

Integrating Emerging Market Countries into the Global Financial System:

Regulatory Infrastructure Covering Financial Markets

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I. Introduction

Strong securities markets are necessary for economic growth and development of any country. Efficient capital raising and allocation of financial resources are an integral part of economic development. It is now well established that securities markets are not casinos but are essential for the growth and development of a country. Recent literature documents the direct linkage between capital market development and economic growth. It also documents the essential role played by capital markets in improving corporate governance, disclosure standards, transparency in the marketplace, and accounting standards.¹ The optimal amount of transparency and regulation leads to market credibility and results in market growth. A sound regulatory framework is the cornerstone of vibrant financial markets. However, global competition is the force that is driving innovation in the markets.

The creation of a global financial system has made the risks of a contagion and systemic failures much more likely. The impact of the Asian crisis was felt far beyond Asia. All this has given rise to the need for cooperation between regulators. The national boundaries of commerce no longer exist and therefore the jurisdictions for regulation are not clear-cut either. Integration of global capital markets, particularly emerging markets, requires greater uniformity of legal, regulatory, and operational procedures. The role of securities regulation is to protect investors; however, it is important not to over-regulate the markets. Regulation also needs to be consistent and predictable.

Securities markets are undergoing rapid transformation, brought about by both technological innovation and globalization of the marketplace. Globalization is both good news

¹ See Demirguc-Kunt and Maksimovic (1998), Megginson and Boutchkova (2000), Levine (1997), Levine and Zervos (1998), and Henry (2000a, 2000b) for details.

and bad news for emerging markets that poses opportunities and challenges. Emerging markets have made significant progress in market infrastructure, institutions, and regulation. Computerized trading systems have been set up with expanded capacity and transparency. Market capitalization and trading volume have increased significantly during the last 15 years. World market capitalization increased almost nine times from \$3.38 trillion to \$26.52 trillion between 1983 and 1998; for the U.S. markets, it increased seven times from \$1.90 trillion to \$12.93 trillion. The most dramatic increase was 23 times for developing markets from \$0.83 trillion to \$1.91 trillion (see Table 1). The rise in trading volume provides evidence of increased liquidity in the markets.

Table 1: Market Capitalization and Trading Volume

	Market Capitalization (\$US billion)			Trading Volume (\$US billion)		
	World	U.S.	Emerging	World	U.S.	Emerging
1983	3,384	1,898	83	1,228	797	25
1986	6,513	2,637	135	3,574	1,796	78
1989	11,713	3,506	755	7,468	2,016	1,170
1992	10,922	4,485	1,000	4,783	2,082	631
1995	17,782	6,858	1,940	10,216	5,09	1,047
1998	26,520	12,926	1,908	22,874	13,149	1,957

Worldwide trading volume increased 18 times from \$1.23 trillion in 1983 to \$22.87 trillion in 1998; for the United States, it increased 16 times from \$797 billion to \$13.15 trillion. Emerging markets saw the most dramatic increase of 78 times from only \$25 billion to \$1.96 trillion. The depth and liquidity in the markets have increased. The growth of emerging markets has been due to several factors, including privatizations, participation of foreign institutional investors, increase in the domestic investor base, and more issuers going to the market. Clearance and settlement

systems have also become more efficient. The regulatory framework has undergone some major changes with countries issuing new securities laws and setting up independent regulatory agencies

Role of Capital Markets

- **Channeling of Resources**
- **Facilitate Capital Formation**
- **Allocate Capital Efficiently**
- **Economic Development**
- **Provide Investment Opportunities for Citizens**

with a reduced role for the state. However, emerging markets now need to start addressing second-generation capital market development issues, including developing financial intermediaries that have professionals with financial sector skills; enhancing the domestic institutional investor base in addition to foreign investors; providing self-regulatory organizations; and developing mechanisms for investor protection. Risk management at all levels

Second-Generation Market Development Issues

- **Develop of Financial Intermediaries**
- **Develop Institutional Investors**
- **Enhance Role of Self-Regulatory Organizations**
- **Provide Investor Protection**
- **Develop Risk Management**
- **Develop Financial Engineering**
- **Address Cross-Border Regulation**

of the financial structure is extremely important but is severely lacking in emerging markets. Emerging markets must also think about introducing new financial products that are suitable for their own markets and develop financial engineering. This will require investment in human capital. Innovation is important to compete in the global marketplace and the regulatory structure should be supportive of such innovation. Both developed and developing countries have to work

together to address cross-border trading issues. Some countries are making good progress on all of these issues whereas others are lagging behind.

Questions about how to regulate financial markets in the face of so much transformation are being studied and debated at many levels, even in developed markets. In the U.S., Nasdaq is in the process of demutualizing and the NYSE is considering it, whereas the U.S. Securities and Exchange Commission (SEC) is reassessing the role of self-regulatory organizations (SROs). There is considerable consolidation taking place in the financial services industry, blurring the distinction between banking, insurance, and the securities industry. This consolidation requires enhanced cooperation between regulators, even within the same industry. There are no “domestic” markets anymore, with the industry becoming truly global in nature. Issuers will raise capital wherever it is cheapest and investors will invest their money wherever it is most profitable. Globalization is at the root of some of the change, but technology is at the heart of many of the changes and is clearly the major force in today’s marketplace. These developments are posing interesting challenges for regulators. However, there is no “one size fits all” approach to regulation that will work for all countries.

The purpose of this discussion paper is first to analyze the impact of globalization and technological innovation on the development of securities markets.² Based on future trends in market development, I offer some thoughts on developing a strategy for emerging markets. I specifically examine the opportunities and challenges facing emerging markets. Successful “blue chip” companies from emerging markets are able to access capital in the global marketplace wherever it is cheapest to do so. However, the role of local stock markets is expected to change dramatically in the future. Typical sources of revenue, such as listing fee, will no longer be major

² Part of this paper draws on work I have done for the Securities Commissions of Mexico, Peru, and Ecuador on market microstructure, regulation, and registration process, respectively.

sources of revenue. Therefore, exchanges must think about how to provide value-added services efficiently because only the strongest will survive. This concern gives rise to the question about whether every country “needs” a stock exchange. The paper discusses the implications of cross-border trading on regulation of securities markets and integration of emerging markets into the global financial system. I also examine regulatory issues posed by the changing corporate governance structure of exchanges and the proliferation of alternative trading systems. I argue that self-regulatory organizations are still a better model than complete regulation by the securities commission of a country even if exchanges are demutualized. However, close oversight by the securities commission is needed to control the conflict of interest issues.

II. Globalization

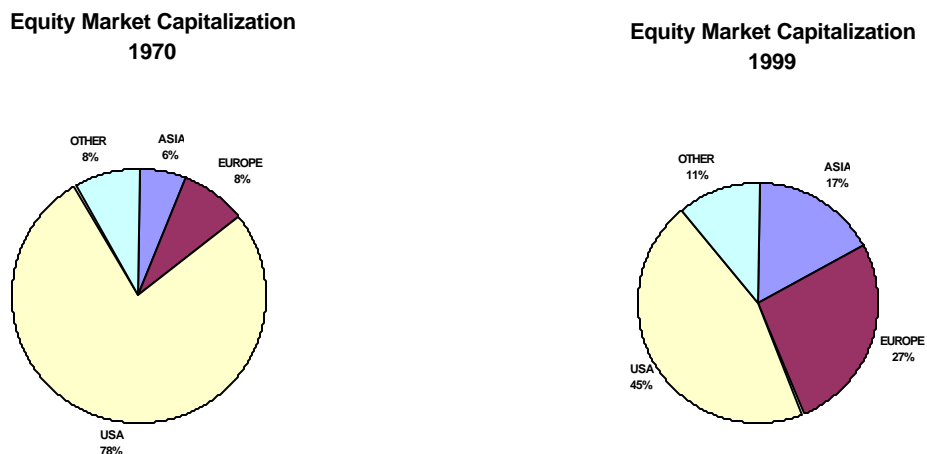
Physical trading floors have been replaced by electronic trading systems and the Internet is playing a crucial role in the globalization of markets. Internet use is expected to grow by 60 percent in one year on English-language sites and double on non-English language sites.³ Information is available quickly and cheaply, foreign markets are one mouse click away, and individual investors have as much access to the market as institutional investors. Issuers know of no national boundaries and want to raise capital wherever it is cheapest. Investors also want to invest globally to earn higher returns and diversify their portfolios. The rapid pace of global mergers in the financial services industry makes the importance of global competition clear among financial intermediaries.

Figure 1 shows that U.S. equity markets made up 78 percent of world capitalization in 1970; by 1999 however, this market share dropped to 45 percent. The share lost by the U.S. was due to the rise of trading in emerging markets. During this period, several new stock exchanges

³ Frank G. Zarb, “Building the Global Digital Stock Market,” speech given at the National Press Club on June 13, 2000 http://www.Nasdaqnews.com/views/zarb_remarks.html

opened, particularly in the transition economies, and the stock markets of Latin America and Asia expanded and liberalized. The globalization of markets is also evident from the growth of depository programs that have been increasing both in terms of number of issues and the size of

Figure 1: Change in Market Capitalization

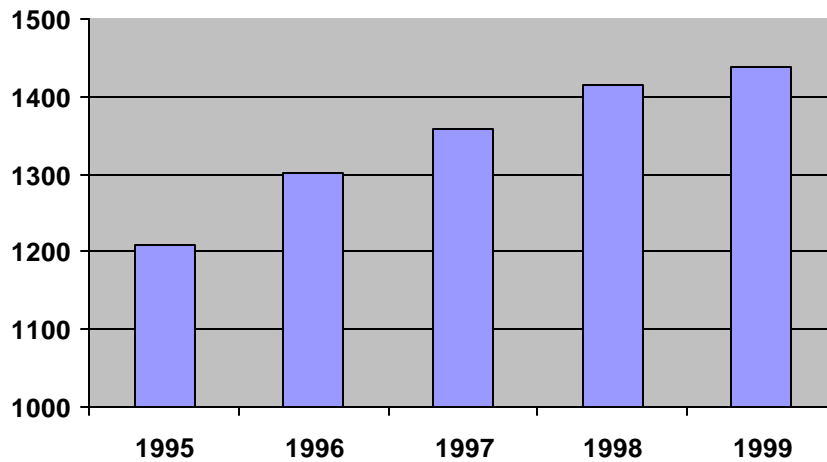


the market (Figure 2). Large depository programs from several emerging markets exist and more are added every year.⁴ Emerging market companies that trade in the U.S. have been some of the most actively traded stocks.

Globalization is changing the nature of capital raising and trading of securities. It is creating opportunities but also posing challenges. There is no doubt that emerging markets are integrating into the global financial system, but the real questions are whether they are ready and how they will be affected by globalization. We will use Latin America as an example of the impact of globalization. Twenty four Mexican companies are listed on the NYSE, 33 trade in the

⁴ Source: Bank of New York's website.

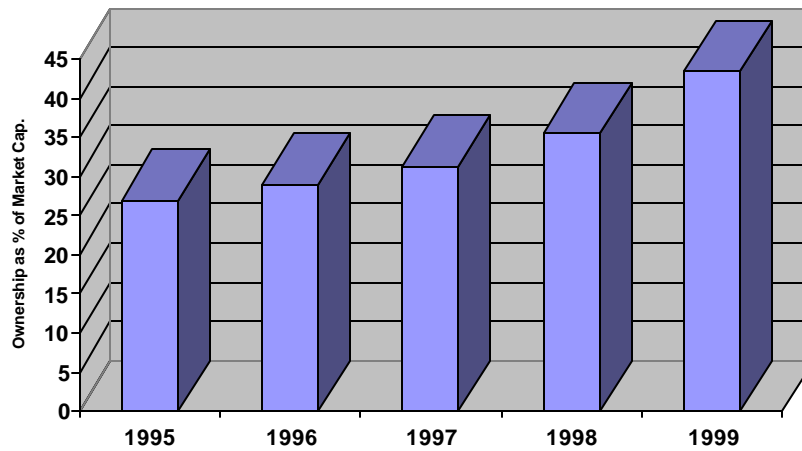
Figure 2: U.S. Depository Receipt Programs



OTC market, 8 in London, 1 on Nasdaq, and 2 on Amex.⁵ The trading activity of foreigners has gone up significantly on the Mexican Bolsa. Figure 3 shows that in 1995 foreign investors owned 26.96 percent of Mexican capitalization, this increased to 43.44 percent by 1999, and was already at 44.07 percent in the first seven months of 2000. Currently, there are nine foreign brokers operating in Mexico: ABN Amro Securities, Bankers Trust, BBV-Probursa, Chase, Deutsche Bank, Goldman Sachs, ING Barings, Merrill Lynch, and Santander Mexicano. Prudential also operates in Mexico as an independent fund manager. The significant participation of foreign investors and financial intermediaries in the Mexican market on the one hand and the issuance of Mexican ADRs and GDRs in foreign markets is evidence of integration.

⁵ Source: Presentation by Jorge Familiar Calderon, CNBV, Mexico, at Georgetown University's Alternative Structures for Securities Markets International Conference, September 2000.

Figure 3: Foreign Investors Acquisition of Mexican Securities



Foreign Intermediaries Operating in Mexico

- ABN AMRO Securities
- Bankers Trust
- BBV-Probursa
- Chase
- Deutsche Bank
- Goldman Sachs
- ING Barings
- Merrill Lynch
- Santander Mexicano

Challenges Posed by Globalization

Latin America provides a good example to illustrate the challenges of globalization because the region has in a way been hurt by its own success. Recent press describes these challenges in a variety of ways, as shown in the box below. The loss of trading activity in blue chip stocks, low liquidity, and decrease in the number of primary offerings are raising questions about the future of Latin Bourses.

Financial Press on Latin American Markets

“The days of the independent national Latin American stock exchanges could be numberedHampered by low liquidity and stagnant market capitalization growth, many bourses are in decline and facing tough competition from US exchanges.”

Emerging Markets Investor, April 1999

**LATIN AMERICA’S STOCKMARKETS – High and Dry
Drying Up?**

The Economist, February 2000

REQUIEM – POR LAS BOLSAS DE AMERICA LATINA

AmericaEconomia, February 2000

Table 2 shows that the number of listings has dropped by 16.67 percent in Argentina, 8.51 percent in Brazil, 0.07 percent in Chile, and 5.83 percent in Mexico. The size and scope of the stock market continue to be small relative to the overall economy. Market capitalization as a percentage of GDP ranges from an average of 15.59 percent for Eastern Europe to 25.47 percent in Latin America, and 38.47 percent in Asia. In contrast the U.S. percentage is 158.47 percent. A similar picture emerges by looking at trading volume as a percentage of GDP. The annual trading volume as a percentage of GDP was 11.13 percent in Latin America, 11.37 percent in Eastern Europe, and 63.53 percent but a high 154.90 percent in the United States.

Strategies for Globalization

Cross-ownership of markets, mergers and acquisitions, alliances and partnerships between

Table 2: Market Capitalization, Trading Volume, and Change in Listings

	Market Cap (% of GDP) 1998	Annual Trading Volume (% of GDP) 1998	% Change in Listings 1994-98
Argentina	15.09	4.46	-16.67
Brazil	27.33	18.96	-8.51
Chile	77.42	5.85	-0.07
Mexico	27.28	8.24	-5.83
Eastern Europe	15.59	11.37	21.90
Asia	38.47	63.53	33.30
Latin America	25.47	11.13	0.24
U.S.	158.47	154.90	9.85

exchanges, cooperation between regulators, and demutualization of exchanges are all part of the globalization strategy. Harmonization of accounting standards, listing requirements, qualification of financial intermediaries, and regulation are at various stages of development. These changes are expected to bring efficiency and reduce costs for the global investor. Some of these strategies become even more important for emerging markets that must figure out a way to survive in this global architecture.

Some traditionally structured exchanges have begun to question the appropriateness of their membership ownership and governance structure. Business is moving at a fast pace, and stock exchanges do not have the luxury of obtaining the approval of their membership for every change. Stock exchanges need to be flexible and quick in making decisions. Stock exchange should also be well financed to compete globally and invest in both technology and human capital.

Other exchanges are considering restructuring into for-profit organizations where access to trading will be separated from the ownership of the market. Regulators will have to consider what

should be the impact of restructuring a membership organization on the regulatory functions of the market authorities, particularly in managing conflicts of interest. The counter-argument to the ‘acting responsibly’ argument is that there will be a considerable conflict of interest if the major exchanges go ahead with their announced intentions to demutualize. “One change might be to keep SROs within exchanges, but in a subsidiary with a ‘Chinese wall’ separating trading and member surveillance from day-to-day operations. In a more dramatic breakup, SROs might become stand-alone firms for hire by their former parent companies.”⁶ The securities commissions and others in the industry worldwide are currently studying these various options.

In the world of the Internet it is not clear what value-added services a stock exchange can provide that cannot be provided in alternative ways at a cheaper cost. Stock markets have to

<i>Exchange Demutualizations</i>
Hong Kong Stock Exchange (2000)
London Stock Exchange (2000)
Nasdaq (2000)
Toronto Stock Exchange (2000)
Athens Stock Exchange (1999)
Iceland Stock Exchange (1999)
Simex (1999)
Stock Exchange of Singapore (1999)
Australian Stock Exchange (1998)
Amsterdam Exchanges (1997)
Borsa Italiana (1997)
Copenhagen Stock Exchange (1996)
Helsinki Stock Exchange (1995)
Stockholm Stock Exchange (1993)
NYSE
Paris Bourse
Deutsche Boerse
Oslo Stock Exchange

respond to change and innovate in order to survive. Traditional methods of trading securities will soon be outdated. The typical sources of revenue (listing, transactions, and information) may not

⁶ “For-Profit Stock Markets Raise Regulatory Concerns,” Dow Jones News Service, 9/03/99.

continue to exist. There is no reason to believe that listing will continue to be a major source of revenue. Similarly, technology has already made information inexpensive and exchanges do not have the luxury to continuing selling data as a major source of revenue. I think whoever can attract trading volume by their design and costs will be the winner. This does not have to be an exchange.

As exchanges are challenged to meet the demands of multinational issuers and international investors, they have converged to form regional and global alliances. These alliances and partnerships become particularly important for emerging markets to reduce costs and offer more services to their clients. So far there as been a lot of talk about alliances and partnerships and even mergers. In reality, due to political, social, and economic differences, it is hard to make these structures functional. Major regulatory differences between countries makes harmonization difficult. Even in Europe, integration has been complicated to achieve and has evolved over decades. The merger talks between the London Stock Exchange and Deutsche Boerse have recently broken down.

ALLIANCES/PARTNERSHIPS

- **ASEA (African Stock Exchanges Association)**
Egypt, Botswana, Morocco, Tanzania, Johannesburg, Uganda,
Zambia, Zimbabwe, Mauritius, Swaziland
- **FEAS (Federation of Euro-Asian Exchanges)**
Amman, Bulgaria, Dhaka, Egypt, Istanbul, Karachi, Lahore, Ukraine,
Tehran, and others
- **FIABV (Federation of Iberoamericana Bolsas de Valores)**
Argentina, Brazil, Chile, Mexico, Ecuador, Peru, Venezuela, Costa Rica,
El Salvador, Portugal, Spain, Uruguay
- **FESE (European)**
European exchanges including Latvia, Lithuania, Cyprus, Bucharest, and others

Alliances among different markets have similar missions and objectives. For example, the Federation of Euro-Asian Exchanges (FEAS) includes 21 stock exchanges with the Istanbul Stock Exchange taking a leadership role. Its mission statement states:

“The mission of FEAS is to create fair, efficient and transparent market environments, with little or no barriers to trade, between the FEAS members and their operating regions. Harmonization of rules and regulations and adoption of new technology for trading and settlement, by member securities markets, will facilitate the objectives of FEAS by promoting the development of the member markets and providing cross listing and trading opportunities for securities issued within FEAS member countries.”

Through alliances and partnerships exchanges are trying to create common trading platforms, clearance and settlement procedures, listing standards, capital reserve requirements, qualifications, for financial intermediaries, and risk management systems. International Federation of Stock Exchanges (FIBV) is the largest trade organization for securities markets. The FIBV acts as a central reference point in the process of international harmonization (cross-border trading and public offerings) among its members and to lobby public bodies about the markets. FIBV also supports emerging markets in their development according to global standards.⁷ Other international organizations such as the International Accounting Standards Committee, International Organization of Securities Commissions (IOSCO), and Council of Securities Regulators of the Americas (COSRA) are working together to develop international standards for harmonization and market integration.

There has been discussion about creating a global equity market (GEM) at the initiative of the New York Stock Exchange that includes emerging markets such as Brazil and Mexico. The Tokyo Stock Exchange is in discussion to form its own alliance with the emerging markets of Asia including South Korea, Thailand, and Philippines. Some of the recent linkages/alliances possibilities that have been discussed are listed in Table 3.

⁷ See <http://www.fibv.com>

Table 3: Market Linkages Discussion

MARKET	LINKS WITH EXCHANGES OR ECNs
NYSE	Toronto, Tokyo, Paris, Amsterdam, SEHK, Australia, Brazil, Brussels, Mexico
Nasdaq	All ECNs trade Nasdaq stocks, Osaka, Deutsche Boerse, London, MarketXT joint-venture
London	Deutsche Boerse Nasdaq, OM
Tokyo	South Korea, Thailand, Philippines, Singapore, NYSE, Nasdaq
SE of Hong Kong	Nasdaq
Paris	NYSE
Brazil BOVESPA	London, Lisbon, NYSE, Argentina
Australia	Nasdaq, NYSE, Far East
Toronto	Nasdaq, NYSE

III. Technology

Technology has had considerable impact on the financial markets, resulting in the development of new types of trading systems. These include automation of existing stock exchanges, creation of new automated exchanges, and the growth of new independent trading systems. New trading systems are already operating in many different parts of the world. Technology allows information to be transmitted rapidly and no physical contact between the transacting parties is required. This has led to an increase in cross-border trading and therefore raised issues about jurisdiction.

Technology is having profound effects on the way the markets operate. Alternative trading systems (ATs)/ Electronic Communication Networks (ECNs) have captured a significant share of the trading volume of traditional exchanges. These trading systems are backed by large financial intermediaries with deep pockets. They have already started expanding globally. It is not clear

who will eventually win the race among ATSS. For now, the same financial intermediary is taking positions in several systems to keep their options open. Regulators will need to contend with these new alternative trading systems. These new systems have also raised the question of “what is an exchange” and therefore how should trading systems be regulated?

One of the effects of multiple ATSS trading the same product is to fragment the market in that product. In addition to normal supervision of the market operator, markets will often require coordination of some regulatory activities for each ATS, the existence of surveillance, and establishing some minimum regulatory requirements that protect the orderliness of the markets. One possible response to this development is to consolidate the various SROs that exist now in the U.S. markets and create a single, central SRO. This option should remove the conflict of interest concerns and satisfy those opposed to the NYSE’s announced intention to keep their SRO in-house if they take for-profit status. While a central SRO might lose some of the nimbleness and expertise that the current SROs have, it still needs to be considered as an alternative.

Technology has led to the development of new trading systems that have become easy to set up because of lowered costs. Trading floors are no longer required and person-to-person contact in conducting transactions is not needed. Trading systems perform tasks similar to an exchange: they channel orders from the originator to the execution site, and orders then get transformed into trades. The process also involves disseminating the pre- and post- trade data to the market. Regulators are concerned about the microstructure of new trading systems, their trade execution rules, impact on the price discovery process, and issues of fairness and competition. ATSS may be owned and operated by a single intermediary (for example, Instinet) or by a group of intermediaries (Archipalego). However, they do not fall under the umbrella of an exchange and

therefore are not obligated to follow the same set of responsibilities as an exchange and are not required to perform several functions, including the SRO role.

Exchanges must comply with many more regulations than trading systems. They must provide trade execution capabilities, centralize trading, and engage in price discovery. They are also required to file proposed rules with the Securities Commission and have a process for obtaining public comment. This makes it hard for them to respond quickly to the market environment, competitive pressures, and new business opportunities. Registered exchanges are required to have adequate capacity and must publicly disseminate pre- and post-transaction information. These trading systems are also for-profit organizations, whereas exchanges have traditionally been non-profit member organizations. This ownership structure is changing rapidly as discussed later.

The proliferation of new trading systems has ignited debate in the U.S., Canada, Europe, Australia, and even some emerging markets as to how ATSS should be regulated. Are they an exchange, a broker, or a dealer? Do they have competitive advantages over exchanges? As they become more and more important, how should they be integrated into the markets? Can they and the exchanges be regulated in a manner that would not stifle innovation? The U.S. SEC published a major concept release in May 1997 to explore ways to respond to the technological developments in the financial markets. The SEC recognized that ATSS already trade more than 20 percent of Nasdaq orders and could potentially become the major market for certain securities. However, ATSS are regulated as broker-dealer and not as an exchange. The SEC needed to be careful in its regulatory approach so that innovation would not be hindered. The definition of an “exchange” was revised under Rule 3b-16 to mean any organization, association, or group that:

- (1) Brings together orders of multiple buyers and sellers

(2) Uses established, non-discretionary methods under which such orders interact with each other.

Specifically excluded are routing systems and single market maker systems. Under this new framework the Commission also wants to encourage innovation and allows SROs to operate new pilot trading systems for up to two years without requiring Commission approval.

Trading systems are a natural platform for cross-border trading. The technology exists to make financial markets truly global and integrated. Technology can easily make round-the-clock trading a reality. However, in spite of all the progress, the regulatory barriers to cross-border trading remain quite high. Commissioner Laura Unger of the U.S. SEC in her speech at the Third National Securities Trading on the Internet Conference on January 24, 2000, correctly pointed out that “The only real impediments to global market are regulatory, not technological. Specifically, what is lacking is an appropriate framework for that market to work in.” She also remarked that the SEC has ample authority and jurisdiction over the activities of foreign markets and broker-dealers in the United States, but the real issue is “to what extent the Commission should exercise that authority,” in the global marketplace.⁸

IV. Purpose of Securities Regulation

A strong legal and regulatory framework is essential for a well-functioning capital market. It is not sufficient to have laws and regulations but their enforcement is critical. Many emerging markets have started to set up an acceptable regulatory framework but the enforcement has been severely lacking. This section discusses some approaches to globalization that are being discussed and also specifically discusses the role of self-regulatory organizations in regulation of capital markets.

⁸ “The Global Marketplace, Ready or Not Here It Comes,” speech by Laura Unger at the Third National Securities Trading on the Internet Conference, New York, January 24, 2000, <http://www.sec.gov/news/speeches/spch344.html>

IOSCO has long recognized the importance of interdependence among regulators as securities markets continue to become integrated and globalize.⁹ IOSCO has set out 30 principles of securities regulation that are aimed at achieving three objectives:

- The protection of investors
- Ensuring that markets are fair, efficient, and transparent
- The reduction of systemic risk

Protection of investors

Full disclosure of material information is probably the single most important means for protection of investors. Full disclosure allows investors to make their own decisions regarding risk and reward so they can protect their own interests. Key components of disclosure include establishing accounting and auditing standards that meet international acceptance.

Ensuring fair, efficient, and transparent markets

Regulators can keep markets fair by protecting investors from improper trading practices or manipulation, and establishing market structure that does not favor some users over others. Efficiency can be promoted by ensuring that relevant information is given widespread and timely dissemination and is reflected in the price formation process. This also relates to transparency, which regulators can encourage by ensuring that pre-trade and post-trade information is made public on a real-time basis.

Reduction of systemic risk

Regulators cannot prevent financial failure of market intermediaries but should attempt to reduce both the risk of failure and also reduce the impact of failure. However, risk taking is essential to an active market and regulation should not unnecessarily stifle legitimate risk taking.

⁹ IOSCO's Objectives and Principles of Securities Regulation, September 1998.

“An efficient and accurate clearing and settlement process that is properly supervised and utilizes effective risk management tools is essential.”

These 30 principles are grouped into eight major categories:

- 1) *Principles relating to the Regulator*: clear responsibilities; operationally independent regulator, adequate powers; consistent regulatory processes; and high professional standards.
- 2) *Principles for Self-Regulation*: some direct oversight based on fairness; oversight of regulator.
- 3) *Principles for Enforcement of Regulation*: comprehensive inspection, investigation and surveillance; enforcement powers.
- 4) *Principles for Cooperation in Regulation*: share information with domestic and foreign counterparts; establish information sharing mechanisms; assistance to foreign regulators.
- 5) *Principles for Issuers*: timely disclosure of material information; fair treatment; and acceptable accounting standards.
- 6) *Principles for Collective Investment Schemes*: eligibility criteria; rules for legal form and structure; disclosure; proper valuation methods.
- 7) *Principles for Market Intermediaries*: entry standards; capital requirements; standards for operational procedures; and process for dealing with intermediary failures.
- 8) *Principles for the Secondary Market*: Regulatory authorization and oversight of trading systems; ongoing supervision; transparency; deter manipulation, risk management; and fair clearing and settlement procedures.

The goal of regulation should be to promote the “best markets” for raising capital and trading securities. However, best does not mean the same thing for each country. In the U.S. the congressional mandate is to achieve four major objectives, as shown in the box below.

<p><i>Congressional Mandate for Securities Regulation</i></p> <ul style="list-style-type: none">• Efficient execution of transactions• Fair competition among brokers, dealers, and markets• Transparent markets with easily available information• Execution of investor orders without dealer participation

Stable financial systems require regulation and monitoring of securities markets and market participants. It is not sufficient to have regulation on the books; it must also be effective.

Therefore, the regulator must have the necessary political, legal, and financial backing. The regulator needs to be both independent and accountable to the government. It needs to have the legal authority to carry out its responsibilities. In many emerging markets securities commissions are not adequately funded both in terms of financial resources and human capital. If the regulator does not have a well-trained and well-experienced staff, it cannot succeed in preventing market manipulation and fraud. Securities commissions around the world are typically funded either by government or by industry. If funding for securities commissions is provided by government, the taxpayers bear the costs of regulation but they are also the beneficiaries of prudent regulation. If industry provides funding, the regulated industry eventually passes the costs to the ultimate customer.

V. Cross-Border Regulation

There are a number of complex and controversial issues involved in cross-border trading that become particularly complicated and challenging for emerging markets. There is no one supra-regulator with jurisdiction over global capital markets although this idea has been suggested, it is extremely hard to implement. These issues within the European Union (EU) have been hard to resolve in spite of the common social, political, and economic background of the EU countries. This is the only region in the world that has issued the Investment Services Directive that spans several countries. Hence, it is hard to imagine agreement on a supra-regulator at an international level.

If each country has its own regulator, several issues arise that have been discussed by Domowitz and Lee (1998) and others. Which country should have jurisdiction over what institutions? What if a trading system is physically located in one jurisdiction but is incorporated in another? Where are securities listed? From which country do investors come? To which

country do the financial institutions involved in the transaction belong? Several approaches have been suggested to deal with the regulatory framework in the global marketplace, but no consensus has been reached yet. Harmonization of rules with regard to qualifications of financial intermediaries, capital requirements, registration of new securities, listing requirements, trading systems, and clearance and settlement will make it less costly for market participants to transact business. However, it is important for each country or region to adapt the principles to suit their own markets.

The U.S. SEC's Concept Release had set out to address the issues of foreign market access in addition to the ATSS. However, the issues related to ATSS itself were important and complicated enough that the discussion of foreign markets was deferred for another time. The Commission proposed three non-exclusive approaches:

- 1) *Mutual Recognition Approach:* This would mean reliance on a foreign market's primary regulator and would work only for those countries whose rules and regulations are similar. Most emerging markets would not be included in this approach. There would be a great deal of politics involved in determining countries whose regulations are comparable. The developed markets would select countries whose regulation is 'comparable' to that of their markets. In the U.S. the concern is that foreign markets could operate in the U.S. with fewer regulatory burdens than U.S. markets. This would be anti-competitive for U.S. exchanges that would in turn want their regulatory burden reduced. It would even be possible for U.S. exchanges to register in the foreign country under less regulation and still operate in the U.S. This approach has been adopted by Europe.
- 2) *Exchange Registration Approach:* Under this approach, the domestic regulator applies the same rules and regulations to foreign and domestic exchanges operating in the country. As globalization proceeds, exchanges could face several sets of regulations, making this a costly approach.
- 3) *Access Provider Regulation:* In the U.S., the possibility of regulating access providers, such as exchanges and broker-dealers, that provide investors with access to foreign markets was considered.

On the Internet, the Commission's view has been that as long as foreign exchanges and broker-dealers post a prominent disclaimer and refuse to transact with U.S. investors then they are not

responsible. The foreign market should also not allow access to U.S. investors indirectly through its own members. In March 1999, the Commission issued exemption to London-based Tradepoint Stock Exchange to provide access to securities listed on the London Stock Exchange. This exemption was granted based on Tradepoint being a limited volume exchange in the U.K. The primary market of a country could not be considered a limited volume exchange. Even in this case, only qualified institutional investors have access to all securities but other public investors only have access to securities registered under the U.S. Securities Act in the form of American Depository Receipts or ordinary shares. Even as an exempted exchange, Tradepoint is required to provide substantial information to the Commission.

Regulators have attempted to create a regulatory wall around cross-border trading, but this cannot last too long. Investors and issuers both suffer from such artificial barriers. However, regulators have to make sure that there is sufficient investor protection. They also realize that citizens of the country demand more and more opportunities to invest in foreign markets. Benn Steil in his letter to the Commission argues that exemptions based on low volume are flawed.¹⁰ The exemption suggests that investors trading on less liquid systems are somehow better off than those trading on a more liquid one. He also argues that U.S. institutional investors already have access to foreign markets through electronic brokerage systems.

The lessons for emerging markets are clear. If each market does not have an appropriate regulatory structure, it will be left behind. It will have a hard time integrating into the global marketplace. Notice that I do not specifically say each country needs credible regulation. I can certainly envision a world in which every country does not have its own market. It is possible that a regional or some other type of partnership/alliance approach is taken to markets. Even if each

¹⁰ Letter by Benn Steil dated 16 July, 1998, to the U.S. SEC, <http://www.sec.gov/rules/other/f10-101/steil.html>

country has its own market, alliances and partnerships will be important and regulation must allow these to develop naturally.

VI. Rationale for Self-Regulation of Financial Markets

Policymakers realize that markets should be allowed to operate with minimum intervention by regulators. Investors and issuers feel confident in participating in stock exchange transactions only if they can be assured that transactions are executed according to a set of pre-determined set of rules. SROs have played a key role in the regulation of markets; however, the tensions inherent in the system are also apparent. SROs can set rules that include regulation of market transactions, regulation of market participants, resolution of disputes, enforcement of actions, and pre-commitment of resources. SROs should have the responsibility for regulating and monitoring stock markets. They should develop qualification standards for market intermediaries, rules for these firms to participate in the market, rules for dealings with customers and clients, and ensure that members fully comply with these rules and with securities laws and regulations. Self-regulation can effectively combine monitoring by private entities with oversight by government regulatory agencies. The role of self-regulation varies from country to country. In some countries only one SRO operates, but in others more than one SRO may exist. Even in the U.S. there is discussion about the potential for a single SRO rather than each exchange being a SRO.

According the Report of the SRO Consultative Committee:

“SROs should be able to have the authority to create, amend, implement and enforce rules of conduct with respect to the entities subject to the SRO’s jurisdiction and to resolve dispute through arbitration or other means.”

SRO rules and regulations will only complement the statutory requirements that already exist.

There are costs associated with operating an SRO and the industry directly or indirectly bears these costs. Many stock exchanges in emerging markets with low liquidity are rightly concerned about the costs of the SRO function. These costs are associated with human capital,

training of employees, and need for updated technology, among others. In the early stages of development of the SROs it is quite likely that there will be considerable duplication of effort by the SRO and the government regulator. The Securities Commission may have to continue performing the same functions as the SRO until the SRO becomes credible and market participants are satisfied by its fair policing activities. If the SRO is able to conduct its operations effectively and efficiently, the government regulator should be able to reduce its budget and pass the savings to market participants. It takes time for SROs to establish credibility based on their track record.

Self-regulation ensures that transactions are executed by member firms according to pre-set rules and conditions. Regulation of member firms ensures that the admission criteria are set clearly and firms can become members only if they satisfy minimum capital requirements, creditworthiness, risk-management capability, and other requisites. Rules are also laid down about conducting business and ethical standards. The procedures for sanctions in case of non-compliance are also laid out. Dispute resolution is an important part of the SRO's responsibilities.

Regulation by SROs

Regulation of Market Transactions

- **Needs Effective Surveillance of Markets**
- **Information Disclosure and Dissemination**

Regulation of Member Firms

- **Criteria for Membership (capital requirements, risk management, technical requirements)**
- **Rules for Conducting Business**
- **Compliance with Rules**
- **Sanctions**

SROs have a business interest in making sure that their markets function smoothly. Reputation capital is very important in this business. Therefore, SROs do have incentives to implement rules that are consistent with the business model. The industry has business interest to

operate a fair, transparent, and competitive market. In today's global marketplace competition is fierce and technology allows market participants to quickly take their transactions to the most efficient market. They are also close to market participants and have more flexibility than government agencies to respond to market needs and create appropriate rules. The combination of their commercial interest and their proximity to the markets makes them suited to carry out some of the regulatory role. They are in a position to set rules, enforce the rules, and resolve disputes that arise from those rules. Flexibility is extremely important in today's fast changing financial world. Government agencies typically do not have the either financial resources or the human resources necessary to carry out all aspects of the regulatory function. It is also easier for the market to self-police itself. Self-imposed rules are more easily accepted than those imposed by a third party, particularly a government agency.

Benefits of SROs

- **Business Interest**
- **Self-Policing**
- **More Resources**
- **Closer to the Markets**
- **More Flexibility**

However, there are major challenges with the implementation of self-regulation. SROs are generally the stock exchange, clearing agencies, and sometimes other professional associations. This model of regulation assumes that the industry has the capability to police itself. Self-regulation also assumes that the industry has the incentive to operate fair and efficient markets. It also requires competition among market participants so that they will monitor each other. If conflicts of interest undermine the role of self-regulation then the benefits of controlling the activities of members and enhancing investor and issuer confidence may not be valued highly. In

emerging markets, there is typically only one stock exchange and therefore no competition. Issuers and investors do not have the option to use another alternative if they are unsatisfied. But there is no other option. Countries with low liquidity are in fact going to be further threatened by global competition. There is no possibility of other trading systems or new exchanges emerging in their markets because there just is not enough trading volume and liquidity. Even in a developed country with competition, the case of the Nasdaq Stock Market showed that collusion between dealers is possible to the detriment of investors. SROs can be driven by the short-term interest of their own market. For example, if exchanges are interested in obtaining more foreign listings, they are ready to have more lenient listing requirements for foreign issuers.

In emerging markets, there is also concern that SROs may not have enough resources (financial and human capital) to effectively carry out their responsibilities. If there are only a handful of financial intermediaries who are members of the SRO or have too much influence that might not be good for the markets. The governance structure of the SRO plays a major role in determining the effectiveness of the SRO's oversight activities. If there is more than one SRO that has overlapping surveillance and enforcement activities then market participants have to abide by several sets of rules incurring substantial costs.

The SRO approach might not be the perfect one, but it is better than other options. A costly alternative would be to have the securities commission perform all the regulatory functions. SROs are closer to the industry, they are more flexible, and therefore have several advantages. Oversight by Congress and the Securities Commission can help resolve the conflicts of interest problems.

VII. Conclusions

Competition among exchanges is heating up on a global scale. I use the term "exchange" in a broad sense. Securities markets are undergoing tremendous changes. Five years from now it

is not clear who the winners will be. Will the traditional exchange even survive? How will the role of exchanges be modified? What additional value-added services will they provide? Will every country have a stock exchange and I preface this with, does every country need a stock exchange? How will exchanges in emerging markets compete with the big players? Will there be regional markets? It will be interesting to see what kinds of alliances and partnerships actually become fruitful and how consolidation in the industry shapes up.

Emerging markets need to have a strategy to compete in this global marketplace. Integration in the global system is a fact, the issue is how best to prepare for it. Regulators must encourage the development of strong competitive markets as the only remedy for success. To become integrated into the global system there are several fronts on which emerging markets need to make progress. Regulators must continue to encourage innovation and foster competition at an international level. In this integrated global economy the need for international cooperation is a necessity. The risks of financial failure will not be borne by one country alone as is evident from several examples (such as, Barings, Long Term Capital, Asian crisis). Risk management and monitoring at the global level are required. The consolidated risk of financial intermediaries and timely dissemination of information is needed. Regulators need to share information to do effective surveillance and enforcement. It is necessary to achieve harmonization in several areas. Harmonization does not mean that each country loses its legal and regulatory identity. If the standards of emerging markets are perceived to be weak relative to those of developed countries, there will be difficulty in integrating.

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