organization may suggest that some greater regulatory oversight of who actually manages the exchange might be considered. Where the regulatory functions of the exchange have been moved to another related entity or out-sourced altogether, the assessment of the expertise of the staff of that regulatory entity will be particularly important.

**Shareholders.** As noted, in a traditional cooperative exchange, no one member could exert control over the operations of the exchange, and all owners were subject to assessments of their qualifications as part of the membership approval process. Where demutualization involves broadening the ownership to other than approved firms, two possibilities arise. The exchange may be:

- controlled by one or more persons; and
- seen to be subject to influence by “inappropriate” shareholders<sup>26</sup>

Does the public interest require some mechanism to address these concerns, such as by restricting maximum share ownership, requiring prior regulatory approval for ownership above a threshold percentage or giving a veto right to the regulator?

In most commercial enterprises the degree of regulatory scrutiny applied to shareholders is fairly slight. Often the only obligation is that a significant shareholder of a public company must disclose that position to the company and/or the market. In some key industries however, ownership restrictions and/or regulatory approval of significant shareholders is common - especially in financial services. The public interest in maintaining an efficient exchange may suggest that some regulatory limitations or oversight of the ownership of the exchange may be warranted, even where the regulatory functions may be performed elsewhere.

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26 For example, there might be concern if a person who had been barred from the securities industry acquired sufficient shares to elect a nominee to the board of the exchange. The acquisition of a significant ownership position by a non-financial industry company may raise other concerns.

## FINANCIAL MATTERS

There are a number of financial issues that may become of greater concern in a for-profit exchange. The question of under funding of regulatory functions has already been discussed. Other issues include:

- cross-subsidization between regulatory and commercial activities; in particular fees and fines generated by regulatory activities being used to fund commercial operations;
- service and other fees set at a level for commercial purposes, such as to build market share, unduly depleting resources of the exchange;
- the equitable allocation of the cost of regulation across market participants; and
- the overall issue of the public interest in the continued good financial health of an exchange.

**Cross-subsidization.** Where each of the regulatory and commercial sides of the exchange may generate revenues, there may be an opportunity for regulatory funds to be reinvested in the commercial activities of the exchange. Further, where an exchange has the ability to set monopoly prices for trading services or for regulatory services, there may be at least a question of fairness if the exchange uses the fees charged to customers that use only its regulatory services - such as an alternative trading system - to fund its commercial services. This sort of cross-subsidization can be viewed as distorting competition.<sup>27</sup> In order to assess and supervise cross-subsidization issues, the exchange's books and records would have to clearly separate the revenues and expenses of the commercial and regulatory activities.

**Uneconomic Pricing.** In the process of trying to build market share, particularly for a new product or service, there is a risk that the price will be set at a level that will not generate sufficient revenue to fund the associated regulatory activities. There is also the possibility that the pricing decisions will be made other than in the long-term interests of the exchange and its financial viability. The appropriate internal controls of a well-run operation and the market discipline applied to a public company should reduce these risks. A clearly defined obligation to fund regulatory activities would also be of assistance.

**Allocation of Regulatory Costs.** The costs of regulation should be shared equitably by those who benefit from it. If the regulatory functions are re-assumed by the statutory regulator, the costs will be spread in accordance with the funding structure of the agency, i.e., borne by all taxpayers, those paying fees to the regulator, or some other method. If some entity other than the statutory regulator is performing these functions, the issue of fair allocation of costs arises.

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27 Ruben Lee, *What is an Exchange?: The Automation, Management and Regulation of Financial Markets* (1998: Oxford University Press), page 311.

**Financial Viability.** Although not an issue solely for a demutualized exchange, the ongoing satisfactory financial condition of the exchange is an issue to consider. In a member-owned organization, an exchange has the right to assess members and request a capital contribution. This theoretically unlimited liability of members has two practical limits: the members' ability and willingness to pay rather than resign from membership and the fact that the members of an exchange, as the decision-makers, will not necessarily authorize the capital call in the first place. A demutualized exchange may not have the right to call on shareholders for additional capital, but does have the ability to raise capital from other sources. Although a demutualized exchange could raise fees to address any shortfall in capital, the issue of financial viability may be of greater concern as new capital may not be available when the exchange needs it most<sup>28</sup>

Regulators address concerns about ensuring the financial condition of financial intermediaries by imposing capital and other prudential requirements. Capital and solvency requirements serve at least two purposes. First, they may reduce the risk of failure of the firm by requiring that a cushion of owners' money be available to absorb unexpected losses. Second, capital may provide liquidity to allow a firm to continue to operate during an orderly wind down and transfer of the business. Where a failure of the intermediary might have systemic implications, the emphasis is often on ensuring the firm remains solvent.

Given the public interest in the continued operations of an exchange, should capital requirements be placed on a demutualized exchange?<sup>29</sup> Other alternatives are to require a demutualized exchange to establish a reserve to address any shortfall in capital, or for the regulator to monitor the financial condition of an exchange and then to take remedial action if its financial condition begins to deteriorate.

Of late, exchanges have expanded the products and services that they provide, such as data processing, the distribution of information, the provision of custodian and registration services, and the operation of clearing and settlement systems. The profit-seeking actions of a demutualized exchange may provide further encouragement to enter businesses other than those directly ancillary to its traditional trade execution functions. The potential for increased conflicts of interest this may produce (particularly those arising where the exchange is seeking to provide services or products which compete with those offered by users of the exchange's other services) has been mentioned above. While new business lines may reduce financial risks by diversifying the exchange's sources of income, they also

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28 While the demutualized exchange may not have the legal right to demand further capital contributions from its owners, a shareholder may opt to provide additional funding in order to maintain its investment in an operating exchange.

29 If capital requirements are to be imposed, the question of how widely these requirements should be applied arises: would the capital regime be applied only to the exchange operating company, or more widely to its holding company or even all related companies that include the exchange?

bring new risks. Should the ability of the exchange to engage in commercial activities be unfettered? Or should it be subject to some limitations, such as segregation of core and non-core businesses, firewalls to protect the resources necessary to run the exchange's core activities, a restriction to products and services that are ancillary to its core business or a requirement for prior regulatory approval?

### **III. Conclusion**

An exchange regulator faces many challenges in the current environment. The challenges become particularly acute when an exchange, operating in a competitive marketplace, decides to restructure its operations as a for-profit entity. The issues discussed above already are being considered by regulators in a number of jurisdictions. Regulators appear to be responding to these challenges in different ways. These differences may be a reflection of unique circumstances or different philosophies. Given the importance of an exchange in the financial and economic system of a country and the additional complexities posed where an exchange becomes a for-profit entity actively competing for business, these issues will continue to demand regulatory attention.

## **APPENDIX A CASE STUDIES**

### **AUSTRALIA - AUSTRALIAN STOCK EXCHANGE**

On October 19, 1996, the members of the Australian Stock Exchange (ASX) voted to change the constitution of the ASX from a mutual structure to a corporate structure in which there is no requirement for a link between the right to trade on the exchange and its ownership. The ASX listed on itself in October 1998.

Under the legislation and administrative arrangements, ASX has retained all of its self-regulatory functions, although ASX's accountability for the performance of these functions was strengthened by requiring it to make a formal annual report on its supervisory activities.

The major change in regulatory structure was brought about by the self-listing of the ASX on the exchange. The ASX could no longer be seen to supervise its own compliance with listing rules or conduct market surveillance of trading in its own securities. Pursuant to the legislation allowing the change in exchange structure, the Australian Securities and Investments Commission (ASIC) was given the power to administer the listing rules in relation to ASX.

Pursuant to a Memorandum of Understanding between ASIC and the ASX, the following areas are addressed:

- Listing procedures
- Ongoing listing requirements
- Fees
- Company announcement procedures
- Listing rule waiver procedures
- Surveillance procedures
- Electronic share registry procedures
- Trading and Clearing procedures
- Information provision

ASIC has found some limitations in the legislative scheme in supervising ASX as a self listed entity. The law contemplates that possible conflicts of interest may arise only from ASX securities being able to be traded on its own exchange. However potential conflicts have arisen between ASX's corporate objectives and business interests and those of other listed entities, not in relation to trading of shares in ASX. For example, when the newly listed ASX made a bid for the Sydney Futures Exchange, a rival bid was made by Computershare Ltd. (a share registry and software firm). This gave rise to a conflict between ASX's interests as a bidder and an obligation to administer the listing rules in relation to Computershare Ltd. ASIC, ASX and Computershare Ltd. entered into an



arrangement in order to address this problem.

The attempt by the ASX and the Sydney Futures Exchange to merge was ultimately rejected by the competition regulator. Subsequently Computershare Ltd withdrew its bid for commercial reasons. Sydney Futures Exchange has completed its demutualisation by court approved scheme of arrangement. Its shares are traded on an exempt market established for the purpose.

In addition, under the legislative arrangements, a person may not own more than 5% of the shares of the ASX. The Australian legislation does not at this time have a "fit and proper" requirement for exchange owners, and the shareholding limitation was designed to ensure some measure of control is maintained over material ownership stakes in the exchange.

In Australia, the experience has been that many of the member firms that were allocated shares at the time of demutualization have held onto their shares.

In October 2000, the Government of Australia announced that the shareholding limit would be raised to 15% and that a fit and proper test would apply to exchange controllers and directors.

In November 2000 the Australian government announced that ASIC would be given enhanced power to audit regulated exchanges and clearing houses and report to the government on how well they are carrying out their supervisory functions. Contemporaneously ASX has stated it is to establish a new subsidiary, ASX Supervisory Review Pty Limited, which will have a board comprised of a majority of independent directors, to keep ASX's supervisory activities under review.

The government's initiatives will be contained in the Financial Services Reform Bill which is expected to be introduced into the Australian parliament before the end of 2000 and come into force by mid 2001.

## **HONG KONG - HONG KONG STOCK & FUTURES EXCHANGES**

In Hong Kong, on March 3, 1999, the Financial Secretary announced a comprehensive reform for the securities and futures market which included the demutualization and merger of Hong Kong's Exchanges and Clearing Houses under a new holding company, Hong Kong Exchanges and Clearing Limited (HKEx). The demutualization and merger took effect on March 6, 2000 following shareholder and court approvals to two schemes of arrangement and the enactment of implementing legislation (the Exchanges and Clearing Houses (Merger) Ordinance). Subsequently, on June 27 2000, HKEC was listed on the exchange operated by its wholly owned subsidiary, The Stock Exchange of Hong Kong.

The board of directors of HKEx is comparatively small to ensure efficiency in policy formulation and decision-making. It comprises broadly equal numbers of directors elected by shareholders and those representing public and market interests appointed by the Financial Secretary. The initial shareholders of HKEx were the former members of the stock and futures exchanges. As HKEx=s ownership diversifies over time through the listing and trading of its shares on the stock market, representation of shareholders' interest in the board will also increase. The composition of the board will aim to maintain an appropriate balance between shareholders and public interest representatives. The new regulatory framework requires HKEx to act in the interests of the public and ensure that these interests prevail over any other interests HKEx is required to serve under any other law.

Access to the exchanges will be broadened to attract more market participants and enable it to capture a greater share of global liquidity. Access to the markets may be obtained through acquisition of trading rights from existing members of the exchanges and after the expiry of a two-year moratorium, from the exchanges themselves.

Following the demutualization and merger, the division of market regulation between the Securities and Futures Commission (SFC) and HKEx follows the model set out below:

- SFC: All prudential regulation of exchange users is handled by the SFC. This includes monitoring compliance with liquid capital requirements and ensuring that exchange users have in place proper systems of management and control.
- HKEx: HKEx will monitor particular aspects of the business of exchange users so as to assess and manage the risks inherent in the operations of its subsidiary business units. This would, in particular, involve assessing the adequacy of risk management measures and compliance with exchange trading rules.

The regulatory framework for HKEx is intended to ensure that HKEx=s commercial objectives are balanced through:

Effective self-regulation: HKEx=s decision-making and self-regulation will take place within the existing framework for the regulation of exchanges and clearing houses. However, the SFC now regulates HKEx as a listed company and will regulated other listed companies or other regulated persons where a conflict of interest prevents an HKEx group company from properly doing so.

Prevention of monopolistic abuses: Where HKEx=s products and services are offered on a de facto monopoly basis, the SFC has approval authority, as it does at present, over the fees that HKEx charges.

Excellence in risk management: Risk management is critical to preserving and bolstering market integrity. HKEx's risk management practices will be monitored by the SFC and a statutory risk management committee of the HKEx board to ensure adequate risk provisioning and the soundness of underlying practices.

Shareholding Limit: There is a shareholding limit of 5% to prevent control of HKEx by any individual party or parties acting in concert.

## **ONTARIO - TORONTO STOCK EXCHANGE**

On June 10, 1999, the members of the Toronto Stock Exchange (TSE) approved a by-law authorizing the TSE to continue as The Toronto Stock Exchange Inc. under the *Ontario Business Corporations Act*.

On December 14, 1999, legislation amending *The Toronto Stock Exchange Act* came into force. The amendments to *The Toronto Stock Exchange Act* provided for the continuance of the TSE as TSE Inc. The legislation also provided that the continuance must be approved by the Ontario Securities Commission (OSC) and the Ontario Government. Amendments to the *Securities Act* (Ontario) were also enacted. These amendments limited share ownership to 5% unless the prior consent of the OSC is obtained.

As a condition of approving the continuance, the OSC requested that the TSE submit to a re-recognition process (the TSE was already recognized as a stock exchange pursuant to the *Securities Act* (Ontario)). The OSC developed recognition criteria that addressed various items. Key items included the following:

Corporate Governance	Requirements provided for fair and meaningful representation
Fees	(at least 50% independent of Participating Organizations) Requirements providing that all fees imposed by the TSE are equitably allocated and do not have the effect of creating barriers to access.
Access	Standards for fair access.
Financial Viability	An early warning system was developed to monitor the financial condition of the TSE.
TSE Regulatory Services	The TSE proposed to establish the market regulation function as a separate division within the TSE (known as TSE RS). TSE RS would operate on a cost recovery basis.

The continuance was effective April 3, 2000 after receiving the consent of the Ontario Government and the OSC. The TSE agreed to comply with a number of ongoing terms and conditions in the areas set out above.

The effect of the continuance is that:

- The TSE is a for-profit corporation;
- The TSE is owned by shareholders instead of member firms based on holding a seat. Members exchanged their seats for shares and are initially the shareholders of TSE Inc.
- Share ownership is limited to 5% of outstanding shares unless the prior consent of the OSC is obtained;
- Members are “grandfathered” in terms of the number of shares they were issued on exchanging their seats but are not able to exercise more than 5% of the votes outstanding unless the prior consent of the OSC is obtained;
- Access to TSE Inc.’s trading system is based on contract, not ownership. Existing members at the time of the continuance may be granted access as “Participating Organizations” and are not required to be shareholders of TSE Inc. in order to trade.

#### **SINGAPORE - SINGAPORE STOCK EXCHANGE**

On December 1, 1999, the Stock Exchange of Singapore (SES) and the Singapore International Monetary Exchange (SIMEX) were demutualized and merged under a new public holding company, the Singapore Exchange Limited (SGX).

Under legislation and administrative arrangements, SGX has retained all the self-regulatory functions previously performed by SES and SIMEX. The regulatory functions reside in the holding company, while trading and clearing-house activities are conducted by separate subsidiaries of the group.

*The Exchanges (Demutualisation and Merger) Act* was passed on August 4, 1999 to effect the demutualization and merger. The *Exchanges Act*, empowers the Monetary Authority of Singapore (MAS) to exercise supervisory powers over the holding company of SGX. SES and SIMEX, which are now subsidiaries of SGX, will continue to be regulated separately under the *Securities Industry Act* and *Futures Trading Act*, respectively. (These two Acts will be merged into an omnibus Securities and Futures Act in 2001.)

*The Exchanges Act* complements the *Securities Industry Act* and *Futures Trading Act* and provides MAS with the authority to issue directives relating to rules, corporate governance and SGX's management of its subsidiaries which engage in the business of a securities or futures exchange, or a securities or futures clearing house. The power to issue directives is, however, not a *carte blanche* but is to be exercised subject to ensuring fair and orderly markets or integrity of, and proper management of systemic risks in, the securities and

futures markets. The holding company's auditors are required to report any breaches of the *Exchanges Act*, or irregularities of a material effect, to the MAS.

SGX is also required to observe the following legislative requirements:

- SGX has to seek the MAS' approval for the appointments of its Chairman and Chief Executive Officer;
- SGX is required to set up a Nominating Committee, whose purpose is to recommend appointments to the Board and key management positions. The appointment of all members of the Nominating Committee is subject to MAS' approval;
- MAS' approval is required for individual shareholdings that exceed 5%. MAS may approve shareholdings exceeding 5% subject to conditions, such as requiring further approvals for subsequent increases in shareholding above specified limits. This measure serves to ensure that some control is retained over the ownership of the exchange in the public interest.

Subject to the above prudential considerations, there is no cap on foreign investment in SGX.

The ownership of the exchange will be expanded through a private placement of SGX shares and, at a later stage, an initial public offering (IPO). The IPO is expected to be accompanied by a listing on SGX's stock exchange. To avoid a conflict of interests which may arise from SGX supervising its own compliance with listing rules or conducting market surveillance of trading in its own shares, the MAS is given the power to administer the listing rules with respect to SGX.

## **SWEDEN - STOCKHOLM STOCK EXCHANGE**

The Stockholm Stock Exchange was established in 1863, was formally recognized as a public institution subject to regular inspections in 1919 and became a fully electronic market in 1990. OM Gruppen AB (OM) was established in 1985 as a securities firm which carried on exchange-like operations in stock options trading, including fully integrated clearing functions.

In 1992, the *Securities Exchange and Operations Act* in Sweden was passed. This law ended the exchange monopoly granted to the Stockholm Stock Exchange. Accordingly, competition between different Swedish stock exchanges and other regulated marketplaces was made possible. In general terms, the law gave the Swedish Finansinspektionen (SFI) the power to grant authorization to conduct exchange or other marketplace operations. Today, Sweden has two exchanges (equities and bonds) and two regulated marketplaces

(equities). Both the Stockholm Stock Exchange and OM were authorized and licensed as exchanges when the act became effective in 1993.

Demutualization of the Stockholm Stock Exchange took place in 1993. Shares were sold to listed issuers and exchange members but did not become freely tradeable for one year. Once the shares were transferable, no restrictions were imposed on ownership. However, the Stockholm Stock Exchange was not permitted to list its own shares.

A new governance structure was established. The old exchange board was comprised of 22 members who represented various societal interests - political parties, labour unions, members, issuers and investors. The new board was made up of 9 members elected by the shareholders generally.

During 1994-98, OM increased its ownership in the Stockholm Stock Exchange. In 1998, all the shares in the exchange were acquired by OM and the Stockholm Stock Exchange and the derivative exchange operations of OM were merged. The merged exchange, which was renamed OM Stockholmsbörsen AB, became a wholly owned subsidiary of OM.

These structural changes prompted the passage of new legislation in 1998, with the view to strengthen the supervision of exchanges. This legislation introduced a formal restriction on an exchange listing its own shares but did not prohibit the listing of companies that owned shares in the exchange. OM is a listed company on the OM Stockholmsbörsen.

The 1998 law gave SFI a number of powers. SFI may

- assess anyone who proposes to acquire more than 10% of the shares of a stock exchange ("qualified owners") to ensure they may be regarded as fit and proper; a qualified owner that is a securities firm which is a member of the exchange, or a listed company on the exchange is required to provide SFI with certain information and inform SFI of new members of the board or management.;
- order a qualified owner to refrain from exercising its voting rights;
- require that a qualified owner reduce its ownership in the exchange to no more than 10%; and
- bring alleged misbehaviour by exchange members and qualified owners that are listed companies to a hearing before the Disciplinary Committee of the exchange. The Committee is obliged to decide the matter.

## **UNITED KINGDOM - LONDON STOCK EXCHANGE**

**Overview.** On 30 July 1999, the London Stock Exchange (LSE) announced its intention to create a new ownership structure based on transferable shares which would result in the LSE becoming a public company enabling it to operate on a fully commercial basis. The LSE believed that in an increasingly competitive environment, ending the link between

ownership and access to the Exchange's markets was critical to the its future success. Specifically, the Board thought that the Proposals would enable the LSE to achieve more readily a clearer focus on customer needs, effective decision-making, the flexibility to respond to changes in the business environment and a fully commercial basis of operation. This would ensure that the LSE was better able to meet the increasingly competitive demands of today's electronic marketplace.

On 15 March 2000, an Extraordinary General Meeting was held at which B shareholders approved the necessary resolutions to enable the LSE to become a public company. This vote paved the way for the LSE to make the constitutional changes necessary in order to re-register as a public company with the name 'London Stock Exchange plc=.

**Regulation.** Prior to Demutualization the LSE performed two regulatory functions. Firstly as a Recognised Investment Exchange (RIE) under the Financial Services Act, the LSE had responsibility for the orderly operation and regulation of trading in its two markets, the Official List, which is the LSE's main market and the Alternative Investment Market (AIM). As a RIE the LSE is regulated by the Financial Services Authority (FSA). Secondly as Competent Authority the LSE also performed the role of regulator of the Primary Market through the UK Listing Authority (UKLA).

Following the announcement of the proposed new ownership structure on 30 July 1999, the LSE discussed its statutory role as regulator of the Primary Market with HM Treasury. In light of the LSE's new commercially based approach, the Treasury agreed that it would be appropriate for the role of regulator of the Primary Market, performed by the UKLA, to be transferred to the FSA. The transfer took place on 1 May 2000. A consequence of the transfer is that admission to the Official List is now a two-stage process involving both the LSE and the UKLA

The LSE continues to regulate its Secondary Markets. In order to maintain the orderly operation and regulation of trading on these markets, the LSE continues to make and enforce its own rules for quoted companies, including the right to admit a security to trading and the requirement to disclose price sensitive information. The LSE also continues regulate its Secondary Markets through monitoring and conducting preliminary investigations into cases of insider dealing and market abuse. In disseminating the full text of company-authorized announcements, the Exchange's Regulatory News Service (RNS) assists the LSE in the delivery of an efficient and orderly trading market. The UKLA will continue to impose requirements governing the issue of announcements by listed companies and is in the process of reviewing the arrangements for their dissemination.

**Other features.** The LSE's Articles of Association, adopted on the implementation of the new ownership structure, contain restrictions to prevent any person or body corporate from acquiring or retaining an interest in the Ordinary Shares which carries more than 4.9 % of

the total voting rights. To amend the Articles of Association, a resolution at general meeting supported by more than 75% of the shareholders would be required.

The ordinary shares of the LSE are not listed. However, a trading facility to bring together potential buyers and sellers to allow trading of Ordinary Shares on a matched bargain basis is provided by a London brokerage house. In its information memorandum the LSE undertook to comply with the continuing obligations set out in the UKLA=s listing rules as though its ordinary shares were listed.

### **UNITED STATES - PACIFIC EXCHANGE**

In May 2000, the Pacific Exchange (PCX) became the first U.S. stock exchange to demutualize part of its business, when the U.S. Securities and Exchange Commission (SEC) approved the conversion of its equity business into a wholly-owned subsidiary, PCX Equities Inc. In the interim, PCX finalized an agreement with Archipelago Holdings, Inc. ("Arca"), and has filed proposed rule changes whereby Arca would become a facility of the PCX, and the Arca limit order book would function for the PCX equities business. The facility, which is subject to SEC approval, would be called the Archipelago Exchange ("ARCX"). ARCX would be a fully electronic exchange that would have listed and over-the-counter securities.

### **UNITED STATES – THE CHICAGO MERCANTILE EXCHANGE**

Chicago Mercantile Exchange became the first U.S. financial exchange to demutualize on November 13, 2000, converting its membership interests into shares of common stock in Chicago Mercantile Exchange Inc. (CME) that can trade separately from exchange trading privileges. Its members had approved the proposal on June 6, 2000. The U.S. SEC declared CME's registration statement effective on April 25, 2000, and the Commodity Futures Trading Commission (CFTC) approved changes implementing CME's demutualization proposal to its by-laws, charter and rules on June 15, 2000. CME received a favorable tax ruling from the U.S. Internal Revenue Service (IRS) on Nov. 7, 2000.

CME issued to its members nearly 26 million Class A shares, representing pure equity rights, and about 5,000 Class B shares, representing trading rights. Initially, transfer restrictions prohibit the sale or transfer of CME stock separately from trading rights. However, such restrictions will be eliminated gradually over the next two years. Anyone will be able to own trading rights, but those who exercise trading privileges must first be approved by CME. The stated goals of demutualization include restructuring governance, streamlining CME's decision-making processes, changing its financial model to that of a for-profit corporation, providing currency for working with strategic partners, unbundling members' equity value and supporting the exchange's expansion by giving it access to the capital markets. The demutualization transaction does not represent an initial public



offering (IPO). Among CME's new business initiatives is entry into the fast-growing business-to-business (B2B) marketplace and the expansion of customer access to CME's electronic trading systems, as well as customers' trade execution choices in key CME products.

### **UNITED STATES – THE NEW YORK MERCANTILE EXCHANGE**

On November 17, 2000, the New York Mercantile Exchange (NYMEX) completed its demutualization. The SEC declared NYMEX's registration statement effective on May 12, 2000, and the Commodity Futures Trading Commission approved changes implementing NYMEX's demutualization proposal to its by-laws, charter and rules, on July 26, 2000. On October 23, 2000, the Exchange received a favorable private letter ruling from the Internal Revenue Service. Its members approved NYMEX's proposal on June 20, 2000.

NYMEX became a Delaware membership company, New York Mercantile Exchange, Inc. (NYMEX Inc.), that is a subsidiary of a Delaware for-profit stock corporation, NYMEX Holdings, Inc. The COMEX Division of NYMEX, a wholly-owned subsidiary of NYMEX, became a wholly-owned subsidiary of NYMEX, Inc. NYMEX Holdings, Inc. owns all of the economic interests and most of the voting control in the for-profit membership corporation. Each existing NYMEX Division membership has been converted into one share of common stock in NYMEX Holdings, representing equity in the overall organization, and one membership in the Exchange representing trading privileges. The common stock and trading privileges will not be separable until a majority of stockholders vote to permit separate trading of the common stock and trading rights.

### **UNITED STATES - THE NASDAQ STOCK MARKET**

The members of the National Association of Securities Dealers<sup>30</sup> (NASD) voted in April 2000 to demutualize The Nasdaq Stock Market (Nasdaq) by way of a two-phase private placement of securities in Nasdaq. The first phase of the private placement of Nasdaq formally closed on June 28, 2000. In this phase of the private placement, Nasdaq sold approximately 24 million shares of newly issued common stock, and the NASD sold warrants that will be redeemable for more than 25 million shares of Nasdaq common stock over time. Over 2,800 non-NASD investors purchased approximately 40 percent of Nasdaq on a fully diluted basis, which included 2,764 NASD members. The second phase of the private placement is expected to be completed in 2001 and is expected to reduce the NASD's equity position in Nasdaq on a fully diluted basis to less than a one-third ownership interest.

Additionally, on June 26, the SEC approved a number of changes to Nasdaq's by-laws

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30 The National Association of Securities Dealers, Inc., is the largest securities-industry, self-regulatory organization in the United States. It is the parent organization of The Nasdaq Stock Market, The American Stock Exchange and NASD Regulation, Inc.

and charter provisions required to implement the Nasdaq restructuring. These changes included placing limitations on the voting control any one member may have, increasing the number of Nasdaq directors by four members to reflect the new stockholder representation, and putting certain shareholder protections into place.

## APPENDIX B LIST OF SOURCES

C. DiNoia, *The Stock-Exchange Industry: Network Effects, Implicit Mergers and Corporate Governance* (March 1999)

Frank Donnan, *Self-regulation and the Demutualisation of the Australian Stock Exchange* (1999) 10 Australian Journal of Corporate Law

Roberta Karmel, *Demutualization - Implications for the Regulation and Governance of Securities Exchanges*, Speech to IOSCO Annual Conference, Sydney (May 2000)

Ruben Lee, *What is an Exchange?: The Automation, Management and Regulation of Financial Markets* (1998: Oxford University Press)

Giovanni Sabatini, *New Market Structures and Regulatory Issues*, Speech to IOSCO Annual Conference, Sydney (May 2000)

Securities Industry Association, *Reinventing Self-Regulation: White Paper for the Securities Industry Association's Ad Hoc Committee on Regulatory Implications of Demutualization* (January 5, 2000)

*Futures Exchange Demutualization*, Office of Commissioner Thomas J. Erickson, Commodity Futures Trading Commission, Preliminary Study (February 22, 2000)

*Invitation to Members of the Stockholm Stock Exchange and Issuers to subscribe for the 1992 issue of new shares in Stockholms Fondbors AB* (The Stockholm Stock Exchange Limited)

*Report on the Organizational Structure of Stock Exchanges* (February 22, 2000), Japan

*Issues Faced by Regulators when Exchanges Demutualize*, Australian Securities and Investments Commission, prepared for International Regulators Meeting, Boca Raton (March 15, 2000)