Re-thinking Securities Regulation:
A comparative study of ASX, NYSE, and SGX

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*The author would like to thank Keith Fletcher of the University of Queensland for his helpful insights.
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Abstract: This article approaches the issue of securities regulation starting with an examination of the nature and role of markets and financial markets. It next outlines the various arguments for and against regulation, and then looks at approaches taken by markets and their regulators. The approaches are government regulation, self-regulation and co-regulation, and the structural changes via demutualization and corporate governance. With this background, it turns to examine how these approaches have played out in the markets themselves. The article surveys the regulatory aspects of the ASX, NYSE and the SGX, and reviews the regulatory and financial performance of the markets. It concludes that the transitioning occurring in markets is not yet complete, and that there remains considerable research to be done.
1) INTRODUCTION

Richard Grasso, the former head of the New York Stock Exchange has been sued by the New York Attorney General for the return of up to $209 million\(^1\) of his compensation. This compensation forms part of his retirement package and represents his remuneration for functioning as the head watchdog of the self-regulating NYSE. By way of comparison, the top ten executives of publicly traded corporations in the world were paid an average of $59 million for the year 2003.\(^2\) Clearly, there are many issues in the case, only one of which is appropriate levels of executive compensation, but it leads to a broader consideration of the structure, role, appropriate means and level of regulation.

*New York vs. Grasso et al.*\(^3\) promises to be an interesting investigation and analysis of what appears to be a classic case of the fox guarding the henhouse. The case is likely to be decided on the basis of whether the board was following proper procedures, had proper disclosure and properly informed itself as to the compensation package the head of the exchange.\(^4\) As Professor Joseph Grundfest of the Stanford Law School and former Commissioner of the Securities Exchange Commission observed, the Attorney General is alleging that the board of the NYSE “was utterly unable to exercise its fiduciary

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\(^1\) Joseph Grundfest, “How Much is Too Much?”, *NY Times* 28 May 2004 observes that depending on how one does the calculations the compensation package could be seen as $139.5, $187.5, or $209.2 million.


\(^4\) Grundfest, ibid.
obligations because it was misinformed and ignorant of the material facts." Grundfest is of the opinion that the director of the NYSE has a fiduciary obligation to the board to ensure it understood the compensation package. He suggests that this obligation is particularly significant because of the conflict of self-interest involved in the matter at issue.

Not only does the NYSE set the world standard at least for regulation of the stock exchanges but the case will be particularly important because there is an increasing recognition of the interconnectedness of stock exchanges and the critical need to study them comparatively. As such, it is important to study the problem posed by the Grasso Affair, and to consider possible effects and implications on other exchanges including the ASX.

This paper is a consideration of the regulation of stock markets. It poses the question: if securities markets are to be regulated, is there a better way to do so? To answer this question, it is necessary to understand the nature and role of markets in society. Next some consideration of the assumptions and purposes of regulation by those party to the debate is critical. In simple terms, the issue is finding a way to preserve the socio-economic benefits of stock markets while controlling the damage their failures can cause.

5 Ibid.
As we shall see, there is a broad spectrum of approaches to the issue ranging from completely free private markets to completely controlled government markets, and of course, a number of intermediary positions. Another way of approaching the issue focuses on how market operators themselves are structured. Some are mutual entities, others are for profit corporations, while yet others are governmental or quasi-governmental bodies.

Each of these different structures has significance in terms of how easily and to what extent a government can control the operations of the market, the level of disclosure about market activities that can be demanded, and the accountability of the individuals involved in the market’s operation. This paper will examine both the regulatory and structural aspects of three different markets and to the extent possible, examine the efficacy of the regulatory schema and structure on the performance of the market in terms of the market’s ability to attract capital, and hypothesized ability to avoid scandal.

The paper begins with an analysis of objectives of markets generally, then turns to an examination of the specific objectives of markets both from a corporate perspective and from the perspective of the individuals involved, and the problems created by combining those objectives. It will then review regulatory theory and the related approaches to the regulation of the markets. Next, it will turn to examine three equity markets: the SGX, the ASX and the NYSE. The comparison will extend from the structure and rules of the exchanges, to a brief analysis of the financial performance of each of the respective
markets. Finally, it will conclude with some recommendations which if followed may help to avoid a repetition of the Grasso Affair and other similar market failures.

2) MARKETS GENERALLY

At a most basic level, markets permit storage of value and allocation of resources as between current and future needs. An established market—i.e. marketplace, with known traders and rules—improves the trading process, in terms of speed, and lowering transaction costs. In a capitalist economy, access to capital is vital to increase production and to increase the goods available to members in society. Traditionally, markets have been mutual entities—that is owned by the users. As the parties most interested in the operation of the market and with a strong desire to influence how the market is run—given the need to protect their interests—a mutual organization has worked well in allowing member-users to achieve those objectives.

a) Financial Markets

The financial markets form the backbone of capitalist economies, assuring liquidity, the existence of primary and secondary markets, and permitting capital formation.

Financial markets help producers access capital and help investors by providing improved investment opportunities.

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8 Angel, 268.
9 Kolb and Rodrigues above n. 7.
10 Angel above n. 6, 262-265.
A financial market, writes James Angel, a leading market scholar “consists of one or more trading platforms, in addition to a very thick rule book.” In order to make financial markets function effectively, certain additional elements must be in place. Particularly, it must be inviting to potential investors by ensuring that its “participants act with integrity and [that] there is adequate disclosure to facilitate informed judgments.”

This approach is referred to by one author as the “twin pillar” approach: where the participants are regulated and disclosure mandatory. This approach in turn serves an important purpose of facilitating transparency that too further improves the market.

Mutual organization worked well enough in the less competitive climate in which the world’s equity markets operated amicably in relative isolation prior to the tremendous drop in the costs of telecommunications. Traditionally, like most markets, these equity markets were owned the stockbrokers who used their services. Once telecommunications became dramatically cheaper, however, the markets came to view each other as competitors, and a move to improve efficiency and facilitate more rapid management responses was necessary. Some scholars, as well as a former chairperson of the NYSE, argue that making these changes required taking power from the vested

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13 Angel above n. 6, 268.
15 Baxt ibid.
17 Angel above n. 6, 265. Noted also in Frank Donnan, “Self-regulation and the Demutualization of the Australian Stock Exchange,” (1999) 10 AJCL 1, 2. Donnan observes that the London Stock Exchange (LSE) as an exception to this general tradition, noting that the LSE was a for-profit joint stock company by the terms of its Deed of Settlement in 1802. Ibid, 2.
interests of the individual stockbrokers\textsuperscript{18} and putting power into the hands of others. The key questions, of course, are: how much power, how to control the power and to which others should that control be given? The answers, as we shall see, are decidedly varied and include permutations which include the government, new corporate vehicles, individual non-trader investors, and a whole host of other ideas.

One increasingly dominant answer has been demutualization. The creation of for profit exchanges permitted “the right of access to the… markets became distinct from the rights of ownership of the [market].”\textsuperscript{19} This demutualization in some ways exacerbates the distinct market functions of operating the trading platform and the rule book control and sharpens the conflict between the business and regulatory functions necessary for a sound financial market.\textsuperscript{20} The for profit platform operator seeks to avoid competition, maximize fees from its dominant market position, maximize its network effect,\textsuperscript{21} while keeping the level of dishonesty to an “acceptable” or “reasonable” level.\textsuperscript{22} The regulator seeks to increase competition, keep barriers to entry low and keep dishonesty at a minimum\textsuperscript{23} “maintaining competition and protecting investors.”\textsuperscript{24} This approach to markets will be discussed in more depth later in the paper.


\textsuperscript{19} Baxt above n. 14, 274.

\textsuperscript{20} Angel above n. 6, 271.


\textsuperscript{22} Historically, the evidence is that markets can function with a fairly high level of dishonesty. (Consider, for example, the South Sea Bubble, and the train of scandals leading ultimately to securities legislation were never able to destroy the financial market.) What is reasonable in this context, arguably, is the amount of dishonesty that does not impede the market’s ability to attract traders and customers.

\textsuperscript{23} Angel above n. 6, 271-271.
The peculiar problem for equity markets, indeed what justifies their very existence, is the information problem associated with equities. Whereas most other commodities are rather easily valued; the value of equities is determined by information about the particulars of the security. Part of that information is determined by the activities of other traders and owners with respect to the equity. Accordingly, access to information and price discovery is a prime motivator for the creation of and participation in an equity market. By forcing equal disclosure from market participants, the market effectively protects and benefits all traders. Access to correct, complete, and timely information is critical for the ethereal but all important investor confidence.

b) Interests of Parties

It is important to identify the interests of the market’s participants. Economists advise that the individual market participants have no interest except self-interest. The foregoing statement, however clear, obvious, and apparently self-explanatory, likely hides as much as it reveals. What is the particular self-interest: is it merely turning a profit? An affirmative answer betrays a facile understanding of human nature. People are interested in a myriad of things and a rather complex set of motivations drive them to make certain decisions. People long for prestige, for example, by making large trades,

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24 Houthakker above n. 12, 285. Described in the literature emanating from the UK as “orderly conduct and investor protection” Board above n. 16 et al. xi.
25 The matter of information in the role of equity markets is the subject of the Efficient Market Hypothesis. Essentially, the hypothesis is focused on the role of information in the markets and particularly how and when it gets incorporated into the price of the equity. See Houthakker, above n. 12, 130-141.
26 Angel, above n. 6, 269-70.
rapid trades, unexpected trades, risky trades. Examples of the role of individuals and their idiosyncratic motivations abound in the literature concerning market collapses.\(^\text{27}\)

People like to challenge themselves and to compete with others. In the case of the market, people will test how far a system or set of rules can be stretched. As well, they will challenge their intellect and creativity and so will endeavour to see whether they can avoid detection of questionable activity. For example, although all three exchanges examined in this study run sophisticated computer programs\(^\text{28}\) to detect irregularities, surely people will continue to attempt to avoid detection for the sake of doing so. Finally people are motivated by their relationships. While things like prestige and competition are aspects of those relationships, there is also the cooperative, friendly aspect. In regard to the exchanges, it may promote less that full enforcement in the oft-noted phenomenon of the regulated and the regulator coming into a symbiotic relationship denominated by economist Gabriel Kolko as “regulatory capture.”\(^\text{29}\)

While certainly profit is the over-riding objective of most market participants, the significant other motivations driving the activities of a portion of the others cannot be

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\(^{28}\) ASX runs SOMA: Surveillance of Market Activity, the NYSE runs its own software as does the SGX.

ignored. In fact it may be that these other motivations are the primary cause of problems which create the problems that regulators are trying to control.\textsuperscript{30}

e) Assumptions Concerning Markets and Their Regulation

In studying any phenomenon, it is important to consider the assumptions being made. What one sees, finds and recommends in any investigation to a large degree is determined by the assumptions from which one is operating.\textsuperscript{31} Accordingly, it is important to identify the main assumptions concerning markets which frame this discussion made by scholars, regulators and other interested parties. By identifying and raising these assumptions it is not the intention of the author to indicate his acceptance of the assumptions; however, to discuss and question each one is another study. Therefore, after identifying the assumptions commonly made, he will question and examine only those assumptions which have direct bearing on the issues.

In general, the main assumptions are that markets: can be regulated, may need to be regulated and can be regulated for a specific end. Concerning the first of the assumptions, whether markets can be regulated, the assumptions are; that regulation is the best way to control the markets—as opposed to the free market ideology in which the Invisible Hand controls the market; that the costs of government regulation are outweighed by the benefits; that the costs will be borne by the regulator without problem

\textsuperscript{30} Collapses have come about for many factors, not the least of which has been individuals. One can consider the actions of Nick Leeson, Alan Bond, Michael Miliken, just to name a few individuals among the many who have brought chaos and ruin to both markets and market participants. Nevertheless, some argument may be made that in the chemical industry at least, disasters are the result of system and not individual failure. Gunningham, above n. 6, 179.

\textsuperscript{31} This discussion is found among the Philosophers of Science, such as Thomas Kuhn, \textit{The Structure of Scientific Revolutions} 2\textsuperscript{nd} ed. (1970) and Paul Feyerabend, \textit{Against Method} (1975).
or shirking, and finally that in the case of a non-government regulator such a regulator will be as diligent in its regulation of the market as would a government regulator.

Assumptions concerning non-governmental regulators are: that conflicts of interest created by the regulation scheme can be adequately dealt with; and, that the regulator can be a for-profit body and yet not devote energy to reducing or avoiding regulation to reduce costs. The evidence concerning this later group of assumptions is particularly questionable. Experience from the NASD, the governing body of the NASDAQ and from the NYSE suggests that these motivational issues have not been adequately addressed.\(^\text{32}\) The nature of the problem is humorously put by the head of NASDAQ “If there were a flag for the securities industry, it would bear the Latin motto for ‘what’s in it for me?’”\(^\text{33}\) With this background discussion of the nature markets common assumptions complete, we turn next to examine the arguments for and against control of the market and methods of doing so.

3) APPROACHES TO CONTROLLING THE MARKET

   a) Governments, Markets and Public Goods

   There are two basic positions a government can take vis-à-vis its financial markets. On one extreme, a government could take the position that the financial market is a public good that should be operated and controlled by the government. No government has taken this position. It is not clear why no government has done so except perhaps as a result of the accidents of history, namely, that more proactive or centrally planned

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\(^{32}\) Donnan, above n. 17.

\(^{33}\) Quoted in Angel above n. 6 269.
economies have been governed by communist governments that oppose market capitalism in the first place.\textsuperscript{34} Governments have operated local markets in many other types of commodities such as farmer’s markets and fish markets. One could argue that such controls as currency controls are in effect, a government operating the money market, at least in respect of its own currency. While there is considerable controversy over the economics of such measures, it is not clear that it is less desirable.\textsuperscript{35} Given some trends which will be discussed within, it may well be that governments may increase their intervention in financial markets to the point of operating and controlling market operations.

On the opposite extreme, governments have recognized that completely unregulated markets lead to disaster. Currently, in all three jurisdictions considered, governments both follow and govern financial transactions from the creation of money in the central bank, to its distribution through the financial system including banks, to matters of credit right through to the administration of bankrupts. Arguably, the only significant gap where the money is free from government control is in the financial market. Still, as shall be discussed, government intervention and control through a regulatory response is certainly not without controversy.


\textsuperscript{35} Nobel Prize winner and former Chief Economist for the World Bank, Joseph Stiglitz, acknowledges that while “market fundamentalists” oppose all efforts to regulate capital movement, notes how effective they can be and credits Malaysia’s currency controls for saving that country from the much more harmful effects
There are a number of reasons a free market approach does not work. Particularly with respect to financial markets, this approach fails because of a phenomenon known as a “network effect.” Basically the effect is the result of interconnectedness such that those connected and the connector gain a disproportionate benefit from their connection, and such connection severely limits competition. 36 As a result, regulation is needed to avoid one of the classic market failures—the monopoly. 37 Free markets fail for reasons of information asymmetries and a lack of completeness. These two matters are inherent to markets and cannot be resolved at a theoretical level38 let alone on a practical level.

Another reason for intervention in financial markets is the risk posed by a collapse. The damage produced by a collapse effects not just those participating in the financial market but every participant in society including the government. Accordingly, all of society has an interest in preventing market collapses and thus government has a role to play in protecting society, whether by ownership, legislation, or some type of regulation.

Further, as more pensions are invested directly or indirectly in the markets, the notion of the market as a public good gains more currency. The matter of public goods is the classic occasion for government involvement. Public goods are considered by economists to be an area of market failure. Public goods are those goods which are too costly for individuals too provide for themselves because of the limited use they would make of them, involve special coordination problems, or are too difficult to sequester. In

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36 Angel above n. 6, 271.
37 Ibid.
38 On the importance and permanence of these two market deficiencies, see B. Greenwald and J.E. Stiglitz “Externalities in Economics with Imperfect Information and Incomplete Markets” (1986) 101 (2) Quarterly J. of Economics, 229-64.
economic terms, a public good is a good that has a “non-rivalrous consumption” and “nonexcludability.” Non-rivalrous consumption simply means that a good can be consumed without depriving anyone else from being able to consume the same good. Information is a good example of a non-rivalrous good. The nonexcludability aspect means that the costs required to make something private property, are too high to interest a profit-maximizing firm in attempting to do so. In the case of the market, the costs of excluding others have been sufficiently offset by the profits made in operating the markets—in fact, the profits from control are so great that they have created the previously noted strong tendency toward monopoly. Accordingly, this aspect of public goods is not in issue, and there is not much of a case for converting the market from private property to a public good from an economic perspective.

Nevertheless, the history of markets is a cycle of boom, scandal and bust, and given the great public harm that can result from these swings, there is considerable interest in controlling or at least minimizing the negative effects. There have been a variety of approached to solving the problem of busts and scandals that have marked the financial markets. In addition to the above mentioned approach of government ownership of markets, there are the approaches of legislation, regulation, including various forms of

http://www.mpp-rdg.mpg.de/ho.html
40 Ibid.
self-regulation, and structural changes such as changes in governance, or more radically, by demutualization. The discussion will now examine each of these approaches in turn.

b) Legislation

One very important response to the problem has been legislative reform. This response has resulted in the development of a considerable amount of legislation. In fact the Australian answer to the boom and bust of financial markets has been a correlated boom of corporate and securities law. It reached the point that the Chief Justice of the High Court complained that corporation’s law is incomprehensible, describing it as “a vast magnitude…[and of] Byzantine complexity.” It reflects the view that financial markets would be fine, says Australian scholar Schoer, “If only we could legislate away the gullibility of investors and financiers, and dishonest and irresponsible conduct.”

The problem with the legal approach is two-fold: it is impossible to develop sufficiently precise and comprehensive legal definitions, and such an approach causes an increase in strategic behaviour as parties attempt to avoid the legislation by other means. Clearly, legislating a way around such market problems is impossible, leaving the public, the government and the market searching for other and better ways to address the problem.

A slightly less rigid, more sensitive approach than legislation is through administrative regulation. Robert Cooter, the American law and economics scholar describes the

42 Ibid, 108.
difference between law and regulation as: “regulations ideally correct failures in markets, laws ideally correct failures in social norms.”

Regulations are more flexible and more easily amended to address issues confronting both the public interest and private interests in the market and its regulation.

c) Theories of Regulation

Regulation is a controversial topic. Even what is meant by regulation is disputed. Generally, regulation can mean any one of the following: to govern according to rules; to have state activity controlling markets; as one instrument of policy (as contrasted with incentive based instruments); and as legal rules in a command-and-control schema. In the discussion of the regulation of financial markets that follows, the term will be used in the second sense: that of state control of market activity.

Regulation is controversial because of the philosophical commitments it reflects, not only with respect to economics, social policy, and social philosophy, but also because of the views of constitutionalism it entails. As to the first set of disputes, scholars and legislators committed to neo-liberal (UK) or neo-conservative (USA) views tend to regard regulation with the same suspicion that they view all government. Those of this view tend to prefer leaving matters to the competitors in the marketplace to fight it out for themselves, trusting in the Invisible Hand to sort things out.

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47 View discussed in Craig, above n. 43, 29-38.
Those scholars and legislators who have a preference for a social democratic model are more favourably disposed toward regulation. They believe that markets like many other parts of society function better with some level of regulation.\textsuperscript{48} Their discussion tends to focus on the level of regulation, how and by whom.

Further, the issue of regulation is controversial among legal scholars because of constitutional commitments. Following Dicey’s dual foundation model with its parliamentary or legislative supremacy and rule of law, regulation which involves the delegation of powers to non-parliamentary bodies is immediately problematic and suspect.\textsuperscript{49} Further, with the flexibility and discretion granted to some of the regulatory bodies, Dicey’s rule of law premise appears to be compromised.\textsuperscript{50}

The controversy concerning regulation is exacerbated by commitments to the political science/economic notions of Public Good on the one hand, and Public Choice theory on the other. Where participants in the debate believe in such a thing as Public Good, there will be a concern about market failure and the belief that government intervention can and should correct it in order to promote the Public Good.\textsuperscript{51} By way of contrast, Public Choice theorists see regulation as nothing more than special interest groups rallying to create opportunities for themselves under the guise of “public good” and show a greater

\textsuperscript{48} View discussed in Craig, ibid, 38-42.
\textsuperscript{49} This move away from direct legislative control has prompted comment. See, for example, Stephen Bottomley “Where did the law go? The delegation of Australian corporate regulation,” (2003) \textit{15 AJCL} 1
\textsuperscript{50} Graham above n. 46, 191 and Craig, above n. 119, 4-5.
\textsuperscript{51} A. Ogus, Regulation, Legal Form and Economic Theory, (194) ch. 3, cited in Craig above, n. 119.
scepticism about government intervention, claiming that government failure or regulatory failure is worse even than market failure.\textsuperscript{52}

Once one has made decisions concerning the above matters and has determined that regulation is an appropriate solution, decisions still need to be made concerning the empowering legislation: Will it be form-based (legal rules) regulation or economic effect-based (out-come) regulation,\textsuperscript{53} or some newer type of regulation\textsuperscript{54} such as “beyond incentive” based regulation which capitalizes on parties voluntary efforts to coordinate and solve problems.\textsuperscript{55} And still other questions about the structure and view of the regulator will remain.\textsuperscript{56} For example, will the regulator be an independent agency or mere governmental department, or some type of an external self-funded agency?\textsuperscript{57}

\textsuperscript{52} Craig, above n. 119, 337-339. G. Brennan and J. Buchanan, \textit{The Reason of Rules}, (1985), and J. Buchanan, \textit{The Limits of Liberty: Between Anarchy and Leviathan} (1975). For a discussion of the problem of market vs. government failure in action, see Stiglitz, above n. 113, 219-20. Stiglitz also points out that the Public Choice theorists who dominate the IMF were demonstrably empirically wrong in addressing macroeconomic problems. Ibid, 84-85.

\textsuperscript{53} Craig, above n. 119, 329.

\textsuperscript{54} See the sophisticated analysis of regulation particularly as it applies to environmental matters in Neil Gunningham, above n. 6.

\textsuperscript{55} Discussed in Timothy Wilkins and Terrell E. Hunt, “Agency Discretion and Advances in Regulatory Theory: Flexible Agency Approaches Toward the Regulated Community as a Model for the Congress-Agency Relationship,” (1995) \textit{63 Geo. Wash. L. Rev. 479.}, especially 492-98 et passim. These authors note a newer trend in which a voluntary preventative approach is taken as opposed to correcting current known problems or retribution type action.

\textsuperscript{56} The “Better Regulation Guide” (1998) of Cabinet Office of the UK identifies eleven alternatives in regulation: 1) do nothing: not every problem can be solved by government regulation, 2) review current regulation to determine whether regulation can improve or is the cause of the problem, 3) improve information to address information asymmetry problems, 4) introduce voluntary scheme, 5) consider code of practice with legal effect, 6) request industry to self-regulate, 7) use economic incentives, 8) consider risk-based insurance, 9) classic command and control regulation, 10) licence the problematic activity, and 11) use international regulation. Quoted in Craig, above n. 43, 341-2. A broader discussion on the limits of regulation can be found in Ian Maitland, “The Limits of Business Self-Regulation,” (1985) 27(3) \textit{California Management Review} 132-47.

\textsuperscript{57} There are at least six general reasons agencies are developed: 1) as a buffer between the public interests and politically motivated interference from the government, 2) escaping traditional governmental weaknesses, 3) bringing the appropriate specialists to the problem, 4) spread power, 5) create an smoother, accessible, specialized office to address matters, and 6) avoid creating too many direct bureaucrats. Identified by D. Hague, W. Mackenzie, and A. Barker eds., in \textit{Public Policy and Private Interests: The Institutions of Compromise}, (1975) 362, cited in Craig, above n. 119, 92.
Decisions concerning the nature of the regulation and regulatory model need to be made to determine whether it will follow an inquisitorial or adversarial\textsuperscript{58} or ombudsman model,\textsuperscript{59} follow policy or address matters ad-hoc,\textsuperscript{60} and whether control of the agency will be ministerial or by judicial oversight.\textsuperscript{61}

Perhaps because of some of the challenges presented by the foregoing government have looked for alternatives to complete government control. As one regulatory scholar explained, the UK government’s preference to grant self-regulatory powers to the financial services sector results from the fact that the task was nothing less than “horrifyingly complex.”\textsuperscript{62}

d) Self-regulation

The self-regulation of financial markets is complex and has drawn mixed responses.\textsuperscript{63} The approach of self-regulation is both reasonable and optimistic carrying with it a number of assumptions about the nature of markets, regulation and the motivations of participants. It comes closer to some of the newer thinking in regulation noted above as “beyond incentive” regulation.

\textsuperscript{58} Craig above n. 119, 264-5.
\textsuperscript{59} Graham, above n. 46, 199-202.
\textsuperscript{60} Craig, above n. 119, 331.
\textsuperscript{61} Ibid, 345-349.
\textsuperscript{62} Graham, above n. 46, 206.
Self-regulation is a model that has become increasingly popular for a number of reasons. Although it is not a new idea, its currency has increased in recent years. In order to understand it with respect to professions a brief review of its history is helpful. Being a broker is both an occupation, and more recently, a profession. The trades as occupations have had a tradition of self-regulation dating back as far as the guilds of the middle-ages.\textsuperscript{64} In that era, quality of the tradesmen’s work was carefully guarded by a long apprentice system permitting only those who met the standards to carry on business as craftsmen.\textsuperscript{65} Those who could not meet those standards stayed in the workshops of accepted craftsmen under the supervision of those craftsmen as assistants or journeymen.

In a similar manner, the professions regulated themselves.\textsuperscript{66} The earliest professions were those associated with the Church,\textsuperscript{67} and later with the university.\textsuperscript{68} Members of these institutions professed the Truth and Knowledge that had been entrusted to them. Over time, the more established traditions, law and medicine joined theology as professions.\textsuperscript{69} Each of the institutions to which the “professor” belonged regulated entry to the profession—by commitments to particularistic views of the Christian faith, and

\textsuperscript{65} Moore ibid, 114. See also Philip Eliot, \textit{The Sociology of the Professions}, (1972), 16-24.
\textsuperscript{67} Thomas Ference, Fred Goldner and R. Richard Ritti, “Priests and Church: The Professionalization of an Organization,” in Eliot Freidson ed. \textit{The Professions and Their Prospects} (1971), 173-190, but Larson notes law and architecture were considered learned professions as far back as Cicero. Larson, above n. 66, 3.
particular levels of education. Without these two basic competencies, one would not be admitted to the profession. The professional was a special type of person who used his/her knowledge for the benefit of the public.\textsuperscript{70} Their knowledge was seen as a public good.

As those most knowledgeable about the subject matter and the proper practice of their particular profession—not to mention the power they commanded in the status quo, and their tradition of self-employment\textsuperscript{71}—the professions developed a tradition of self-regulation.\textsuperscript{72} More professions have been created\textsuperscript{73}—such as accounting, nursing and engineering, up to the latest claims of information technologists\textsuperscript{74}—and each is clamouring for the power to self-regulate, seeing it as the golden ring of professional recognition.\textsuperscript{75} There is some legitimacy to the claims from these professions that they should be self-regulating, but self-regulation also has its drawbacks.

Industries can benefit from self-regulation and even voluntary—i.e. non-governmentally imposed—self-regulation. Industries are motivated to participate in self-regulation where, as regulation experts Gunningham and Grabosky state, “[that] minority of cases in which industry interest and public interest are sufficiently coincident for self-regulation

\textsuperscript{71} Larson, above n. 66, 232-233, and Freidson, ibid, 27-34.
\textsuperscript{72} Freidson, ibid, 34-5.
\textsuperscript{73} Andrew Abbott, The System of Professions, (1988), 3.
\textsuperscript{74} Ibid, 216.
\textsuperscript{75} Ibid, and Larson, above n. 66, xii.
to be a viable regulatory strategy.\textsuperscript{76} Industries will do so when they face an industry-wide problems such as: problems with public image, a lack of cheap means of protecting their individual image as distinct from the industry as a whole, competitive advantages including enhanced profits can be had from better processes, and where an industry tends to create social capital—that is, where an industry’s members move freely among various market participants, sharing technical expertise and know-how.\textsuperscript{77} It is not clear that all of these factors are present with the global market for financial markets, and is likely not even present within individual markets such as the three discussed in this paper. Next, these claims for and drawbacks to self-regulation will be examined, and some conclusions will be drawn concerning implications for the brokerage industry and profession.

i) Benefits of Self-Regulation\textsuperscript{78}

The benefits of self-regulation of are:

- a voluntary relationship, meaning that a dissatisfied participant can easily withdraw from the profession;

- brings knowledgeable parties to the problem of regulation and these parties are able to regulate with the least disruption to the market and the greatest efficiency

- The benefit of an SRO is its proximity to the regulated parties, knowledge and expertise of the activities and environment in which it operates.\textsuperscript{79}

\textsuperscript{76} Gunningham, above n. 6, 159.
\textsuperscript{77} Ibid, 159-163.
\textsuperscript{78} This summary of benefits and drawbacks is based on Ray Schoer, “Self-Regulation and the Australian Stock Exchange,” Ch. 8 in Business Regulation and Australia’s Future Peter Grabosky and John Braithwaite (1993), 110-111 except as noted.
\textsuperscript{79} “Chief Regulator: a discussion with NYSE CRO Rick Ketchum” Inside the NYSE on NYSE website.
conscious of the costs of regulation and thus tend to avoid unnecessary regulation

with specific reference to self-regulation in the financial markets, the argument has been advanced that because of competitive pressures, the market’s rules will be sufficiently flexible; and

• diversity of methods of compliance

However, the competitive nature of trading would suggest that stock trader SRO’s will attempt to undermine competition within their own market where they may be offering similar services to corporations listed on their markets. In addition, they will still have to deal with other competing stock markets.

ii) Problems of Self-regulation

While there are certainly benefits to self-regulation, there are particular drawbacks as well. Generally, the main problems of self regulation are:

• it may not cover all the participants practicing the profession,

• it may lead to restrictive practices as the regulator develops and applies rules to limit competition,

• it may not consider adequately in terms of design and implementation the interests of the public and third parties because of its inward focus,

• it may be ineffective by not being sufficiently independent or seen not to be such,

• it may not be well enough publicized to create public confidence,

• it may not have sufficient power in terms of investigation and sanction.\textsuperscript{80}

\textsuperscript{80} Graham, above n. 6, 194-5.
• They may use their power to enhance their prestige instead of promoting public good,81

• Protect the existing orthodoxy even where better alternatives may be available,82

• They tend to claim excessive jurisdiction83

• The profit motive tends to override other considerations84

• Managers’ short-term focus impedes the longer-term thinking necessary for regulation,85

• Some participants may not have resources adequate to address the issue and so free-ride exacerbating the collective action problem86 and

• They may favour their larger clients.87

Perhaps at the heart of the matter for financial markets, which are clearly exclusively for-profit operations, is that it is unlikely that a profit inhibiting, robust interpretation of the regulations will be favoured over profit enhancing, minimalist interpretation of the regulations.88 There is no sense of public good, and so the conflict of interest between the public good and individual profit is often wholly overlooked or given negligible attention.89

e) Co-Regulation, NDPD’s and Quangos

81 Moore, above n. 64, 111.
82 Ibid. Stiglitz observes that large investors opposed moves to increase transparency in markets at the time of the Asian crisis despite the known benefits to the vast majority of the public. Stiglitz, above n. 113, 236.
83 Ibid.
84 Gunningham, above n. 6, 164.
85 Ibid, 165
86 Ibid,166
87 Donnan, above, n. 17, 15.
88 Ibid, 14.
Some of the inherent conflicts of interest resulting from self-regulation and other problems just noted have led governments and the regulated to look for yet other approaches to regulation. A new development is the notion of co-regulation. The idea is that the industry self-regulates, but does so with the participation and under the supervision of the government. In many cases this may be done by setting up another regulatory body for the purpose: but, that body takes on a non-traditional form.\textsuperscript{90} The body may be a corporate or mutual body, it may or may not be government funded, it may be accountable to one or more government bodies directly, or none at all. In the United Kingdom, the structure is sometimes referred to as an NDPD (non-departmental public body) or a “Quango” (quasi-autonomous non-governmental organisation).\textsuperscript{91} These bodies often are both service delivery and regulatory agencies.\textsuperscript{92} An NDPD is defined as “a body which has a role in the processes of national government, but is not a government department or part of one, and which accordingly operates to a greater or lesser extent at arm’s length from Ministers.”\textsuperscript{93}

Co-regulatory bodies fit well in this category, as they may well be quasi-autonomous non-governmental organisations and described as non-departmental public bodies. The co-regulation of stock markets permits the most important benefits of self-regulation—knowledge, expertise, flexibility, and timeliness, while avoiding the greatest dangers

\textsuperscript{89} This conflict of interest playing out in favour of the traders in an SRO financial market is precisely what the NASD was reprimanded for doing by the SEC. See, Donnon, above n. 17, 10-12. In research for the preparation of this paper the term “conflict of interest” appeared in only one journal article in Australia.\textsuperscript{90} Craig, above n. 43.

\textsuperscript{91} Ibid. Craig explains that the NDPD title is preferable because it more clearly identifies the governmental connection to the agency whereas Quango is excessively broad as a non-governmental organization can be nearly anything. Ibid.

\textsuperscript{92} Ibid.
arising from the conflicts of interest and efforts to avoid transparency and accountability. The NDPD allows some sense of public good to intervene in the regulatory process without having that intervention become overwhelming.

f) Structural Approach: Demutualization

Another important approach to regulation is a structural approach. Exchange structures can vary with respect to the role of the board and staff, powers of the executives, the means and influence of external bodies, voting structures, and membership rules and criteria. One interesting structural solution is demutualization. As noted, there is a trend in financial markets to reformulate from member exchanges to demutualized, for-profit corporations. The idea behind this change of structure has been that by its structure a publicly traded for-profit corporation solves many of the problems of mutual organizations including ease of making management decisions, focusing on clear specific objectives, and balancing some of the power imbalances. In addition, publicly traded corporations are subject to greater disclosure obligations. These facets in turn should improve transparency and when combined with an appropriate regulatory regime, such as co-regulation, should work to inhibit monopolistic tendencies which impair the efficiency of financial markets. Very recent work by researchers Peter Swan of the University of

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93 Cabinet Office, Opening up Quangos, A Consultation Paper, (November, 1997), Ch. 1., para. 1, quoted in Craig, ibid, n. 17.
94 Donnan, above n.17, 21.
95 Ibid, 2.
96 Ibid, 2-3.
New South Wales and Joakim Westerholm of the University of Sydney, indicate that the demutualized ASX has experienced just such effects.\textsuperscript{97}

Although many approaches to solving the conflicts have been made, including: enhanced corporate governance requirements, imposed ownership restrictions, reinforced public interest mandate, upgraded supervision by regulators, strengthened internal controls and management processes, transferred regulatory functions to an independent SRO and transfer regulatory functions to the Public Regulator\textsuperscript{98}—it is not clear that any of these completely solves the problem.

\textbf{g) Responses of the Regulated}

An interesting analysis of industry responses to regulation, beyond the matter of regulatory capture noted above,\textsuperscript{99} has been developed by Peter Sandman.\textsuperscript{100} Sandman suggests that there are essentially three responses or stages: Stonewalling, Missionary Stage, and Dialogue. In the first stage, the industry refuses to engage with the public on any level—it creates a strong divide, or stonewall between itself and the public. The second stage, the Missionary Stage, is when the industry becomes its own advocate, expending efforts to convince the public of its good effect on the public good. The final stage, Dialogue, is when the industry opens itself up and engages in genuine dialogue

\begin{footnotesize}
\begin{itemize}
  \item \textsuperscript{98} Carson, above n. 11, 3.
  \item \textsuperscript{99} See above Section, 2 a) Financial Markets.
  \item \textsuperscript{100} Peter Sandman, \textit{Addressing Scepticism About Responsible Care}, (1991).
\end{itemize}
\end{footnotesize}
with the public to hear and address the public’s concerns. As we shall see, the markets examined in this study find themselves at different stages.

h) New Directions

Gunningham’s study of the chemical industry’s efforts at self-regulation101 may hold some intriguing potential for self-regulation in the brokerage industry and profession. If the industry were to set up a self-regulatory body on a world-wide basis, it may be able to make some considerable advances in its objectives of self-regulation, improvement in the financial markets, and in over-all quality of markets. Interestingly, the International Standards Organization’s (ISO) has just commenced examining the feasibility of certifying self-regulatory schemes.102 Following the ISO model, regulatory compliance would become part of day-to-day management practice. The ISO model fits the financial market’s needs nicely as the markets recognize their need to communicate with the public and to varying degrees, the public interest,103 while at the same time they desire to conduct their affairs without undue interference. By taking on the ISO model, making regulation a management matter, it would permit the regulatory functions to be both spread widely and penetrate deeply in the organizational structure.

As with all ISO organizations, such an organization would be purely voluntary but would allow the markets that choose to participate to display a symbol such as the well-

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101 Gunningham, above n. 6, 155-186.
103 The ISO describes itself as “A bridge between public and private sectors.” Ibid.
recognized “ISO 9000”. To obtain such a symbol, the structures and systems of checks and balances would have to meet a world-wide standard, which standard would have to be developed by both the markets themselves and outside third-parties. The organization would have to publish a grade sheet on compliance, do some type of audit, publish annual membership lists, as well as reasons for suspension, withdrawal, expulsion and re-admission of member markets. As a public report card on known, world-wide, industry standards, which standards reach into all levels of the organization, the oversight and considerable assurance such an organization’s symbol would carry would be of considerable value to the members, the investing public, and possibly help to avoid some of the more egregious market disasters. Given that some argument can be made for the main cause of failures is systemic and not individual,104 it may be that improved structure and structural analysis and monitoring would benefit all the parties even more.

Having examined these various approaches to market regulation, we now turn to an examination of each of the three markets to see what approaches they have taken and what outcomes they have achieved. Certain aspects of the markets are set out in a table to assist the reader in visualizing the comparison. (See Table A)

4) AUSTRALIA: THE ASX

   a) Historical Background

The Australian stock market in its current form is a fairly new creature. Although there was an unsuccessful attempt to start a stock brokerage in 1828 in New South Wales, it

104 Gunningham, above n. 6.
was not until 1835 that a successful exchange brokerage existed in Australia. That brokerage was transformed into the Sydney Stock Exchange in 1871. Other exchanges sprang up in the capital cities of the other states and so the Australian securities markets were divided from 1882 until 1987. 105 A particularly severe boom-and-bust cycle in 1967-70 caused the government to reconsider its alternatives. 106 At that point, the government decided that it would be better if there was a consolidation and as a result the Australian Stock Exchange was formed. A further bust in 1987 caused further self-examination and a new response was developed. 107 As part of a global trend, 108 the Australian Stock Exchange (ASX) demutualized in 1998 taking on its present form.

b) ASX Structure and Regulation

Australia’s ASX is a publicly traded for profit corporation: it is listed on the market it operates. Shareholders are not limited to the traditional market owners—the stockbrokers—but include any member of the investing public who chooses to do so within certain limits set out by the legislation. The ASX corporate body provides two main services; 109 it operates the share market, including the physical assets, IT services, and clearance and settlement services. Second, it is a co-regulator, and as such, regulates the market. It does so by ensuring compliance with the rules which may include

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105 R. Bruce, et al, Australian Corporate Finance, 3rd ed. (1988), 68. cited in Ford’s Principles of Corporation’s Law. 2.1.0120. See also the discussions in Donnan, above n. 17, 13,14 and Schoer, above n. 78.
106 Ibid.
107 Ibid.
108 FTSE/MV World Exchanges Report, reports that 78% of the world’s markets are corporatized. 1, Carson, above n. 11, 4, Angel above n. 6, 271.
scrutinizing trading activities, and by developing rules and enforcing those rules by penalizing those who breach them.

As a for profit corporation, it has the over-riding objective of earning a profit. Should it fail to do so, investors would withdraw their money, the corporation would collapse and investors would have to find a new market on which to trade their shares.\textsuperscript{110} An interesting and important element of the ASX’s corporate structure is its limit on shareholdings. No individual shareholder can own or control more than five percent of the stock.\textsuperscript{111}

The ASX corporate structure is made up of eight directors, seven of whom are non-executive independents.\textsuperscript{112} The offices of CEO and Chairperson of the Board are independent, and although Richard Humphry is both Managing Director and CEO, this is not considered an excessive grant of power. ASX’s decision to separate the two positions complies with corporate governance best practices and precludes the CEO from dominating the Board of Directors.

The Nominating and Remuneration Committee is made up of three non-executive, independent directors.\textsuperscript{113} The Audit Committee is made up of four all of whom are non-

\textsuperscript{110} Presumably, some creditor would step in to take up the assets and get the market operation forthwith.
\textsuperscript{112} 2003 Annual Report 24-25. The report also sets out the criteria for status as “independent” as being a matter of materiality and follows the criteria set out in the ASX Corporate Governance Council guidelines.
\textsuperscript{113} Ibid, 25.
executive, independent directors.\textsuperscript{114} The ASX is divided into nine Operations Divisions, of which one, Market Integrity, is devoted to regulatory matters.\textsuperscript{115} It has a Chief Integrity Officer who supervises the area.\textsuperscript{116} The Financial Statements note an accumulated retirement benefit due and payable to the CEO in the amount of $1.9 million (AUD$2,798,700) for 10 years of service.\textsuperscript{117}

The ASX has recently created the ASX Corporate Governance Council with 21 stakeholder members.\textsuperscript{118} The role of the council is to ensure that the ASX is developing appropriate guidelines for its members—which guidelines, presumably it will follow itself.

In March 2001, the ASX established an independent supervisory board, the ASX Supervisory Review Pty Limited (ASXSR).\textsuperscript{119} It makes determinations as to whether the ASX is devoting sufficient resources to its regulatory role and communicates its views of how well the ASX is complying with its regulatory duties.\textsuperscript{120} The ASXSR currently is made up of four directors, has a majority of independent non-executive directors and meets on a bi-monthly basis.\textsuperscript{121} The ASXSR issues independent annual reports on the

\textsuperscript{114} Ibid, 33.
\textsuperscript{115} ASX website above n. 1.09.
\textsuperscript{116} Ibid.
\textsuperscript{117} Annual Report above n. 112, 44.
\textsuperscript{118} Ibid. 5.
\textsuperscript{119} ASX Supervisory Review \url{http://www.asxsr.com.au/role.htm}
\textsuperscript{120} Ibid.
actions of the ASX. Its annual report is delivered to ASIC for purposes of facilitating ASIC’s audit.\textsuperscript{122}

The ASX reports to ASIC by means of an “Annual Regulatory Report Under Section 792F of the Corporations Act.”\textsuperscript{123} Concerning the development of its rules, the ASX proposes rules which must be approved by ASIC prior to coming into force. ASX noted in its 2003 Annual Report that there have been calls for releasing its market supervision role to outside parties; however, it has defended its maintaining of the role on the basis that it is “integral to our commercial and reputational [sic] success.”\textsuperscript{124}

c) Efficacy: Financial and Efficiency Results

The ASX’s market capitalization is $910 billion (AUD $1.3 trillion). It has 1,516 companies listed, and has a daily average of 156 billion shares.\textsuperscript{125} Over the last 6 years since it demutualized—it was among the pioneers of developed exchanges in this regard\textsuperscript{126}—the value of its stock has grown from under $5.00 per share in 1998, to over $15.00 in 2004.\textsuperscript{127} (See Table B) As well, its market capitalization has grown from $409 billion in 1999 to the $910 billion just mentioned.

\textsuperscript{122} Ibid 103.
\textsuperscript{123} Most recent report available at \url{http://www.asx.com.au/about/pdf/AnnualRegReport2003 ASX ASXF.pdf}
\textsuperscript{124} Annual Report above n. 112, 5.
\textsuperscript{125} \url{http://www.asx.com.au/shareholder/pdf/endofyear300603.pdf}
\textsuperscript{126} Donnan notes that three European exchanges were demutualized ahead of the ASX. These were: Stockholm in 1993, Amsterdam in 1996, and Copenhagen in the same year. Donnan, above n. 17, 2.
\textsuperscript{127} Other measures of market performance such as liquidity, spreads, and historical corporate profits have been unavailable. The author has contacted the ASX and SGX exchanges by email to obtain this data. Only the NYSE has the information and so it has not been included as there is nothing for comparison. On the importance and measurement of spreads, see Nicolas PB Bollen, Tom Smith, and Robert E Whaley,
The ASX took disciplinary action against a number of members and listed companies in 2003. One brokerage was terminated, and disciplinary actions\textsuperscript{128} were taken in another 19 other cases.\textsuperscript{129} In addition, it referred 58 cases to ASIC for investigation and prosecution where ASIC deems it desirable.\textsuperscript{130} ASX has 135 employees dedicated to regulatory matters and an expenditure on regulatory matters of $25 million.\textsuperscript{131}

5) SINGAPORE: THE SGX

a) Historical Background

Singapore, as part of British Malaya, has a long history of production and trading, and its stock broking industry developed out of this environment. It was only relatively recently, in 1930, however, that the stockbrokers organized and registered themselves as the Singapore Stockbrokers Association under the Societies Act.\textsuperscript{132} The market operated independently of the government. Despite joining and later separating from Malaysia, the nation of Singapore kept its stock market joined to Malaysia’s until 1973. In that year, the Stock Exchange of Singapore Ltd. was incorporated, and operated as a self-regulating organization under the\textit{ Securities Industry Act 1973}.

\textsuperscript{128} Disciplinary actions counted here do not including letters issued to warn members of their actions, but which carry no penalties.
\textsuperscript{129} ASX Annual Regulatory Report above n. 46, 93-95.
\textsuperscript{130} Annual Report above n. 115, 19.
\textsuperscript{131} Ibid. Stephen Yan of the Corporate Communications Dept of the ASX indicated that there are 85-89 staff in the Market Integrity division, but that nearly all employees have some regulatory functions. Email correspondence with the author, June 18, 2004.
As a result of a dramatic corporate collapse,\(^\text{133}\) the government stepped in and in 1986 the Monetary Authority of Singapore (MAS) became the regulator, although the day to day supervision was still left to the exchange itself.\(^\text{134}\) The arrangement is the more traditional government regulatory agency private regulated industry schema. The Securities Industry Act is complemented by the Companies Act as the other main piece of legislation governing securities in Singapore. The exchange has three boards of companies: one for listed companies meeting all the listing requirements, one for companies with good prospects and likely to meet the full listing requirements, and one for companies that are foreign and have good prospects.\(^\text{135}\)

\[\text{b) SGX Structure and Regulation}\]

The Singapore Exchange Limited (SGX) in its current form, is a relatively new exchange. It is the product of a merger between the Stock Exchange of Singapore and the Singapore International Monetary Exchange. The merger was a demutualization of the two prior exchanges and occurred in 1999.\(^\text{136}\) It has been a listed for-profit corporation since November 2000. The SGX has co-trading linkages with the ASX and is looking to link its cash and derivative markets, possibly with Tokyo.\(^\text{137}\)

The SGX corporate is made up of 12 directors, 10 of whom are non-executive.\(^\text{138}\) The offices of CEO and Chairperson are separate.\(^\text{139}\) This division facilitates the supervisory

\(^{133}\) In December 1985, the Singapore and Malaysian exchanges were closed for three days following the collapse of Pan-Electric Industries. Woon, ibid, 2.  
\(^{134}\) Ibid 2.  
\(^{135}\) Ibid 3.  
\(^{136}\) SGX website. http://info.sgx.com/SGXWeb_CORPCOM.nsf/DOCNAME/SGX_Corporate_Information  
\(^{137}\) Monetary Authority of Singapore website.  
\(^{138}\) SGX website above n. 136.
role of the Board of Directors by preventing the CEO from dominating the Board of Directors. The SGX does not have an independent supervisory board. Hsieh Fu Hua, the Chairman of the SGX, earned just under $1.0 million and sees his job as a national service. The SGX notes that on retirement, the CEO will be entitled to a minimum of 2 million share options for each year of service. The Compensation Committee is composed by seven members and is made up entirely of directors from the Board of Directors and includes six independent non-executive directors. Its Audit Committee of six is made up entirely of independent non-executive directors. The SGX does not release information about the number or people engaged in regulatory matters or market oversight. Nor does it disclose information about its budget for these matters.

The SGX’s regulator’s powers are vast. The regulator, MAS, operates as the de facto central bank of Singapore, and in relation to securities regulation, has complete power to obtain whatever information it desires about any and all traders, dealers and investors who buy or sell on the exchange. There is no confidentiality whatsoever between brokers and clients. MAS licenses all market participants, is the review board for all actions by the exchange against market actors, must approve all rules, may prohibit trading in any security it believes may cause risks to individuals, or for public interest

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139 CEO is Hsieh Fu Hua and Chairperson is J Y Pillay.
140 These regulatory activities are supervised by the manager charged with the area of “Risk Management & Regulation.” [http://info.sgx.com/SGXWeb_CORPCOM.nsf/DOCNAME/Background_On_SGX](http://info.sgx.com/SGXWeb_CORPCOM.nsf/DOCNAME/Background_On_SGX)
142 SGX Annual Report 2003 Note 12 to Financial Statements, 98.
143 SGX Summary Annual Report 2003, 68, 71, and 75.
144 Email correspondence with Kim Hok of the SGX, June 14, 2004.
145 Woon, above n. 132, 3.
146 Ibid 4.
concerns, and make regulations concerning practices it considers deceptive or manipulative.\textsuperscript{147}

Although SGX is not a governmental agency,\textsuperscript{148} MAS and the SGX cooperate in developing the market. For example, MAS and SGX invested some $4.2 million USD for purposes of improving the securities and derivatives trading in the market.\textsuperscript{149}

As part of its regulatory activities, the SGX used to conduct annual on-site inspections of all members. In April, 2003, MAS rescinded certain regulatory powers from the SGX including the annual on-site inspection of brokers which MAS took on as its own responsibility. The government announcement claims the step was taken “to provide greater clarity in regulatory responsibilities.”\textsuperscript{150} The SGX’s current regulatory activities include requiring all its members to file annual audited statements, and monitoring market activity.\textsuperscript{151} Finally, SGX monitors members’ financial strength. Power to control the securities market is primarily via the previously mentioned Companies Act, and the Listing Rules of the Exchange.

The SGX has two main business units—Markets and Operations—which are subdivided into five sub-units: Markets, Products & Services, Strategy & Business Development,
Operations, and Technology. In addition, it has two other branches, Corporate Services and Risk Management.

c) Efficacy: Financial and Efficiency Results

The SGX’s market capitalization is $223 billion ($S383 billion). It has 551 companies listed, and has a daily average turnover of about 57.4 billion shares. Over the last four years since it demutualized, its market capitalization grew from $192 billion in November 2001, to its current $223 billion capitalization just mentioned.\textsuperscript{152} Its profitability as a listed company has grown with its revenues and profits increasing year over year from 1998 when the Straits Times Industrial Index was at 885,\textsuperscript{153} to the merger of 2000, the Index grew to about 1,900.\textsuperscript{154} It stands at a level of 1,825 in 2004.\textsuperscript{155} Since SGX’s opening at $0.7855 in December 2000, the share price has increased modestly to $0.9251, as of June, 2004. (See Table C).

In 2003, the SGX took 10 regulatory actions against members and listed companies.\textsuperscript{156} The details of each action are published on the website giving at least the impression of a high level of transparency to its internal regulatory action.

\textsuperscript{152} SGX Prices, shares, statistics http://info.sgx.com/webmktsstatistics.nsf/0b0324dae84b770948256dad0009440a/b20be0fb4de8b02148256b3a0030e665?OpenDocument last visited June 4, 2004
\textsuperscript{155} Straits Times as at June 6, 2004.
6) UNITED STATES OF AMERICA: THE NYSE

a) Historical Background

The NYSE dates back to 1792. Throughout its history is has been a mutual company. As such, the NYSE is a private organization and not required to be open about its affairs. In response to the Crash of 1929, the USA government stepped in to regulate the market by the creation of the Securities Exchange Commission (SEC). The NYSE was registered as a national securities exchange in 1934\(^{157}\) and continues to be subject to the government regulator in the traditional government agency regulator and private regulated party schema.

The SEC administers seven pieces of legislation\(^{158}\) the most important of which are: Securities Act of 1933, Securities Exchange Act of 1934, and Sarbanes-Oxley Act of 2002. Its objectives are “that investors receive financial and other significant information… and [to] prohibit deceit, misrepresentations and other fraud in the sale of securities.”\(^{159}\) Its primary approach is through the registration process requiring the filing of prospectuses with the usual disclosure requirements.\(^{160}\) The SEC has jurisdiction with respect to the regulation of brokers, transfer and clearing agents, and the various exchanges in the USA.

In response to the most recent string of scandals, starting with Enron, Worldcom and

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159 Ibid.
160 Ibid.
Adelphia, Congress enacted the Sarbanes-Oxley Act. It is a detailed, rule oriented, micromanaging piece of legislation.161

b) NYSE Structure and Regulation
The NYSE as a mutual organization is owned by the members, the majority of whom are brokers. As of December 30, 2003 there were 1,366 members with distributive rights—i.e. rights to distributions of equity162—of which 957 were leased to Lessee members, 29 electronic access members, and 4 physical access members for a total of 1,399.163

As of 2003, the NYSE has a dual board structure. Although the NYSE started in 1938 with a large board, having some 33 members on the Board of Governors, in 2003 that Board was replaced with a Board of Directors, all independents, and a Board of Executives, comprised of “constituents” or stakeholders.164 The Board of Directors has between 6 and 12 members in addition to the CEO and Chairman.165 The current board has 10 members.166 The CEO and Chair positions have been separated after the Grasso scandal.

The NYSE has a staff of 650.167 It is increasingly looking to strengthen its regulatory ability via technology.168 The NYSE is the Designated Examining Authority, appointed

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161 For a general criticism and caution concerning the effects of this legislation, see Larry E Ribstein “Implications Of Sarbanes-Raising The Rent On Us Law” (2003) 3(2) J. Of Corp. Law Studies 299
162 identified as “distributive rights” in the NYSE Annual Report 2003, note on New Equity Members, 50.
163 Ibid.
164 NYSE website, “Historical”
165 NYSE Annual Report, above n. 85, “Report to the members by the Chairman [sic]” 2.
166 2003 Annual Report above n. 85, 42.
167 “Chief Regulator: a discussion with NYSE CRO Rick Ketchum” Inside the NYSE on NYSE website. 
by the SEC, to supervise and regulate its members. It runs programs on all its members’ mandatory financial filings, has annual examination of members’ books, requires annual independent audits of all members that deal with the public, and reviews complaints filed by the public.\footnote{169}

The USA system requires every rule to be pre-approved by the SEC. The rule approval process by the SEC has been described as:

proposed rule changes are first published in the Federal Register. Then there is a public comment period which provides full employment for lobbyists. The lobbyists from an SRO’s competitors attempt to convince the SEC and the US Congress that the proposed rule change would lead to the end of civilisation as we know it, and that a different rule change should be adopted by the allegedly ‘self’-regulatory organization. Meanwhile, the understaffed and under funded SEC won’t approve the SRO rules until the SRO amends the rule filing into the exact form that the SEC wants.\footnote{170}

This description is hardly a comforting, confidence building description; purported to be “the envy of the world.”\footnote{171}

The Grasso Affair has not left the NYSE untouched. In fact, a considerable proportion of the NYSE Annual Report 2003 chairman’s message as well as the CEO’s message are dedicated to reforms to recoup the damage to the NYSE’s reputation and restore lost investor confidence, which resulted from Grasso’s compensation. The NYSE claims it referred the matter to the Attorney General of New York. This step, however, does sound a bit ingenuous. The NYSE failed to disclose the complete compensation package until

\footnote{168 Ibid.}
\footnote{169 NYSE Safety of Customer Assets NYSE website.}
\footnote{170 Angel above n. 6, 277.}
\footnote{171 Ibid.}
the SEC applied pressure, after which the exchange revealed it will pay an additional $48 million in the future.\textsuperscript{172} Furthermore, why did it not pursue the matter itself, seems to be the natural question, as it would have the best standing in an action against the former chair.

The NYSE reports that it brought 231 cases against members resulting in $12.6 million in disciplinary fines, six enforcement actions for insider trading, and it played a key role in the investment banking global settlements\textsuperscript{173} of several billion dollars. Still, the SEC is asking why the NYSE was slow in detecting problems, including Grasso’s pay. The NYSE’s response has been a corporate governance solution, namely separating out the regulatory function making it completely independent of the market activities.\textsuperscript{174}

There has been pressure on the NYSE to demutualize,\textsuperscript{175} in part because of Grasso’s exorbitant compensation package. The idea would be that a demutualization would increase public scrutiny, by increasing transparency and accountability. The NYSE’s response to date, however, has been related to corporate governance—splitting the Chair and CEO roles\textsuperscript{176}—and disclosure concerning executive compensation.\textsuperscript{177} The SEC approved rules increasing the number of independent directors to a majority of the board, and rules by which the nominating, compensation and audit committees must be

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\textsuperscript{172} Hugo Dixon, “Feet in Mouth” 10 Sept., 2003, \textit{Breaking News}.


\textsuperscript{174} Ibid. This approach is strongly supported by its members, with 93\% voting in favour of the change. Annual Report above n. 85.

\textsuperscript{175} Andrei Postelnicu, “NYSE Faces pressure to demutualise,” 7 Sept. 2003, \textit{NY Times}.

\textsuperscript{176} The split is not a permanent feature of the NYSE. It stems specifically from the Grasso affair. “Report to the Members by the Chairman,” NYSE Annual Report 2003, above n. 85, 2.

\textsuperscript{177} “Chief Regulator: a discussion with NYSE CRO Rick Ketchum” above n. 79. See also, Postelnicu ibid.
composed entirely of independent directors. Because of the SEC’s ability to recommend rules, it is unclear whether these changes to the rules came at the initiative of the NYSE, or from the SEC. The interplay between regulator and regulated even as a self-regulating body can get overrun, and at least one expert claims that the NYSE is only nominally “self” regulating. The most critical issue is who regulates the trades and it would appear that the NYSE continues to do so. Still, the new CEO, John Thain has stated that the SEC is in danger of over-regulating the market. He suggests that the balance between “regulation and accountability versus growth and competitiveness” are being tipped too much toward the former. This statement is rather surprising given the NYSE’s recent struggles to regain confidence as a result of the largest scandals in corporate history in addition to the Grasso affair.

As a result of its corporate governance changes, the NYSE separated its regulatory function from its market function. Its Chief Regulatory Officer (CRO) reports directly to the Regulatory Oversight & Regulatory Budget Committee, which is composed exclusively of independent directors. The NYSE’s CRO sees the issues facing capital markets as being best addressed by self-regulation and a completely independent regulatory structure within the SRO.

179 Angel above n. 6, 277.
180 May 27, 2004 Remarks to the Economic Club of New York City, NYSE article.
181 NYSE website Market Regulation
Except for the CEO, all directors are outside and independent.\textsuperscript{182} The Board of Directors, (BoD) is charged with responsibility for being “accountable to member owners and the public, the fiduciary, regulatory oversight [and] ultimately responsibility for the NYSE.”\textsuperscript{183} The Board of Directors has four Board Committees: Regulatory Oversight & Regulatory Budget Committee; Human Resources and Compensation Committee; Regulation, Enforcement & Listing Standards Committee; Nominating and Compensation Committee; and Audit Committee. All board members except for the Chairman act on the Compensation and Nomination Committees. The Audit Committee is composed of three outside, independent directors.\textsuperscript{184} It has 560 employees dedicated to regulatory matters but does not disclose its regulatory expenditure.

The newly created Board of Executives is a broader board, composed of stakeholders and was founded as an effort to stay engaged with the financial community and “to include additional public and private buy-side representatives, as well as lessor [sic] members.”\textsuperscript{185} The Board of Executives is appointed by the BoD and is to meet at least six times per year. Its responsibilities are;

- engagement with BOD and management;
- advisory on NYSE operations;
- advisory on NYSE evolution within contract of market structure and performance discussion;
- advisory on public spokesman role of the NYSE and its Chair and CEO, and recommends the non-regulatory operating budget of the BOD.\textsuperscript{186}

c) Efficacy: Financial and Efficiency Results

\textsuperscript{182} 2003 Annual Report above n. 85, 2.
\textsuperscript{183} Ibid, 44.
\textsuperscript{184} Ibid, 44.
\textsuperscript{185} Ibid, 2.
\textsuperscript{186} Ibid, 44.
The NYSE’s market is $17.3 trillion. It has an average daily volume of 1.4 billion shares valued at $38.5 billion. The NYSE spreads have narrowed significantly between 1996 and 2002. The NYSE has not been all success, and in fact, has lost listings to some of its competitors. (See Table D).

7) CONCLUSION

The stock exchanges discussed in this paper, although facing the same challenge of providing a financial market which successfully balances the demands of capital consumers and capital providers, have developed differently in many ways. They differ most in term of the role of the regulator and how the regulator should be best involved—whether inside as a participant in the market enterprise as in the Singaporean model, as a quasi-participant co-regulator as in the Antipodean model, or a fully external body as in the American model. As to structure, the options appear to be somewhat limited: co-operative market or for-profit corporation. As may be expected, the rules are not radically different as they are attempting to accomplish the same thing.

From our examination of the three exchanges, it is clear that the NYSE model remains a labyrinthine, medieval affair, with committees and boards arranged, responsible and reporting in a confusing array. As a private, members only club, it cannot but be expected to continue to stumble through other Grasso Affair type problems. It lacks the

external accountability of a publicly traded for-profit and it lacks transparency.189

Furthermore, it has no sense of public good.

The ASX is a step ahead of the NYSE. Its independent Supervisory Board with its annual audited reporting to the government and its publicly traded structure gives it a considerably higher level of transparency and accountability. It appears to be a clearly set up and well-designed co-regulatory schema. The government’s interest and involvement in the operation and regulation of the market is much clearer than that of the NYSE. Nevertheless, the conundrum is that ASX’s profit making activity includes its activity as being the regulator enforcing its rules.190 As regulator, the ASX’s objective is to exercise an element of control over market participants—including itself—to create an efficient, transparent market. It must do this without regard to the financial consequences. But this highlights the very problem confronted by the ASX and indeed all co-regulatory and self-regulatory markets. On the one hand, to be successful in its corporate objective as a listed company both profitable and carrying out its corporate mission, the ASX must protect the market’s reputation for fair, efficient and honest operations, of both itself and of the market’s market participants by enforcing the rules. On the other hand, its corporate objective of staying financially sound precludes it from a robust enforcement of those very rules.191 This problem is not merely hypothetical: the ASX has been reluctant to take legal action against companies which it believes should

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189 See Swan, above n. 97.
190 Board above n. 16 et al note that this tendency toward for profit exchanges has decreased interest in regulatory functions 12.
191 Donnan, above n. 17, 14.
be prosecuted for fear of retaliatory litigation which may result in a very significant damage award if successful.\textsuperscript{192}

In some ways, the most convincing model is the SGX, where the government’s hand in the market has made it perfectly clear that financial markets play an important role in the public good. Even its chairman, as noted above, sees his job as a public service. In addition, the SGX benefits from its status as a publicly traded for-profit corporation, monitored carefully by MAS. Unfortunately, it is not clear why MAS took back member auditing responsibilities. Accordingly, it cannot be determined whether the SGX’s auditing was sufficient, and whether rescinding the power is good or not. In any event, investors and other participants in the market can have confidence, backed by the Singapore government’s strong reputation in finance that the market is being run well.\textsuperscript{193}

Still, the level of scrutiny of trades and trades available to the government, and that governments have their own problems with corruption could certainly cause some investors to avoid the SGX.

In terms of Sandman’s three stages of regulatory response, we can see that the NYSE appears to be stuck at stonewalling moving sometimes to missionizing. This position is manifest in the CEO’s report which focuses on buffing the image of the NYSE while not making the good corporate governance changes permanent or seeking independent input. The ASX and the SGX have moved to at least the missionary stage, and given the

\textsuperscript{192} Schoer, above n. 78, 112. Schoer also notes that ASX claims to spend about $5 million annually in enforcement of the rules without specifying what counts as an enforcement expense, 111.

\textsuperscript{193} The Singapore government takes equity positions in many corporations traded on the market. Normally, those companies with government involvement trade at a premium because of that involvement.
pressure of the government regulators and the disclosure requirements of public companies, they appear to be held at or close to a dialogue stage.

In the last few years, the markets themselves have remarkably similar trajectories in terms of equity growth (See Table D). Furthermore, the incorporated markets have reasonably similar levels of profit.

Given that many of the changes to the rules and structures have only been recent, and that there has been considerable volatility in the global economy which has only begun to recover from its most recent recession, it is exceedingly difficult to draw any definitive conclusions about which system or structure is better. For these reasons it is difficult to develop a correlation between structural and regulatory matters with economic and financial performance of markets, although Swan and Westerholm’s research certainly provides intriguing indications.\textsuperscript{194} One would expect these changes and structures to show over time the superiority of one market over another. And while there are certainly a multitude of other factors effecting a market’s growth, there can be little doubt about the importance of a market’s structure and regulation in developing its reputation and consequently, its utility in providing capital for producers and enticing investment opportunities for investors. Several years will need to pass and careful monitoring of the situation will have to take place before such a study can be conducted. Nevertheless, this paper highlights the possibility, direction and general shape such a study could take.

\textsuperscript{194} See above n. 97.
What is clear is that human nature is not likely to change and that while markets and their regulators need to be diligent in minimizing opportunity for deceitful behaviour, there will always be those participants who will seek and find the openings permitting them to exploit other participants in the market. Indeed, it may not be too much to say that the basic strategy of all the participants in the market is just that: to be just one step ahead of everyone else in order to exploit those without the tiny edge just discovered by the sharpest of the sharp.
### Table A: Market Finance and Corporate Comparison

**Comparison of Exchanges**  
Source: 2003 Annual Reports  
(All figures in millions)  
(All dollars = USD)

<table>
<thead>
<tr>
<th></th>
<th>ASX</th>
<th>NYSE</th>
<th>SGX</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MARKET</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Capitalization</td>
<td>900</td>
<td>17,300</td>
<td>821</td>
</tr>
<tr>
<td>Total Share Volume-daily</td>
<td>156,000</td>
<td>352,000</td>
<td>113,000</td>
</tr>
<tr>
<td>Listed Companies(x1)</td>
<td>1,515</td>
<td>2308</td>
<td>551</td>
</tr>
<tr>
<td><strong>CORPORATE</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating Revenue</td>
<td>143</td>
<td>1,074</td>
<td>127</td>
</tr>
<tr>
<td>Profit</td>
<td>40.2</td>
<td>90</td>
<td>30</td>
</tr>
<tr>
<td>CEO Compensation</td>
<td>0.9</td>
<td>130+</td>
<td>1.0**</td>
</tr>
<tr>
<td>Cash on hand</td>
<td>60.6</td>
<td>800*</td>
<td>129</td>
</tr>
<tr>
<td>Regulatory expenditure</td>
<td>25</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Regulatory employees</td>
<td>135</td>
<td>560</td>
<td>***</td>
</tr>
<tr>
<td>Regulatory Actions</td>
<td>20</td>
<td>231</td>
<td>0</td>
</tr>
</tbody>
</table>

** source see n. 148 above  
* Cash on hand prior to Grasso payout (Source: Meyerson: May 28, 2004)  
*** indicates not Available
Table B: ASX
Table C: SGX
Table D: NYSE

195 All comparisons in this paper dealing with the NYSE have dealt with DJI as if it were a complete index and representative of the NYSE. This decision was made because of lack of alternative sources of information and as a best substitute.
Table E: Comparison of Growth of Markets