

**Promoting Regional Capital Market Integration**

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# Promoting Regional Capital Market Integration<sup>1</sup>

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## 1. Introduction

This report examines the topic of promoting regional capital market integration. It has five broad aims:

- 1) To discuss the costs and benefits of regional capital market integration;
- 2) To examine typical barriers to regional capital market integration;
- 3) To discuss the different principles and methods that might be employed to promote regional capital market integration (including regulatory standardization and harmonization, multi listing, links and mergers between stock exchanges and other types of market institutions, technical interfaces, information sharing and other capital market innovations);
- 4) To provide some illustrations of attempts to promote capital market integration in different regions, and discuss their success or failure;
- 5) To provide the elements of a strategy to promote capital market integration that includes a discussion of the optimal role and function of the key agents – including private sector entities, government agencies, regional bodies, and international financial institutions.<sup>2</sup>

The term integration in the context of the capital markets has been used to mean different things. It can refer to an environment where: 1) identical securities are traded at essentially the same price across the markets in a region after adjustment for foreign exchange rates;<sup>3</sup> 2) investors can buy and sell securities in the region's markets without restriction;<sup>4</sup> 3) all types of participants in the capital markets can offer their services throughout the region without restriction; or 4) capital markets are not fragmented (a term which itself is full of ambiguity).<sup>5</sup> These four attributes of an environment are closely linked, but not identical. In this report, attention is focused on the first and third of them. The first clearly focuses on the costs of trading, and stresses that in an integrated market such costs should be the same throughout the region, and implicitly as low as possible. The third attribute focuses on market participants' ability to undertake their business activities wherever they wish in a region, and stresses that there should be no restrictions stopping them from doing so. It is vital to note that although the phrase "regional capital market integration" implies to

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<sup>1</sup> This report is the property of the Inter-American Development Bank, and was prepared for the Capital Markets Roundtable held Feb. 5-6, 2001, Washington DC, USA.

<sup>2</sup> As per the Terms of Reference for the report, which also specify that the report should be at least 35 pages (with double spaced type), not counting appendices, references and tables.

<sup>3</sup> Wellons p. 1, (4/1997).

<sup>4</sup> p. 6, Lemmen (1998).

many people the need for some form of cooperation between market participants or jurisdictions, it does not require it. Indeed, as will be discussed, competition both between market participants and between regulatory regimes, can have an enormously positive effect on bringing about such integration.

The term region is used here loosely to refer to a set of nations bound by trade or other links, or a single nation with a federal system that allows its states, provinces, or other sub-national jurisdictions, to pursue different laws and policies.<sup>6</sup>

There are a range of well known reasons why the capital markets are currently in a state of rapid change. These include:

- 1) the consolidation and globalisation amongst capital market participants, most evidently amongst investment banks and issuers, but also progressively amongst investors and exchanges;
- 2) intense competition between all types of capital market participants, including exchanges, new trading mechanisms, investment banks, brokers, issuers, and investors;
- 3) increased demand for capital market instruments at both the retail and the institutional level, and both for equities and bonds;
- 4) the growing importance of funded and private pension schemes as a result of demographic trends in many of the developed markets;
- 5) the move from national to sectoral allocation of investments, being spurred in Europe by the introduction of the Euro.
- 6) increased supply of capital by companies on a border-less basis, partly as a result of large privatisation schemes, and partly by new entrepreneurial companies;
- 7) the demutualisation of exchanges into for-profit companies;
- 8) rapid technological advancement, including in the internet, e-business, wireless technology, and new software for market participants;
- 9) a desire to price explicitly the risks of trading, and if possible to reduce them; and
- 10) deregulation and liberalisation in some of the world's capital markets.

These trends are creating intense pressures on all markets, including emerging ones, to lower cross-border transaction costs of all types, to allow market participants to deliver services across borders, and to reduce all the many forms of risks inherent in the international trading process. While it is possible to further all these goals at a domestic level, the potential gains of doing so at a regional level are significantly larger. For this reason, the advancement of regional capital market integration has become widely perceived as critically important, and not just by market participants. Interest in promoting regional capital market integration has been taken up at the highest political levels, most evidently by the Economics and Finance Ministers in the EU as discussed below, but also elsewhere as well.

One further question about the optimal level of integration is important to address. If the gains of capital market integration are larger at a regional level than at a domestic level, would they not be correspondingly larger at a global level than at a regional one? Although no broad answer to this question is provided to this question here, two

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<sup>5</sup> p. 53-55, Lee (1999).

partial responses may be given. The first is to argue that if global integration is better than regional integration, one way of reaching the global goal is via a series of regional goals. The second response is to note, expediently, that many of activities identified in this report to promote regional capital market integration are simply infeasible right now at the global level.

The report is composed of five sections in addition to the introduction. In section two, a summary of the costs and benefits of, and barriers to, regional capital market integration is presented. In the third section, the manner in which legislative and regulatory initiatives may, or may not, further regional capital market integration is evaluated. In section four, key types of cooperative initiatives in the provision of market infrastructure that can be used to promote regional capital markets integration are described and assessed. In the fifth section, a strategy to promote capital market integration in Latin America and the Caribbean is proposed. Brief conclusions are presented in the final part of the report.

Three important initial points concerning the report are noteworthy. First, attention is focused on delivering some practical recommendations for enhancing regional capital market integration, rather than on presenting a purely academic report. Second, most of the analysis presented here concentrates on the equity markets. This is done, not because the regional integration of debt markets is thought unimportant, on the contrary, but due to a lack of time and space, and also because many of the issues relevant for regional integration of the equity markets are the same as those relevant for regional integration of the debt markets. Last, many of the attempts at achieving regional capital market integration have not been well documented in public. There is frequently, therefore, a lack of authoritative information about such initiatives, and much of the information that is available comes from secondary sources.

## **2. Costs, Benefits, and Barriers**

The most extended and extensive examination of the costs and benefits of, and barriers to, regional capital market integration has been in the European Union (EU). Following an initial report by the European Commission in 1966, the European Commission has issued a report every ten years or so subsequently focusing on the merits of regional capital market integration, and on how it can be achieved.<sup>7</sup> On 17/7/2000 for the first time, however, the issue changed from one which was primarily of concern to European bureaucrats, to one which was seen as critically important at the highest political level, namely by the Economic and Finance Ministers of the EU. On that date they established a “Committee of Wise Men” to determine why the capital markets in Europe were not yet integrated, and

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<sup>6</sup> p. 1, Wellons (4/1997).

<sup>7</sup> See European Economic Community Commission (11/1966), Commission of the European Communities (1977a, b), (1980), (1988), & (11/5/1999).

what do in order to achieve this.<sup>8</sup> The Committee was established because it was recognised both that there were significant impediments limiting the integration of the European capital markets, but that great gains that could be achieved if such integration could be delivered. This section provides a summary of the costs and benefits arising from regional capital market integration, and also the barriers to its realisation. Lessons from the EU and else are incorporated in the discussion.

### *2.1. Cost and Benefits*

This summary of the costs and benefits that regional capital market integration can bring is composed of three parts. In the first, a listing of the major costs and benefits is provided. In the second, an example of the positive effects of integration in one segment of the capital markets in one region, namely between stock exchanges in Europe since 1986, is described. Finally the literature that discusses the relationship between financial development and economic growth is briefly summarised. More detailed examinations of the costs and benefits of different aspects of regional capital market integration are presented in various sections below.

#### **Summary List<sup>9</sup>**

The integration of a region's capital markets should lead to the following benefits:

1) **Lower Prices** for all financial services, as competition lowers transaction costs, and allows larger regional firms to exploit economies of scale and scope. These effects will be evident in all forms of intermediation, investment, and other capital market activities.

2) **More Efficient, More Liquid, and Broader Securities Markets**, with a likely increase in turnover.

3) **Innovative Financial Products and Services**.

4) **A Industrial Transformation** of all sectors of the capital markets industry.

5) **Cheaper Financing** for companies, given lower transaction costs.

6) **More Efficient Allocation of Capital** arising from the fact that savings can flow more easily and cheaply to investment, and because barriers to investment are dismantled.

7) **Higher Returns** on investments given lower transaction costs.

8) **Enhanced Risk-Return Frontiers** for investors who previously faced restricted opportunities, but who now can now diversify their investments to a greater extent than before.

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<sup>8</sup> Committee of Wise Men (9/11/2000).

9) **Improved Macroeconomic Performance** of the region's economy, producing higher economic growth with positive effects on employment and productivity, possibly resulting in more inward investment. Higher returns should also lower pension costs, with an attendant reduction of labour costs and enhancement of competitiveness.

As the Committee of Wise Men (9/11/2000) in the EU imply, these benefits should obtain broad political support, as they should be widely shared by a region's citizens, its small and medium sized businesses, and its large companies.

However, regional capital market integration may also lead to some of the following costs:

1) **Protected Industries will Lose Out**, and lobby hard to resist the effects of regional capital market integration.

2) **Some Individual Companies will Lose Out**, if they prove not to be competitive in the integrated market.

3) **Transition Costs** may have to be born by some market participants.

4) **Unanticipated Regulatory Costs** may be large. These may arise either directly in terms of regulatory fees, or indirectly in that the regulators enlarge, and market participants are required to pay these increased costs.

5) **Unanticipated Protectionism**: Even though the aim of regional integration is to enhance competition, the process to achieve this may be captured by vested interests.

### **A Positive Example: Competition between European Stock Exchanges**

One example in one region where integration of the capital markets has had dramatic and positive effects has been the competition between national stock exchanges in Europe since 1986. This integration has sharply reduced the costs of trading, enhanced the quality and quantity of services offered by exchanges, and increased the number and diversity of trading mechanisms available to market participants. Pagano (4/1997) provides a good summary of this integration process as follows:<sup>10</sup>

Until 1985, European equity markets still worked according to a blueprint laid out in the 19th century. Continental Europe featured call auction markets with open outcry dealing, where publicly licensed single-capacity intermediaries conveyed the orders of their customers and were compensated via statutorily fixed commissions. In London, stock trading was managed by dealers, called "jobbers", who received the customers' orders via single-capacity brokers, and commissions were fixed by the members of the exchange. In all countries, stock exchanges were closed membership organizations, with high barriers to potential entrants. Each exchange operated in isolation from the others, sheltered from competition by national regulations and especially by barriers to capital mobility and high costs of telecommunication.

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<sup>9</sup> This section draws on Committee of Wise Men (9/11/2000).

<sup>10</sup> The next four paragraphs are copied with permission, and also some small amendments, from Pagano (4/1997). See also Pagano & Roëll (10/1990).

These obstacles started to wither away in the mid-1980s. European integration led to increasing capital mobility and technology made telecommunications cheaper and more effective. At the same time, institutional investors stepped up their participation in international equity markets, and their hunger for international diversification led to a rapid increase in cross-border trading. In the last decade, the microstructure of European equity markets has changed dramatically. Trading costs have been reduced and the variety of trading mechanisms has increased substantially. Most European “blue chip” stocks are now simultaneously traded in continuous auction (or “order-driven”) systems and in dealer (or “quote-driven”) markets, not to mention the hybrid systems that have emerged in some exchanges. The pressure on trading costs and the proliferation of alternative trading mechanisms are both due to an unprecedented wave of competition among European exchanges.

In this ongoing competitive struggle, the balance between the contenders’ forces has shifted considerably. The London exchange, which started the competition with the inception of the SEAQ International (SEAQ-I) quote-driven trading system in 1986, was initially able to attract large trading volumes from Continental exchanges. In the late 1980s, London appeared on its way toward becoming the main marketplace for all the blue-chip European stocks. But in those same years, the main Continental exchanges underwent a radical restructuring of their trading mechanisms and regulations, introducing continuous, electronic order-driven systems, liberalizing access to their membership, reducing transaction taxes, etc. This strategy allowed them to stage a formidable comeback in the early 1990s. The London dealers’ share of trading volume in Continental stocks declined considerably. And even the London market for British stocks started facing the competitive pressure of order-driven trading systems, such as the London-based Tradepoint system, modelled on the Continental electronic auction markets, and EUROCAC, a new segment of the French Bourse specializing in British and other Continental stocks. As a result, after much controversy, the London Stock Exchange replaced its quote-driven SEAQ system with an order-driven system similar to those used in Continental exchanges, while retaining its traditional dealer market for large trades.

The proliferation of trading systems offers investors greater variety in the modes of execution of their orders, and exerts competitive pressure on trading costs. The wider choice is beneficial for all types of investors. Auction markets offer very cheap execution to investors who want to trade small amounts as well as to large traders who are willing to wait for their order to be executed gradually. Direct access by institutional investors to the limit order books of electronic markets is becoming more widespread. Dealer markets are increasingly confined to providing immediate execution to block traders who need protection against execution risk. The lower trading costs also benefit issuing companies, since the reduction in trading costs is reflected in higher issue prices for equities, and hence in a reduced cost of equity capital for public companies. This has induced more companies to go public, including new entrepreneurial companies.

Pagano worries that these benefits might be reduced to some extent by the adverse effects of fragmentation and a lack of transparency. However, his concerns have been disputed.<sup>11</sup>

### **The Relationship between Financial Markets and Growth**

There is a growing body of academic work that shows a positive relationship between the development of financial markets and growth, as discussed by the Wise Men (9/11/2000). To the extent that regional capital market integration furthers the growth in financial markets, it may therefore spur on economic growth.

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<sup>11</sup> For discussions about fragmentation, see ch. 8, Cohen et al. (1986), pp. 255-271 Lee (1999), ch. 13 Schwartz (1988), ch. 9, Schwartz (1991), and SEC (1/1994).

Levine (6/1997) studies the relationship between financial development and economic growth concluding that most of the theoretical reasoning and empirical evidence indicates that the development of the financial system plays an important role in the growth process. This contrasts with the view that the financial system is essentially irrelevant to economic growth and industrialization. He also argues that there is even evidence that the level of financial development is a good predictor of future rates of economic growth, capital accumulation, and technological change. Moreover, cross-country, case-study, industry-level, and firm-level analyses document extensive periods when financial development (or the lack of it) affects the speed and pattern of economic development. Levine notes that theory suggests that financial instruments, markets, and institutions arise to mitigate the effects of information and transaction costs. Differences in how well financial systems reduce information and transaction costs positively influence savings rates, investment decisions, technological innovation, and long-run growth rates.

Levine, Loayza, and Beck (8/2000) evaluate the nature of the effect of financial intermediary development on economic growth. Both the different econometric approaches they employ confirm the same fact, namely that the exogenous component of financial intermediary development is positively associated with economic growth. They also provide evidence that cross-country differences in the legal rights of creditors, the efficiency of contract enforcement, and accounting system standards help explain cross-country differences in the level of financial intermediary development, which in turn positively affects economic growth.

In a subsequent paper, Beck, Levine & Loayza (2000) study how financial development affects both economic growth and the sources of economic growth. They focus on how the development of financial intermediaries influence savings rates, physical capital accumulation, and total factor productivity growth. Although their findings do not confirm a relationship between financial intermediary development and either physical capital accumulation or private savings rates, they do find a significant positive link between financial intermediary development and both real per capita GDP growth and total factor productivity growth.

Levine and Zervos (6/1996) investigate the empirical link between stock markets development and long-run growth. Their data suggest that stock market development is positively associated with economic growth. Moreover, instrumental variables procedures indicate a strong connection between the predetermined component of stock market and economic growth in the long run. Levine & Zervos (6/1998) investigate whether well-functioning stock markets promote long run economic growth. They study whether measures of stock market liquidity, including size, volatility, and integration with world capital markets, are correlated with current and future rates of economic growth, capital accumulation, productivity improvements, and saving rates. They find evidence that stock market liquidity, as measured both by the value of stock trading relative to the size of the market and by the value of trading relative to the size of the economy, is positively and significantly correlated with current and future rates of economic growth, capital accumulation and productivity growth.

Rajan & Zingales (6/1998) examine whether financial development facilitates economic growth by scrutinising one rationale for such a relationship, namely that financial development reduces the costs of external finance to firms. They study whether industrial sectors that are relatively more in need of external finance develop disproportionately faster in countries with more developed financial markets, and find this to be true in a large sample of countries over the 1980s. The results suggest that financial development may play a beneficial role in the development of new firms, and that the existence of a well developed financial market may be a source of comparative advantage for a country or region with industries that are more dependent on external finance.

## *2.2. Barriers*

A wide array of barriers may hinder regional capital market integration. Although more detailed analyses of some of these are presented throughout the report, an initial general listing is provided here as follows:

1) **Currency Convertibility:** Without a convertible currency, the possibility of most types of market participant using the capital markets across borders will be severely restricted.

2) **Domestic or Regional Monopolistic or Oligopolistic Practices:** The presence of oligopolistic or monopolistic practices will lead to participants paying high than warranted costs, and may provide barriers to entry in particular segments of the region's capital markets.

3) **Multiple Regulators:** If market participants are subject to multiple regulators when they operate in different countries in a region, they are likely to face regulatory uncertainties, complexities, and increased costs, both directly in having to comply with multiple regulatory regimes, and indirectly in having to pay for the many regulators. These problems may be evident in all areas subject to regulatory oversight, and by all types of market participants. Inappropriate arrangements for cooperation and mutual assistance between national supervisors can also hinder regional capital market integration.

4) **Legislative and Regulatory Impediments** of many types can limit integration, including differences in bankruptcy regimes, sanctions regimes, restrictions on ownership by non-nationals, the imposition of national rules to protect national industries, requirements to establish local companies, and restrictions of many types on issuers, intermediaries, and investors in providing cross-border services. Local or regional laws may also be too detailed, and thus too inflexible in changing circumstances.

5) **Transaction Costs:** There will be an obstacle to regional financial integration, wherever any element of the cross-border trading process faces unnecessarily high costs. Amongst the functions where such high transaction costs may be evident are cross-border listing, information dissemination, order routing, trading, clearing via a central counterparty, and settlement.

6) **Taxation** can distort cross-border trading flows and the selling of financial products.

7) **Accounting** differences can hinder market participants' abilities to compare financial statements.

8) **A Lack of Information** about all aspects of capital markets across a region can obstruct regional integration. This includes information about regulatory requirements, exchange prices and quotes, company finances and strategies, investor allocation policies, or intermediary products and historical records.

9) **History and Culture**: There are many, sometimes intangible, factors related to a region's history and culture that may limit the possibility of capital market integration. These may include differences in language, and variations in attitudes towards corporate governance and investor protection.

### 3. Law and Regulation

The key question to be addressed in this section is can any regional legislative and regulatory initiatives better promote regional capital market integration than can local legislators and regulators acting by themselves. The reason for phrasing the question in the above manner is to highlight the fact that, contrary to a common belief, many regional initiatives have significant costs associated with them, as well as potential benefits. Whenever assessing the merits of a proposed regional initiative, therefore, it is vital to assess both its anticipated costs as well as its proposed benefits.

At the broadest level, regional legislative and regulatory initiatives normally seek to enhance the delivery of the three key objectives of regulation, as identified by the International Organisation of Securities Commissions (IOSCO), namely the protection of investors, ensuring that markets are fair, efficient and transparent, and the reduction of systemic risk.<sup>12</sup> Three of the most important ways in which the delivery of these objectives may be improved are: first, by lowering the direct costs of operating multiple regulators that market participants bear; second, by reducing the indirect costs that the existence of multiple regulators imposes on market participants, by dint of the fact that they have to comply with many different regulatory regimes; and, third, by enhancing competition at a regional level between the various types of participants in the capital markets – most importantly by reducing barriers to such competition.

The costs and benefits of four types of legislative and regulatory initiatives aimed at promoting regional capital market integration are discussed here in turn. They are: 1) sharing information between the regulators of different jurisdictions in a region; 2) harmonising regulation between jurisdictions; 3) establishing a system of mutual reliance between the regulators in a region; and, 4) creating a legal environment in which mutual recognition between regulators, and home country control, is accepted and enforced. The second and third options are examined together. As will become evident below, while each of these four initiatives is progressively more ambitious than the last in terms of its

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<sup>12</sup> IOSCO (9/1998).

anticipated benefits, each also has potentially more costs associated with it, a possibility that is frequently realised in practice.

### *3.1. Information Sharing*

One area where regulators have sought to cooperate at a regional level is in the sharing of information both about surveillance and enforcement actions against market participants, and in resolving crises in a market or at a particular firm. Such information-sharing arrangements may be valuable when examining a firm or a market that operates in more than one jurisdiction, where by definition a local, as opposed to a regional, view of the firm or market will always be limited.

Typically, regulatory information-sharing arrangements do not have any formal legal backing, but are established via a Memorandum of Understanding (MOU) which specifies the types of information which the participating regulators indicate they are willing to share, and the circumstances when they are happy to do so. Many such MOUs have been adopted, and indeed IOSCO supports their adoption, as indicated, for example, by the guidance it has prepared on the types of core information that market authorities may need to obtain, and should be prepared to share, during periods of market or firm crisis.<sup>13</sup>

The existence of an information-sharing MOU between regulators does not, however, mean that appropriate information will actually be shared.<sup>14</sup> The effectiveness of MOUs in general, and of information-sharing ones in particular, depends on the extent to which the regulators party to such agreements are willing to work together. If the aims of the regulators are congruent, then both institutions are likely to comply with the agreement. The pursuit of fraud, for example, is likely to be a key goal of many regulators. However, if the exchange of information impinges on other objectives of the regulators about which they may have differing views, the effectiveness of the MOU could be in doubt. This may, for example, be a problem when there is competition between different national markets. A regulatory agency in one jurisdiction could believe that by handing over certain information to a regulatory agency in another jurisdiction, it might harm the prospects of the financial centre which it supervised. In such circumstances, it is debatable whether an MOU, if one had been signed, would make any difference as to whether the information was released by the first regulator, or not.

### *3.2. Harmonisation and Mutual Reliance*

A conceptually simple way of reducing the costs that arise when different jurisdictions have different

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<sup>13</sup> IOSCO (11/1997).

<sup>14</sup> See Lee (10/1993).

regulations, and when capital market participants operating across boundaries have to comply with many jurisdictions' regulations, is to harmonise the regulations across jurisdictions. Any organisation operating across jurisdictions - be it an issuer, investor, intermediary or exchange - should thereby incur lower regulatory costs in complying with harmonised regulations, than if it had to comply with different regulations across jurisdictions.

One set of jurisdictions where regulatory harmonisation is being promoted is in Canada.<sup>15</sup> Securities regulation in Canada falls within the jurisdiction of the provinces and territories, rather than being a federal matter. Each province and territory has its own securities regulator, and there are thirteen of them operating with differing sets of rules and policies. This regulatory fragmentation is inefficient and costly for market participants, as they have to deal with the differences between jurisdictions.

Even though many capital market participants in Canada believe that transforming all of the provincial securities' and territories' regulators into a single national securities commission would produce a more cost-efficient and effective system of regulation than the current fragmented one, almost all accept that it is politically unrealistic, following three failed attempts over the past three decades. Instead, the securities regulators have sought to create a "virtual national securities commission", which has been defined as "a system of securities regulation administered by the various jurisdictions in such a way that the public is offered a level of efficiency and consistency that might be expected of administration by a single jurisdiction".

The Canadian virtual securities commission is being developed via an informal body composed of all the provincial and territorial securities regulators, called the Canadian Securities Administrators (CSA). The aim of the CSA is precisely to harmonise legislation, regulatory standards, and policies, and to coordinate the activities of the capital market regulatory authorities in the various jurisdictions.

In addition to this harmonisation, the CSA is constructing a regulatory framework based on mutual reliance between provincial and territory regulators. Mutual reliance, in this context, means that when a market participant, such as an issuer or a registrant, needs a regulatory response from more than one jurisdiction, participating commissions are willing to rely on the analysis and recommendations made by the staff in the other provinces' commissions. So, for example, if a company wishes to issue securities in more than one jurisdiction in Canada, the issuer need only deal with one principal regulator, usually the one in the jurisdiction where the company is located. That securities commission analyses the prospectus, provides comments to the issuer, and makes appropriate recommendations. The participating securities commissions of the other jurisdictions then agree that they will accept and rely on the recommendations of the commission in the principal jurisdiction. It should be stressed, however, that in this mutual reliance framework, each participating regulator retains the ultimate power and responsibility for regulatory decisions in its jurisdiction.

A similar initiative in the European Union that has sought to enhance the harmonisation of regulatory regimes in different jurisdictions is the Forum of European Securities Commission (FESCO), a body composed of the regulatory authorities in the European Economic Area.<sup>16</sup> It seeks to develop standards that complement the legal framework established by the European Directives (discussed below), or that cover areas where no European law exists. Each FESCO member is committed to implementing these standards in its home jurisdiction. The key areas where FESCO hopes to contribute to greater regional cooperation are in surveillance and enforcement.

The intended benefits of both the CSA and FESCO are similar. They can reduce duplication of effort, free resources for other regulatory matters, enhance consistency of analysis and decisions; and simplify and speed up regulatory rulings. They also have the strength of having the participation of all the regulators in their respective regions, including some which have traditionally been extremely sensitive to issues of jurisdiction, while at the same time having the flexibility to respond to local sensitivities.

Both the CSA and FESCO also, however, face similar problems. Both work by consensus, which means that the harmonisation of policies and rules takes a long time. The consensual process also means that individual jurisdictions may be able to insist on anti-competitive harmonised rules in order to protect their national interests. Neither body has any legal powers of enforcement, nor are their recommendations binding. The implementation of decisions in the different jurisdictions is dependent upon the regulatory powers granted to each respective regulator, and these differ widely. Other relevant areas of law and policy vary between local jurisdictions, and these can limit the effectiveness of the regulatory harmonisation achieved. Each regulator in all the local or national jurisdictions in the region, still of course exists, and has to be paid for by market participants. Finally, and most importantly, harmonisation is unnecessary if mutual recognition and home country (or jurisdiction) control, as discussed next, are implemented. This is because together mutual recognition and home country control mean that individual firms only have to comply with the single regulatory structure of in their home country, and there is thus no need to lower the costs of having to comply with multiple regulators by harmonisation.

### *3.3. Mutual Recognition and Home Country Control*

The most ambitious legislative and regulatory approach that has been used to promote regional capital market integration has been the combined use of minimum harmonisation, mutual recognition, and home country control, developed in the European Union (EU). The central goal of this program is extremely simple, but also extremely powerful: to enhance competition in the EU's regional capital market, by allowing market participants from any single

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<sup>15</sup> The discussion about Canada draws heavily on Brown (24/2/1999) and McGlaughlin (1/2000).

<sup>16</sup> See FESCO: <http://www.eurofefesco.org/>.

country in the EU to offer their services throughout the EU, and critically importantly, to do so, in most circumstances, with only a single regulatory authorisation from its home country. Given the importance of the EU's legislative structure governing the capital markets as a potential model for Latin America and the Caribbean, three aspects of it are outlined here: the primary legal foundation supporting the approach, some secondary pieces of legislation implementing it, and finally, a range of problems to which it has given rise.

### **Legal Foundation<sup>17</sup>**

The legal foundation for the EU is laid out in the Treaty of Rome, which establishes the fundamental European freedoms of movement and of establishment.<sup>18</sup> The freedom of movement of services gives nationals who are established in one country (or Member State) the right to provide services in other Member States. The freedom of establishment allows a natural or a legal person (namely an individual or a firm) from one Member State to set up and manage a firm in another Member State, under the conditions laid down for the nationals of the second Member State. A third and critical element of the Treaty is that competition should not be inhibited in an inappropriate manner. These legal rights can be upheld via judicial review in the European Court. The European legal and judicial structure applies to those EU countries with a tradition of common law, and to those countries with a tradition of civil law.

The freedoms of movement and establishment are not completely without limits. Member States are allowed to impose restrictions on both these freedoms on various grounds, including that of "public policy". In addition, the European Court has recognized a series of "mandatory requirements" that Member States may impose in the absence of EU rules, even if such impositions obstruct the exercise of the European freedoms.<sup>19</sup> These mandatory requirements include ensuring the effectiveness of fiscal supervision, the fairness of commercial transactions, and the defence of the consumer.

Following the passing of the Single European Act, the Treaty of Rome was amended to mandate the European Commission to draft a programme of secondary legislation to bring about what is called the "Single Market". The aim of this is to make the EU "an area without internal frontiers in which the free movement of goods, persons, services and capital is ensured".<sup>20</sup> Although these freedoms were already guaranteed in the original Treaty, the Single European Act was passed for several reasons. Amongst these were that it was believed that reliance on appeals to the European Court to uphold the Treaty would be costly, time consuming, and unpredictable, and that the many technical and other barriers that were seen as restricting the European freedoms could best be removed by direct secondary legislation.

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<sup>17</sup> This section draws on Lee (1996).

<sup>18</sup> Treaties Establishing the European Economic Community (Treaty of Rome) (1957).

<sup>19</sup> Rewe Zentral AG v. Bundesmonopolverwaltung für Branntwein.

<sup>20</sup> Article 8a, Treaty of Rome (1957).

## Secondary Legislation

Although the process by which secondary legislation is passed in the EU is complicated, certain elements of it have important implications for the nature of the law that is adopted, and indeed have critically affected the legislation intended to promote the integration of the European capital markets. The basic and initial elements of the “co-decision” procedure normally now employed are as follows.

The European Commission initiates secondary legislation, making a proposal to the Council of Ministers of all the Member States. The European Parliament then delivers an opinion on the proposal to the Council. The Council then discusses the proposal, and amendments to it, before voting on it, typically using a qualified majority scheme, in which different Member States have different numbers of votes, with the larger countries having more votes than the smaller countries. If the proposal is accepted, the proposal is again communicated to the European Parliament, which then votes to accept or reject the proposal. Once a proposal is finally passed into European law, following further EU institutional procedures, it then has to be transposed or, equivalently, implemented into national law in each of the Member States. This means that each Member State has to take the EU proposal and adopt an appropriate form of it via their national parliaments into their own law. If Member States do not do this, or if they do but do not then follow the law, the European Commission can ask the European Court to review their actions, so as to enforce the EU legislation.

Three linked strategies have been employed to achieve the Single Market for financial services: the harmonization between Member States of the minimum standards for the prudential supervision of financial institutions; the mutual recognition by each Member State of the competence of the supervisory bodies in each other Member State for the governance of these minimum standards; and the assignment of the supervision of a financial institution to the home country of that financial institution, in those areas that have been harmonized between Member States.

These strategies have been used in a wide range of secondary legislation to promote the Single Market for financial services. Amongst the issues addressed have been: the admission of stocks to an official stock exchange quotation;<sup>21</sup> the particulars that should be published for securities admitted to an official stock exchange listing;<sup>22</sup> the contents of public offer prospectuses;<sup>23</sup> the information that companies admitted to an official stock exchange listing should publish on a regular basis;<sup>24</sup> the criteria for determining when the purchase or sale of a major shareholding in a

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<sup>21</sup> Council Directives 79/279/EEC and 82/148/EEC. Full details for all EU legislation referred to here are in European Commission (1993).

<sup>22</sup> Council Directives 80/390/EEC, 82/148/EEC, 87/345/EEC and 90/211/EEC.

<sup>23</sup> Council Directive 89/298/EEC.

<sup>24</sup> Council Directive 82/121/EEC.

listed company should be disclosed;<sup>25</sup> the standards for pooled investment vehicles, termed undertakings for collective investment in transferable securities;<sup>26</sup> insider dealing;<sup>27</sup> and the minimum capital requirements that banks and securities firms must have in order to obtain a passport to operate their securities trading businesses throughout the EU.<sup>28</sup> Cooperation between securities regulators for dealing with cross-border practices and trading is only lightly covered by relevant legislation, and the investigative powers of national authorities and sanctions are not defined at the EU level.

One important piece of secondary legislation in the EU, the Investment Services Directive (ISD), allows firms that provide investment services, such as broker-dealers, to obtain what is called a “European passport”. This passport gives investment services firms the right, under certain circumstances, to provide their services without restriction throughout the EU.<sup>29</sup> The ISD details the conditions under which the three pronged approach of minimum harmonization, mutual recognition, and home country control, for the provision of investment services is to operate. It specifies how once an investment firm is appropriately authorized in its home Member State, the firm must be allowed to offer its services in all other Member States without the need for further authorisation. Member States must permit investment firms to become members of, or be given access to, all “regulated” markets, as defined in the Directive, in their jurisdictions. National restrictions on the number of members of “regulated” markets must also be eliminated.

The ISD identifies a range of activities denoted as investment services, and lays out various criteria that Member States’ competent authorities must require a firm to satisfy, both in its initial authorisation, and in its ongoing operations, before the firm can obtain the European passport. These include that the firm’s directors be sufficiently experienced; that it have appropriate measures for administrative and accounting procedures, for safeguarding clients’ securities and funds, and for recordkeeping; that it avoid any conflicts of interest in its operations, or that if such conflicts do arise, it provide for the fair management of them; and that its employees act fairly and honestly.

There are several so-called “general good” provisions in the ISD that allow a Member State to justify the application of national regulations which restrict the fundamental European freedoms. In particular, a Member State may justify the establishment of particular rules of conduct for investment firms in the general good, if such rules protect either the stability and sound operation of the financial system, or if they protect investors. The Directive also allows Member States to create restrictive rules governing the form and content of advertising by investment firms, again in the interest of the “general good”.

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<sup>25</sup> Council Directive 88/627/EEC.

<sup>26</sup> Council Directives 85/611/EEC and 88/220/EEC.

<sup>27</sup> Council Directive 89/592/EEC.

<sup>28</sup> Council Directive 93/6/EEC.

In certain circumstances, the Directive allows a Member State to require that all trades by resident or established investors be concentrated on a “regulated” market. If a Member State applies the concentration principle, however, it is obliged to give the market participants to whom the principle applies, the right not to comply with the principle and thereby to have their transactions executed away from a regulated market. Member States must allow a regulated market from another Member State to establish automated trading facilities in their jurisdiction, without any additional regulatory approval other than the recognition the regulated market received in its home Member State.

### **Problems<sup>30</sup>**

There are many problems in the EU’s legislative and regulatory structure for the European capital markets which mean that its intended goals are not being achieved. These problems are not just theoretical. As noted above, they have been deemed so important that, very unusually, the EU’s Council of Economic and Finance Ministers appointed a so-called “Committee of Wise Men” with three broad mandates:

to assess the current conditions for implementation of the regulation of the securities markets in the European Union;

to assess how the mechanism for regulating the securities markets in the European Union can best respond to developments underway on securities markets;

and in order to eliminate barriers and obstacles, to propose as a result scenarios for adapting current practices in order to ensure greater convergence and cooperation in day to day implementation, taking into account new developments in the market.

Five major sets of problems with the EU’s legislative and regulatory structure for European capital markets are now briefly discussed. They are the lack of competition, the lack of a theory of harmonisation, the lack of harmonisation and of home country control, the ineffectiveness of the European Court, and the ambiguity, rigidity and slowness in the legislative and regulatory structure.

#### Lack of Competition

The underlying goal of the Single Market programme in European capital markets is one of economic liberalism: the essence of the freedoms of movement and of establishment is that they are pro-competitive. Despite this, however, the Single Market programme has actually been used to obstruct competition, primarily by national authorities attempting to protect their own financial markets.

It may occur when Directives are first being created and passed into law. Many attempts, for example, were made to create in the ISD a legislative tool to limit competition between the trading markets of the EU, all in the name of enhancing fairness and investor protection. The lack of transparency in the agendas, discussions, and procedures, meant that important discussions concerning the substance of the Directive remained confidential, and that the way to

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<sup>29</sup> Council Directive 93/22/EEC.

influence the decision-making process was through informal lobbying and privileged access. The political process of negotiation together with the qualified majority voting scheme also allowed protectionist tendencies to flourish.

Once passed, there are also many ways in which EU secondary legislation may allow a Member State to establish national law in a manner that suits its own markets, but not those of other Member States. The ISD, for example, may be used to support anti-competitive behaviour through the implementation of the conduct of business rules for investment firms. The establishment of such rules is one of the areas of supervision that remain the responsibility of a host Member State, rather than that of the home Member State of an investment firm. Given that there is no statutory definition of what the “general good” means, interpretation of the phrase has to rely on the European Court and its judgments. Five principles have been developed to decide when use of the “general good”, and similarly the public policy clauses in the Treaty and the mandatory requirements recognized by the European Court, may justify the establishment of rules which restrict the fundamental European freedoms. The principles may be denoted as “non-harmonization”, “non-discrimination”, “non-duplication”, “objective justification”, and finally “proportionality”.<sup>31</sup>

When these criteria are satisfied, the European Court has accepted that the protection of consumers may justify national measures that restrict the fundamental European freedoms. In the insurance sector, for example, the Court has found that restrictive rules could be implemented because insurance was a “particularly sensitive area from the point of view of the protection of the consumer both as a policy holder and as an insured person”.<sup>32</sup> The sensitivity was said to arise because consumers have to enter into a long term relationship with their insurers, because the timing of execution of an insurance contract is uncertain, and because consumers may not have enough information to be able to gauge the long term financial soundness of their insurers. The Court did, however, recognise that the application of restrictive national laws to large and sophisticated institutions might not be justifiable on the grounds of the general good.<sup>33</sup>

Member States can frustrate the liberalising intentions of the Single Market programme via both the implementation and the enforcement processes. They take extended periods of time to implement Directives into national law, and once implemented sometimes do not enforce them.

One of the lesson that can be learned from the EU experience, that where it has encouraged regulatory competition, this has lead to better and cheaper regulation. Despite worries that there might be “race to the bottom” in terms of regulatory regimes, with regulators attempting to deliver lighter and lighter supervision at the expense of

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<sup>30</sup> See Committee of Wise Men (9/11/2000), Lee (1996), and Steil (1996).

<sup>31</sup> Katz (1992) and Van Gerven (1990).

<sup>32</sup> Commission v. Germany.

<sup>33</sup> Buet, R. and Educational Business Services SARL v. Ministère Public.

desired regulatory goals, this has not occurred. It is not a strategy that attracts private sector market participants.

### Lack of a Theory of Harmonisation

Despite the centrality of the notion of harmonization to the stated goals of the EU Single Market programme, neither the Commission nor the other European institutions have constructed a credible set of criteria to decide what should be harmonized at the EU level and what should be left for Member States to regulate. The need for such a theory is simple and compelling. Without one, not only will any decision as to what to harmonize be arbitrary, but also there will be no reason why any particular act of harmonization should be expected to have beneficial effects. This is particularly evident in the legislation governing the capital markets, where the lack of a theory of harmonization has meant that many laws have been passed the need for which is highly questionable. The merits of competition between different trading systems, between different listing requirements, and between different prospectus requirements, for example, all debatably outweigh the need for the harmonization that has been attempted.

### Lack of Harmonisation and of Home Country Control

Despite the stated goal of harmonisation in the EU Single Market program, there are many ways in which Member States continue to impose differing regulations on the same activities. This applies to all types of capital market participants, including issuers, investors, intermediaries and exchanges. For example, the EU passport for issuers is still not a reality – companies wishing to raise capital in many EU jurisdictions are obliged to comply with different or additional requirements in order to gain the approval of local Regulatory Authorities. There is no agreed definition of a public offer of securities, with the result that a similar issue of securities is classified as a private placement in some Member States and not in others. Rules on the disclosure of price sensitive and relevant market and company information also differ greatly between Member States. Professional investors are often subjected to multiple sets of conduct of business rules. There is still no legally agreed definition of what constitutes a professional investor, despite some recent progress. Retail investors are faced with different sets of consumer rules with varying levels of consumer protection. There is no agreed definition of market manipulation. Effective functioning of cross-border clearing and settlement is still impeded by legal differences in the treatment of collateral. Investment firms now have a European passport but are often subject to multiple conduct of business rules.

The effective lack of harmonisation and of home country control in the EU means that market participants still have to obtain appropriate regulatory authorisations from most of the EU countries in which they operate with the attendant costs this entails.

### Ineffectiveness of European Court

Reliance on the European Court to resolve problems with national implementation and enforcement of EU

legislation is ineffective. The Court's workings are too slow, and it does not have the expertise necessary to evaluate the rapidly changing trading mechanisms and products of the financial markets. Furthermore, the Commission has shown a reluctance to use the European Court to combat recalcitrant Member States for several reasons: the likelihood that the Court's rulings will not be enforced, and that this in turn may undermine the standing of the Court; ambiguities in some of the legislation; a lack of Commission resources; and a low number of complaints.

#### Ambiguity, Rigidity, Slowness

The necessity of obtaining a political consensus in the voting structure of the European Council of Ministers when negotiating new legislation, can lead to the adoption of ambiguous texts or texts with a level of harmonization so minimal that no real integration is achieved. One of the reasons for this is the lack of transparency in the procedure by which negotiations are conducted, and the arbitrariness of the political process. The ISD, for example, does not give sufficient clarity about whose conduct of business rules should apply to wholesale business. The same provisions are often interpreted and applied by Member States in a very different manner. Without legal clarity, no efficient delivery mechanisms can subsequently guarantee equivalent implementation.

EU legislation is also time-consuming and difficult to achieve, and once obtained is difficult to change. Even when political problems do not arise, it takes three years on average to agree a Directive. Such a timescale means that legislation cannot keep pace with the capital markets, given their complexity and the speed at which they are developing. There is no rapid mechanism in place to update Community Directives to new market developments, and importantly, the Single Market programme relies too much on legislation for determining detailed rules.

## **4. Cooperative Initiatives in Market Infrastructure**

Key types of cooperative initiatives in the provision of market infrastructure that can be used to promote regional capital markets integration are described and assessed in this section. Attention is focused on examining and evaluating projects between organisations that deliver the following seven important market infrastructure functions: listing, information dissemination, order routing, trading, clearing via a central counter-party, settlement, and marketing. In addition, some general comments on the success and failure of different types of linkages and cooperative efforts at regional market integration are provided.

The discussion concentrates on cooperative projects between market infrastructure providers because these are frequently projects which affect the public interest, which are large in nature, and which governments and regulators seek both to instigate and to supervise. It is vital to stress, however, that competition, rather than cooperation, between all types of market participants, including infrastructure providers, is one of the most powerful drivers towards regional capital market integration. Private self-interest is normally sufficient to promote such competition, as long as there are

no regulatory barriers impeding it. There is little need here, therefore, to explore the incentives market participants need in order to take competitive actions that enhance regional integration. As discussed above, they simply need to be allowed to conduct their business across borders without restrictions.

#### *4.1. Listing*

There are many reasons why a company may choose to obtain a listing outside its home country:<sup>34</sup>

1) **To obtain cheap financing.** Firms may decide to list abroad to take advantage of a relatively high price for their shares compared to that available on their home market.

2) **To improve the liquidity for its shares.** A company may choose to list its shares on a foreign exchange, as well as a domestic one, because competitive pressure between the exchanges can narrow the dealing spreads on the domestic market, and thereby raise trading activity.<sup>35</sup> However, a cross-listing may not always lead to greater liquidity for a company's shares, especially when the transmission of relevant information between the markets is constrained in some way.<sup>36</sup>

3) **To enhance improve its corporate visibility and status.** By listing abroad a company may enhance its image and that of its products, and also obtain the prestige of being listed on a well-known exchange. A cross-listing can act as an advertisement for a company's products abroad and thereby increase its sales.

4) **To support the implementation of corporate strategies.** These might include raising capital for mergers and acquisitions abroad.

5) **To alleviate market segmentation.** This may be obtained by listing abroad so as to reduce barriers to foreign investors arising, for example, from regulation, transaction costs, or from a lack of information available from the company's domestic market.

6) **To develop a broad shareholder base.** A foreign listing may bring a company a wide range of individual and institutional investors, that in turn can enhance the demand for the company's shares and provide stability for its share price.<sup>37</sup>

7) **To obtain good analyst coverage of its stock.** A listing in a large financial centre with many skilled analysts may affect the terms at which equity finance is available, by reducing informational asymmetries in the primary market.

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<sup>34</sup> See Baker & Johnson (1990), LSE (1999), NYSE (1999), and Pagano, Roëll & Zechner (12/2000).

<sup>35</sup> See Foerster & Karolyi (1996) and Smith & Sofianos (1997).

<sup>36</sup> See Domowitz, Glen & Madhavan (1998).

8) **To obtain high standards of regulation.** This might include good monitoring of the trading in its securities, high disclosure requirements, and high standards of corporate governance.

9) **To reduce political risk.**

When considering what methods, if any, might be taken to enhance regional capital market integration in the context of listing, it is vital to clarify what listing means. Historically, once a company satisfied an exchange's listing requirements, namely certain minimum initial and on-going standards for investor protection, the company was said to be listed on the exchange, and its shares would be traded on the exchange's trading system. This is still the situation in many jurisdictions. However, in some jurisdictions a distinction has arisen between a security being admitted to listing, and a security being admitted to trading.

In these jurisdictions, admission to listing refers only to the process of being listed in accordance with the relevant legislation, namely satisfying the minimum initial and on-going requirements, under the supervision of a designated listing authority. Such an authority may be an exchange, as was normally the case in the past, or it may be a regulator distinct from any exchange. Admission to trading, in contrast, refers to the process by which an exchange, or other form of trading system, chooses to let a particular security be traded on its dealing mechanism. This is not a regulatory decision, and remains the responsibility of exchanges and trading systems. In the jurisdictions where this distinction has arisen, an exchange can now admit securities to trading while not being in charge of admitting them for listing. In a regional context, a key question concerns whether an exchange in one jurisdiction can admit securities for trading that are admitted for listing in another jurisdiction.

It is always a company which has the right to choose whether to apply for its shares to be admitted for listing in a particular jurisdiction, by satisfying the appropriate listing requirements and paying the costs of listing. On the other hand, it is only exchanges or other types of organisation which provide trading systems for securities, that have the right to allow particular securities to be traded on their trading systems.

Most of the benefits to a company of listing abroad can be obtained in a regional environment in which listing authorities (be they exchanges or non-exchange regulators) compete with each other to attract listings, and in which the providers of trading systems (be they exchanges or other forms of organisation) compete with each other to attract trading. There have nevertheless been various cooperative attempts at promoting cross-listing and/or cross-trading – most of which have failed.

The most ambitious cooperative attempt at allowing companies listed on one exchange in a region to be listed and traded on other exchanges in the region was a project called EuroList, proposed in 1990 by the Federation of Stock

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<sup>37</sup> See Stulz (1999).

Exchanges of the EC (now called the Federation of European Stock Exchanges). The aim of EuroList was to allow the largest European companies to be officially and simultaneously listed, and thus traded, on all stock exchanges in the EU. It was thought that this would be advantageous to issuers because they would gain a “European” status by being showcased on such a list, and to investors, thanks to multiple market access and hopefully increased liquidity. Investors would also be able to trade on their national stock exchange with which they were familiar. It was anticipated that companies would be required to pay a listing fee for multiple listings, in addition to their national listing fee, and that each country would choose the domestic companies that it wished to quote on the European list. Prices of multiple-listed issues would be quoted in their domestic currency, in the currency of the national exchange on which they were quoted, and possibly also in ECU. A central element of the project involved the creation of a network enabling a company to give information to the domestic exchange on which it was listed, which could in turn then transmit the information instantly to the other exchanges on which the company’s shares were listed.

The Eurolist project was never implemented for several reasons. Amongst these were that it was seen by the London Stock Exchange (LSE) as an attempt by the continental European stock exchanges (and particularly those in France, Belgium and Italy) to buttress their positions against the perceived success of London at the time of attracting trading in continental European stocks. One of the most important other reasons why the project failed was that there was little demand for it by the major European corporations.

#### *4.2. Information Dissemination*<sup>38</sup>

Information dissemination is the act of transmitting pre- and post-trade data, about quotes and trades respectively, to market participants. In a regional context, and specifically when there are multiple arenas in which trading may be undertaken, a key question arises as to whether, and how, information about quotes and trades should be consolidated. The jurisdiction which has been most aggressive in mandating the publication and consolidation of prices and quotes is the US, via its “National Market System” (NMS). The concept of the NMS may be viewed both as a set of objectives which Congress ordered the SEC to pursue, and as the institutions that have been established in order to deliver these objectives.<sup>39</sup> Congress found that,

It is in the public interest and appropriate for the protection of investors and the maintenance of fair and orderly markets to assure

- (i) economically efficient execution of securities transactions;
- (ii) fair competition among brokers and dealers, among exchange markets, and between exchange markets and markets other than exchange markets;

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<sup>38</sup> This discussion is drawn from pp. 121-128 Lee (1999).

<sup>39</sup> The SEC has imposed many obligations on exchanges and other market participants to implement the price and quote dissemination elements of the NMS that are not discussed here.

(iii) the availability to brokers, dealers, and investors of information with respect to quotations for and transactions in securities;

(iv) the practicability of brokers executing investors' orders in the best market; and

(v) an opportunity, consistent with the [above] provisions ..., for investors' orders to be executed without the participation of a dealer.<sup>40</sup>

The SEC initially passed three key rules to implement the NMS goals with regard to the dissemination of price and quote information: the "last sale rule", the "quote rule", and the "display rule". The last sale rule requires that a report be published of all trades in "national market securities".<sup>41</sup> Such securities include all exchange-listed stocks and the largest Nasdaq stocks.<sup>42</sup> The price and volume of the transaction and the marketplace where each transaction is executed must be reported. No vendor may be prohibited from re-transmitting the data available from a transaction reporting plan, provided they pay the appropriate fees.

The firm quotation or quote rule requires each broker or dealer to communicate promptly to its exchange its best bids and offers and associated quotation sizes for all relevant securities. It also requires that each exchange make available to quotation vendors, the highest bid and the lowest offer for the relevant securities, plus the quotation size or aggregate quotation size.<sup>43</sup> The aggregate quotation size is the sum of the quotation sizes of all responsible brokers or dealers. Each exchange must also be able to identify and disclose to other members of that exchange, the brokers or dealers making the relevant quotes. A series of important amendments to the quote rule have been made in order to improve the handling and execution of customer orders by brokers and dealers.<sup>44</sup> These concern so called "electronic communications networks" (ECNs), and "alternative trading systems" (ATS).

The third key rule created to implement the NMS, the display rule, requires that if a vendor disseminates last sale data for securities subject to mandatory trade reporting, it must distribute the "consolidated" price, the "consolidated" volume, and an identifier indicating the market centre where trades occur.<sup>45</sup> Similarly, a vendor disseminating quotation information, must distribute consolidated quotation information which must include, the "best" bid and offer for such a security, the quotation size or "aggregate quotation size" associated with the best bid and offer, and identifiers indicating the market centres which reported these quotes, or a "quotation montage" from all other reporting centres.

The "consolidated" price and volume is the price and volume of the most recent transaction from all reporting market centres. The "best" bid and offer for listed securities is the highest bid or lowest offer quoted by any reporting

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<sup>40</sup> Section 11(A), SEA (1934).

<sup>41</sup> Section 240.11Aa3-1, C.F.R.

<sup>42</sup> Those aspects of the NMS that refer to Nasdaq stocks are for the most ignored in the rest of this section.

<sup>43</sup> Section 240.11Ac1-1, C.F.R.

<sup>44</sup> SEC Release No. 34-37619 (29/8/1996).

centre, with bids and offers of equal values ranked first by size, and then by time, for exchange listed securities. A “quotation montage” shows best bids and offers from all reporting market centres.

Two key institutions were developed to bring coordination about information dissemination in the NMS: the Consolidated Quotation System (CQS) and the Consolidated Tape Association (CTA). The CQS was established to implement the firm quotation rule.<sup>46</sup> It is a mechanism for making available to data vendors information about the bid and offer quotations and associated volumes, for eligible securities from the markets which participate in the NMS. The bid and ask quotes from all the exchanges, are combined to obtain a consolidated Best Bid and Offer (BBO). The CQS disseminates both the BBO and all the quotes provided by all the participants. The source of each quote, and the relevant exchange or the market maker, are also identified.

Administration of the CQS is undertaken by an operating committee which is composed of one representative from each “plan participant”, namely each exchange and the NASD. Each participant has one vote on the committee, and amendments to the CQS Plan require unanimity. The participants share in the income and expenses associated with publishing the quotation information. Any net income from the sale of the CQS information is divided up proportionally between the different exchanges according to their relative “annual shares”. The “annual share” of an exchange for any calendar year is essentially the total number of last sale prices of the network’s eligible securities reported by the participant divided by the total number of reported last sales. The CTA was established to consolidate the last-sale reporting of all trades in exchange-listed securities.<sup>47</sup> Trade reports by participants must be made promptly, so that under normal conditions not less than 90% of such prices must be reported within one and a half minutes. Administration of the CTA is undertaken by a similar committee to that running the CQS.

There has been much controversy about the merits of consolidating price and quote information in the US.<sup>48</sup> The proponents of mandatory price and quote transparency believe, in essence, that it promotes almost all the key goals that regulation of the securities markets should seek to deliver, namely investor protection, fairness, competition, market efficiency, liquidity, market integrity and investor confidence. They therefore argue that mandatory price and quote transparency should be a fundamental and universal cornerstone of the regulation of exchanges and markets. Others have argued, in contrast, that such a policy may be inappropriate in that it does not recognise that there may be significant trade-offs between the attainment of different regulatory goals. In particular, they claim that mandatory transparency can compromise the delivery of the two key goals of efficiency and liquidity. Private incentives as opposed to regulatory fiat, are thought best to lead to the level of transparency that most effectively delivers these goals.

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<sup>45</sup> 240.11Ac1-2, C.F.R..

<sup>46</sup> See CQS (12/1995).

<sup>47</sup> See CTA (12/1995). It started operating on 30/4/1976.

More practically each exchange has a strong incentive to publish appropriate amounts of information about prices and quotes, and data vendors have a strong incentive to consolidate by themselves all relevant information about such prices and quotes.

Whatever the merits of the above arguments, a further lesson of the American experience for regional attempts at consolidating price and quote information, is that it is an extremely political exercise that takes a long amount of time to realise.

### *4.3. Order Routing*

Order routing is the act of delivering orders from their originators, such as investors and financial intermediaries, to an order execution mechanism or trading system. Orders may be delivered by hand, cart, telephone, telex, fax, the internet, or any other information distribution mechanisms. The longest running regional integrated order-routing facility has been the Intermarket Trading System (ITS) developed in the US, again at the prompting of the Congress and the SEC.

The goal of the ITS is to provide an intermarket communications linkage by which a member of one exchange may trade with a member from another exchange, provided that the first exchange furnishes continuous two-sided quotes in the security.<sup>49</sup> Operation of the ITS presupposes the existence of a mechanism such the CQS to disseminate quotes in the market, as market participants must be able to see which exchange is quoting the best price in the security in which they are interested. A member of a participating market wishing to trade at a price quoted on another market, can send a “commitment to trade” to the other market. A “commitment to trade” is a firm order which is good for a pre-specified period of either one or two minutes. If the quote is still available at the market to which the commitment to trade is sent, or if a better price is available, and if the market rules permit an execution at that price, the market must accept the commitment and execute the order. If the commitment is not accepted within the specified time frame, it is automatically cancelled. Partial executions may occur. All the exchanges and Nasdaq participate in the system.

In the mid-1980's five order-routing linkages between various securities exchanges in the USA and elsewhere were proposed.<sup>50</sup> Of these, three were linkages between an American and a Canadian exchange, and the other two were between an American stock exchange and the LSE. Only three of the proposed linkages were actually established, and all of them subsequently failed. The most ambitious was between the American Stock Exchange (AMEX) and the Toronto Stock Exchange (TSE). It was between two primary markets, it was intended to involve trading in different

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<sup>48</sup> This paragraph is drawn from the discussion on pp. 255-271 Lee (1999).

<sup>49</sup> The ITS arose as a result of Section 11A(a)(3)(B) of the Act and SEC Rule 11Aa3-2. Since its inception, it has been amended many times.

currencies, and it joined two trading floors with many dissimilar trading procedures, including different market making systems, different priority rules for the execution of orders, and somewhat different concepts of agency and principal transactions. Amongst the anticipated benefits of the link were that it would give investors in both countries an opportunity to obtain the best prices in either country for dually listed stocks, faster executions, more cost-effectiveness, and greater liquidity.

The linkage started with a pilot scheme that allowed orders to be sent from the floor of the TSE to the floor of the AMEX for execution. Although it was also intended to facilitate a northbound flow of orders from the AMEX to the TSE, this was delayed because the TSE did not initially have the ability to provide a currency transaction at the same time as a northbound stock trade was executed through the linkage. Each exchange displayed on its trading floor the quotes distributed by the other exchange in the linkage stocks. Quotes on the AMEX were in US dollars, while those in Toronto were at first in Canadian dollars. Orders were transmitted between the two trading floors using the existing automated routing systems of the two exchanges. Initially, only “marketable” limit orders were sent over the linkage. These were orders for which the price was equal to, or better than, the quote then being displayed at the receiving exchange. Such orders were treated as “immediate or cancel” orders, to be promptly executed or cancelled depending on whether they were marketable when received by the relevant market maker at the receiving exchange. Agency orders were guaranteed an execution up to a minimum amount of shares. It was planned to accommodate “away from the market orders”, namely orders whose prices were worse than the best available quote at the receiving exchange, at a later date. The linkage was initially available only for dually-listed stocks, namely stocks traded on both the AMEX and the TSE. Transactions were cleared and settled through an interface between the American National Securities Clearing Corporation and the Canadian Depository Service.

The AMEX/TSE link began operating on 24/9/1985. Six stocks were listed on the link to begin with, though this number later increased to twenty. It was perceived as obtaining a minimal order flow, most of which was between the specialists on the two exchanges’ floors. The average ratio of southbound to northbound transactions was approximately 5:1. A TSE report noted that although such a ratio might be “interpreted as a loss of market share by the TSE to AMEX ... any such interpretation should take into account that some southbound order flow may have been a result of offsets for TSE trades. As such, a trade on the AMEX may not necessarily take away an opportunity for a trade on the TSE but take place only because a trade was done on the TSE”. The linkage was discontinued at the end of 1988 as being uneconomical to run.

The value of cooperatively-run order-routing systems has been controversial. On the one hand, the ITS has been seen by some in the US as an essential element of the NMS, and as a means of ensuring that competition between

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<sup>50</sup> This discussion is taken from pp. 73-76 Lee (1999).

markets is enhanced by ensuring that orders are always routed to the trading system which has the best quote on it. On the other hand it has been viewed both as harmful - in that it encourages quote-matching - and as anti-competitive - in that it preserves a function for stock exchange floor members and does not threaten the central role of specialists, precisely when new technology can disintermediate such intermediaries.<sup>51</sup> Two common criticisms of cooperative, as opposed to privately established, order routing systems are that there is little demand for them, and that market participants themselves have the best incentive to deliver good order-routing systems, as they can attract more business by doing so;

#### *4.4. Trading*

A trading system or order execution mechanism lies at the heart of any market. There are many ways in which in which operators of trading systems in different countries might cooperate to promote regional market integration. In order to gain an understanding of some of the pivotal issues that need to be addressed in such cooperative ventures, four that have been attempted, and the lessons that can be learned from each, are summarised in turn. The four cooperative ventures are: NOREX in Scandinavia; BVRM in West Africa; Euronext in France, Italy and the Netherlands; and iX in Germany and the UK. Given the difficulties in obtaining information about some of these ventures, the accounts presented here should not be viewed as complete. They are, nevertheless, seen as useful descriptions based on the available information.

#### **NOREX<sup>52</sup>**

The Nordic Exchanges (NOREX) Alliance is a cooperative venture between independent exchanges to form a common market place for trading in financial instruments. The objective is to create a single market covering a wide range of products with participation from exchanges, and other stakeholders, from countries in the Nordic and Baltic area. NOREX was initiated with a Letter of Intent between the Stockholm and Copenhagen Stock Exchanges signed in 6/1997, on 1/1998 final cooperation agreements were signed between the two exchanges, and on 21/6/1999, Danish stocks listed on the Copenhagen Stock Exchange began trading on the Swedish technology platform. On 17/10/2000, the Oslo Stock Exchange Board approved the agreements to form the basis for it to join NOREX. There is an open invitation to the Helsinki Stock Exchange to become a partner in the NOREX alliance, and discussions have also been held with the Baltic exchanges.

The central elements of the alliance are as follows. Participating exchanges use one trading system: the OM

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<sup>51</sup> Joel Seligman quoted on p. 848, Cox & Michael (1987).

Technology SAXESS platform. The regulatory functions of listing companies, and supervising trading and membership are retained by each national exchange, however, the general rules and regulations have been harmonised. The alliance is based on cross-membership of the exchanges for intermediaries. A security only needs to be listed on one of the exchanges in the alliance to be traded on the system. The price structure at the different participating exchanges will gradually be harmonised for listing, membership and trading.

The anticipated advantages of NOREX are as follows. It makes it cheaper and easier for member firms of the participating exchanges to access a wider range of shares than is currently possible, given that access to participating markets is via a single connection. It is hoped that the combined market offered by NOREX will stimulate increased activity and attract new market participants, who do not currently consider the separate markets to be large enough to be worth investing in by themselves. Individually, the Nordic exchanges are relatively small, however, together they comprise Europe's fifth largest equity market. It is hoped this will enhance turnover and liquidity, and raise the profile of shares listed on the participating exchanges. Listed companies will no longer find it necessary to arrange separate listings of their shares on international stock exchanges.

Two simple lessons are evident from the NOREX example. First, it is possible to agree and implement successfully a cooperative regional project between exchanges in a relatively short time. Second, and although it is difficult to measure this formally, the shared culture of the Scandinavian countries has been a significant factor in the success of the venture.

### **BVRM<sup>53</sup>**

On 14/11/1973, the seven French-speaking member countries of the West African Economic and Monetary Union (UMOE) - Benin, Burkina Faso, Côte d'Ivoire, Guinea Bissau (recently joined the union), Mali, Niger, Senegal and Togo - signed a treaty concerning the creation of a regional financial market. In 17/12/1993, the monetary authorities decided to establish one, and mandated the UEMOA central bank (the Banque Centrale des États de l'Afrique de l'Ouest- BCEAO) to lead the project. After extensive negotiations between member countries, a regulator called the Regional Council for Public Savings and Financial Markets (Conseil Régional de l'Épargne Publique et des Marchés Financiers) was formed in 10/1997, and on 16/9/1998 the Bourse Régionale des Valeurs Mobilières (BRVM - Regional Stock Exchange), opened. The BVRM has branches in each of the UEMOA member countries, and its headquarters in Abidjan, Côte d'Ivoire. Although the bourse is majority-owned by the private sector, the member governments have 13.5% of the capital.

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<sup>52</sup> This section draws on Copenhagen Stock Exchange: <http://www.xcse.dk/uk/nyt/norex/10marketeff.asp?n=6>, Oslo Stock Exchange: <http://www.ose.no/>, and NOREX: <http://www.nordicexchanges.com/index.asp>.

<sup>53</sup> This section draws on BVRM (2000), BVRM: [www.bvrm.org](http://www.bvrm.org), MBendi (3/12/1999), and other informal sources.

Trading on the BVRM is computerised, with satellite links which allow brokers to transmit orders from any of the member countries to the central site in Abidjan, to check and interact with the order book, and to see information about the market and the central depository. The exchange has 15 brokerage firms. Trading takes place on three days of the week, and all orders are filled at a price set at a fixing once a day. Trades are cleared and settled at the Dépositaire Central/Banque de Règlement S.A.. Initially, 35 companies were quoted on the BRVM. Current capitalisation is just over 827 Billion CFA (US \$1.13 Billion).<sup>54</sup> The average value of all transactions at each trading session of the exchange from October to December 2000 was 215 million CFA (US \$295,000). If this level of transactions were continued for the whole year, the amount turned over would be 33.54 Billion (US \$45.6 Million) a year (i.e. 215 x 3 times a week x 52 weeks a year). This would represent about 4% of the total capitalisation of the exchange, a relatively low amount of turnover.

Three lessons may be learned from the experience of the development of the BVRM. First, it can take a very long time to build a regionally integrated exchange. Second, the fact that a regionally integrated exchange is built, does not mean that it will be used, or that it will integrate the markets. Third, the sustainability of any regional project must be very carefully assessed before the project is undertaken. Private-sector market participants, as opposed to regulators, central banks or other public institutions, normally have the best incentive to determine whether the expenditure on a particular integration scheme for market infrastructure is worthwhile, especially when they are spending their own money.

### **Euronext<sup>55</sup>**

On 22/9/2000 Euronext was created from a merger of the Amsterdam Exchanges, Brussels Exchanges and Paris Bourse. The three exchanges agreed to take the following stakes in Euronext: Paris Bourse - 60%, Amsterdam Exchanges - 32%, and Brussels Exchanges - 8%. Euronext will continue to operate three subsidiary holding companies in its three member countries, each of which will continue to hold an exchange license for the local capital market. Euronext is providing a unified order driven trading platform based on the French system, NSC, and a single set of trading rules; a central counterparty and netting and clearing house for all trades executed on Euronext via Clearenet; and a unified settlement and custody platform with Euroclear. Take-over rules will continue to be imposed domestically.

Listed companies will remain listed on their current exchanges, but listing requirements will be harmonised, all shares will be traded on the single integrated trading platform, and each listed security will be accessible to all members of Euronext, regardless of the nationality of the issuer or the member. Companies seeking a listing on Euronext can choose to do so in any one of the three member financial centres. By choosing their entry point, they will automatically

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<sup>54</sup> The Exchange rate for 12/1999 was US\$1 = CFA 735.28. See MBendi: <http://www.mbendi.co.za/cyexch.htm>.

choose their home country as far as regulation is concerned. Although companies could consider more than one listing agreement with Euronext in different financial centres, this will provide them with no added value, as there will be only one order book for their equities regardless of the number of listings on Euronext. The jurisdiction under which a listing agreement is concluded determines which regulator Euronext's market surveillance department reports to, concerning irregularities in trading in the securities issued by a company.

The regulators in the three member countries have agreed that a market participant licensed in one country will automatically receive a passport to operate in the other Euronext countries. Market participants will be subject to the supervision of the regulator of the country in which they are granted their main license. The Euronext entry point chosen by a market participant will determine the jurisdiction governing the membership agreement concluded between Euronext and the market participant.

The main reason that Euronext was created was that it was thought a simpler structure than attempting to negotiate complex linkage agreements between the three different partner exchanges in order to reduce costs. In addition it was thought to provide a simple and flexible regulatory environment for listed companies, members, and the exchanges themselves. Euronext anticipates making cost savings amounting to Euro 50 million a year, mainly from savings in information technology. It also hopes to achieve enhanced liquidity, transparency and price discovery resulting from the creation of a single order book.

Several lessons may be drawn from the Euronext experience. First, it is possible to merge large exchanges from several countries, each of which have strong traditions of national sovereignty and ambitions for creating local financial centres. Second, in order to achieve such a merger, it is essential to have the goodwill of all the regulatory authorities involved. Third, clarity and simplicity both in ownership structures of markets and in regulatory environments are attractive propositions to market participants.

**iX**<sup>56</sup>

On 3/5/2000 Deutsche Börse and the LSE announced that they had agreed to merge to create a new exchange, called iX-international exchanges plc (iX). The plan was that LSE shareholders, in aggregate, and Deutsche Börse were each to own 50% of the shares in iX. The new exchange would be headquartered in London and have two main subsidiaries in London and Frankfurt. The London-based market would be a pan-European blue-chip market subject to UK regulation. The Frankfurt-based market, which was to be developed in association with Nasdaq, would be a pan-European high-growth market subject to German

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<sup>55</sup> This section draws on Euronext: <http://www.euronext.com/en/>, and Euronext (2000).

<sup>56</sup> This section draws on Deutsche Börse & LSE (15/7/2000), Hilton & Lascelles (8/2000), and Lee (4/9/2000).

regulation. Other elements of the merger proposal concerned Eurex, the futures exchange of Deutsche Börse, and various issues concerning clearing and settlement.

Existing listed companies on either of the two merging exchanges would not be required by iX to give up their home country listing in order to be admitted to trading on iX's markets or to adopt a particular currency in which to raise capital, state their accounts or pay dividends. Newly admitted companies could choose to be listed through the regulatory authority of their choosing. iX would operate a single electronic trading platform based on the German Xetra technology for all its cash markets, and it intended to offer support to users in mitigating the costs of technical migration. iX would also adopt common market models, a consistent regulatory approach, and offer facilities for trading in equities from other European markets.

It was anticipated that the merged organisation could better provide a single management, a single trading platform with international remote access, and a single pricing model, than could the two exchanges apart. In addition the size of the combined exchange was seen as a major advantage in the competition between European exchanges. iX would be the leading European exchange in terms of volume and value of equity trading. On a combined basis, the two exchanges accounted for just over half of European equity traded volume in the 12 months prior to 31 March 2000, with 41% of Europe's top 300 companies having their primary listing on either the Frankfurt or London exchange. Through Eurex, the Group would have an 80% economic interest in the world's leading derivatives exchange.

It was also argued that the merger would create significant value for shareholders, and significant benefits for customers, including private client brokers, dealers, investors and issuers. iX was expected to deliver operating cost savings, excluding any possible impact on combined revenues as a result of the merger, of approximately £50 million per annum from the year commencing 1/1/2002. These would come in part from a reduction in the complexity of IT operations for iX.

Following much criticism of the merger proposal, and also an unanticipated hostile bid for the LSE by the OM Group which operated the Swedish exchanges, the proposed merger was abandoned. Amongst the criticisms of the merger were the following:

1) **It was not cost efficient.** This was because iX proposed merging two institutions – the LSE and Deutsche Börse – only to create two new markets, iX for Europe's top companies, and the iX-Nasdaq joint-venture for pan-European high growth companies.

2) **It would lead to conflict.** The distinction between iX (for Europe's top companies) and the iX-Nasdaq joint-venture (for pan-European high growth companies) would inevitably have led to conflict. Nasdaq would never support the possibility of companies choosing to graduate from its high-tech growth market to the blue-chip iX market.

This would have meant creating a market which had the seeds of its own destruction contained within it.

3) **The valuation of the LSE was set too low.** Management's valuation of the LSE implied in the iX proposal was thought to be too low. The LSE and Deutsche Börse were effectively estimated as having the same value, a decision that was seen as purely political because no other terms would have been acceptable on an agreed basis to either the Germans or the Londoners.

4) **It would have an unworkable split regulatory regime.** The allocation of regulatory powers between the German and UK regulatory authorities was thought to be so confusing, and liable to give rise to such regulatory conflict, as to be unworkable.

5) **The merger was dictated by political compromise at the market level, rather than economic interests.** This was evident in the way the various components of iX were divided between Deutsche Börse and the LSE, including the technology, management positions, and valuation.

6) **The merger was not sensitive to national politics.** The high profile of the merger meant that it became a focus for criticism from a range of disparate political and nationalistic interest groups in both the UK and Germany, which were not well managed by the two exchanges.

#### *4.5. Central Counter-Party Clearing*

The key role of a central counter-party (CCP) in clearing is to minimise the credit risk and market risk faced by market participants when settling their transactions.<sup>57</sup> It can do this in two main ways: by the process of novation, namely by placing itself as an intermediate counterparty between all buyers and sellers and acting to guarantee trades, and by providing a netting system, so as to reduce the total number of financial obligations requiring settlement, thereby further minimizing risk. These two functions may lead to various other benefits, including: 1) the preservation of market participants' anonymity; 2) the reduction of the collateral that market participants' need to support their trading activity, which in turn allows them to take larger positions, possibly increasing the liquidity of the market; 3) the simplification of risk management; 4) the standardization of processing and operational procedures thus lowering costs; and 5) a reduction in systemic risk. Establishing and operating a CCP also, of course, has a range of costs associated with it.

Not all markets need a CCP – a full cost-benefit analysis is required to make such an assessment - and not all markets have one. For example, while most futures markets typically have a CCP, not all cash markets do. But even for those countries that do have them, there is no consensus about what the optimal structure of CCPs should be across countries. Three issues relating to how CCPs might cooperatively seek to promote regional capital market integration

are presented in this section: the merits of consolidation, some general comments on ways of cooperating, and then an example of one link between CCPs, namely between the Chicago Mercantile Exchange and the Singapore International Monetary Exchange.

### **Consolidation**

The reasons for consolidating CCPs across countries in a region are essentially the same as those for establishing one in a single jurisdiction, except that the net gains of doing so may be greater. In addition, economies of scale in administration and technology use and development may be obtained by spreading their costs across a larger base of trading activity, better risk management may be available if the correlation between the underlying markets can be exploited, and lower operational costs may be obtained if the merged CCP can establish links with multiple trading mechanisms, settlement organisations, and other market participants, including investors, dealers, and custodians.

The issue of whether, and how, CCPs should be integrated at a regional level is being most actively considered in Europe. Following the creation of Euronext, clearing for all three of its constituent exchanges will go through a single legal entity, Euronext's French subsidiary, Clearnet S.A. The clearing divisions of Amsterdam Exchanges and Brussels Exchanges are thus transferring their assets and liabilities to Clearnet S.A. The three exchanges have agreed that the French jurisdiction should govern the guaranteeing of all transactions.

There is, however, a debate about how, and whether, Clearnet, and the other two large CCPs in Europe, Eurex Clearing in Germany and the London Clearing House (LCH) in the UK should be linked or merge. Clearnet, Eurex Clearing, and the LCH, have all explored the possibility of different merger combinations. A group of the largest investment banks in Europe, which are also among both the largest users and owners of all three CCPs, have recently formed an association called the European Securities Forum (ESF), which, amongst other initiatives, is arguing for the creation of a single CCP to support the equity markets in Europe. At one stage in late 2000, the ESF even contemplated creating its own pan-European CCP, if Clearnet, Eurex, and the LCH, did not agree to merge. This idea was subsequently retracted. The Depository Trust and Clearing Corporation (DTCC), the single American organisation that acts as a CCP for all cash securities, has also indicated its interest in playing a role in this linkage or consolidation process. As yet, however, no resolution has been reached as to the best regional industrial model.

### **Cooperation**

There are many ways in which CCPs may cooperate with each other to promote regional capital market integration. The DTCC (10/2000) has identified some of these, several of which may operate simultaneously, including:

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<sup>57</sup> See, for example, DTCC (10/2000), and Scott-Quinn & Walmsley (1999). Hobson (Winter 2000) provides a good discussion of the costs and benefits of merging CCPs and CSDs.

1) **Dialogue**, which can be valuable as a means of sharing basic expertise, and developing common industry positions on common problems. 2) **Shared Standards** on communications, messaging, technology and operating standards and systems. 3) **Collateral Optimization Arrangements** such as agreements on cross guarantees, cross-collateralization and cross-margining. These allow one CCP to take account of relevant margins, collateral and positions held in another. 4) **Shared Technology Investment** which can reduce development costs if similar platforms are adopted. 5) **Business Policies and Plans** which can lead to harmonisation of policies and procedures. While these may in theory bring about similar benefits to those obtainable from a merger, in practice maintaining the necessary level of cooperation is difficult.

Amongst the business models the DTCC notes could facilitate these forms of cooperation are: 1) **An Integrating Clearer** which could act as a clearinghouse and CCP for other CCPs, enabling trade and settlement novation and netting across a region served by different types of asset-specific (such as equities or futures) CCPs and national CCPs. 2) **A Joint Venture** which could arise, for example, among major CCPs to provide common services, such as operational processing or the development and management of technology. 3) **An Application System Provider** (ASP) whereby technology is delivered and maintained remotely. In the CCP context, this could occur if a large CCP delivers technology to a smaller one, or if a joint venture is established to deliver it to a number of CCPs.

#### **CME-SIMEX Link**

One of the few instances of CCPs cooperating has been in the futures markets with the mutual off-set arrangement agreed between the Chicago Mercantile Exchange (CME) and the Singapore International Monetary Exchange (SIMEX) on 7/9/1984.<sup>58</sup> This allows a trader taking a position on one exchange to reverse the position on the other exchange. A trade executed on SIMEX by a CME clearing member, for example, can be transferred to the CME's account at the SIMEX clearing organization, which in turn results in the establishment of an identical position on the CME for the CME clearing member. CME traders can thus effectively use SIMEX as an extension of the CME trading floor after the CME has closed. An analogous arrangement allows SIMEX traders to use the CME while SIMEX is closed.

The primary reason why the CME established the link was as a weapon to help it compete internationally against the London International Financial Futures Exchange (LIFFE), which was then battling against the CME to establish itself as the dominant forum for trading Eurodollar contracts. Given LIFFE's perceived advantage in being closer to the Asian time zone than the CME, a link with SIMEX was viewed as providing a valuable foothold for the CME in the Far East. The CME also identified several benefits of the link for its members and their clients. The advantages noted for Futures Commission Merchants were that it gave them the ability to offer clients something closer

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<sup>58</sup> The discussion of the CME-SIMEX linkage is taken from pp. 76-77 Lee (1999).

to 24 hour trading at low cost, and that it reduced the costs and risks they incurred in trading on a foreign market. CME member firms also gained the ability to increase business by acting as an executing agent for those SIMEX member firms which wished to have their trades cleared through the CME. The benefits of the link anticipated for members' clients were as follows: they gained the ability to manage the risk of potential price movements overnight; the link expanded the number of trading hours available for active traders; it reduced transaction costs by requiring only a single margin structure; it assured clients the ability to offset a position taken on SIMEX on what they knew to be a liquid market - namely the CME; finally, it gave clients reassurance because their positions, whether initiated in Singapore or on the CME, could be held in Chicago on the books of the CME.

The link was initially agreed for a ten year period in 1984. Although the contractual details of the scheme were not released, there was apparently no financial aspect to the original CME/SIMEX agreement. The CME thus saw the main goals of the linkage to be to increase order flow to its members, and to forestall LIFFE's attempts to trade Eurodollar contracts. The mutual off-set system succeeded in doing this, as LIFFE's share of trading volume dwindled following the opening of the link, until LIFFE finally de-listed its Eurodollar contract in 1996. When the CME/SIMEX mutual off-set agreement was re-negotiated in 1994, a financial element to the contract was established. In particular, if one exchange was a net transferor of contracts to the other exchange, the first exchange agreed to pay a pre-specified fee per contract to the other exchange.

The main tactical benefit of establishing the link for Singapore was to build a financial centre to rival Hong Kong. The link gave SIMEX access to a contract for which there was already a pool of liquidity in the USA with a reputable exchange, and for which demand had already been identified. It thus gave the new exchange a good chance of being successful.

Two key lessons may be taken from this form of cooperation between the CME and SIMEX. First, private incentives may be sufficient to promote a link between CCPs that enhances regional capital market integration. Second, mutually beneficial cooperation is possible between CCPs in countries with strong notions of sovereignty and different regulatory structures.

#### *4.6. Settlement*

The settlement of matched securities transactions is normally undertaken by a custodial agent called a depository, via a book-entry system. Up until recently there has normally been a single depository in any one jurisdiction called a Central Securities Depository (CSD). CSDs may provide a range of services, in addition to pure settlement services, including confirmation, and handling the money side of settlement procedures. They can also provide facilities for borrowing and lending securities in order to ensure that if market participants do not have either the securities or the money necessary to settle any transactions which they have agreed, they can borrow either the

securities or the money against appropriate collateral. As with CCPs, there is no consensus for how best to achieve regional capital integration for settlement institutions, and it has again been in Europe that the most intense discussion about this issue has recently been conducted, given the commonly accepted belief that there are too many CSDs in Europe. Six different cooperative models for how the industry might be configured to enhance regional market integration are briefly described in this section.<sup>59</sup>

### **RegionClear**

The simplest conceptual solution would be to create a single regional settlement facility, that would replace all CSDs and International CSDs (ICSD) in a region, and allow traders and investors to settle trades in all markets, securities, and currencies in the same way, and through the same organisation. The establishment of such a “RegionClear” is, however commonly agreed to be impractical for several reasons. It would be too expensive to build, and would require large write-offs by the existing systems. User fees would be prohibitively expensive. The elimination by each nation of the legal, tax, currency, and regulatory, barriers that would hinder the effective functioning of the system is unlikely. Custodian banks and domestic CSDs would resist its development. Any failure of the system, or fraud or default within it, would have serious repercussions throughout the markets. And finally, as a regional monopoly, it might lack the spur of competition.

### **Central Processing Unit**

The “Central Processing Unit” (CPU) model is similar to the ASP notion described above. Essentially, CSDs would outsource their securities processing functions to a single computer utility or a string of regional utilities using a common software. By leaving safekeeping and settlement functions in the hands of custodians and CSDs, a CPU could standardise, accelerate, and make settlement less expensive without provoking political resistance. However, it would be costly and complex to build, and would not make settlement between markets more efficient. This model is also now regarded as unworkable.

### **European Clearing House**

A so-called “European Clearing House” model (even though the model relates primarily to settlement rather than to clearing) was proposed by Cedel. The intention was to merge an ICSD with a CSD to obtain a nucleus for settlement activities in Europe with an open and flexible structure. Other depositories and clearing organisations could then integrate with the European Clearing House by merging, by outsourcing their securities processing services, or by establishing electronic DVP links. While these options allow each national CSD the flexibility of joining the European

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<sup>59</sup> Key sources for the descriptions in this section are various issues of Global Custodian.

Clearing House in a manner suited to itself, they also give rise to complexity which is difficult to manage.

Three main benefits were anticipated from the model: 1) Costs could be reduced via the economies of scale of combining markets and adopting a common technology. 2) By pooling the assets of customers in one entity it would be easier for customers both to assess more quickly which assets were available, and to use them for trading activities, and asset optimisation activities including lending and the collateralisation of payments. This would both reduce costs for customers, and also provide them increased opportunities for revenue. 3) Counterparties would be able to settle their securities transactions through a common interface using standardised access, thus reducing the risks associated with cross-border settlement.

### **Hub and Spokes<sup>60</sup>**

A “Hub and Spokes” model was promoted by Euroclear in 1999, although it was subsequently discarded. The proposal had two key aims: 1) to transform Euroclear into the main point of entry to every European CSD, for international fund managers, custodian banks, and broker/dealers; and 2) to allow Euroclear to act as a central information processing unit for local banks and broker/dealers doing business with international counterparties through their local CSDs. In addition to its role of linking the Spokes, the Hub was intended to serve as the primary cross-border settlement provider for global intermediaries. This business would require a high concentration of both assets and counterparties to guarantee the greatest possible settlement efficiency, facilitated by integrated credit and collateral management, and enhanced custody services.

The Spokes were to settle high volume, domestic, retail-driven securities transactions, which could include the domestic transactions of global capital market participants. The Spokes would have the prime relationship with their respective domestic markets and, therefore, be responsible for the supply and quality of securities information to the whole system. They would also have a key role in securities issuance and communications with issuers, registrars, and tax authorities. The Spokes would act as the primary depositories for securities issued by domestic issuers. They also would provide their participants with settlement and custody services in foreign securities through their linkages with the Hub.

The benefits of the Hub and Spokes model were anticipated to be the following: 1) a single interface for each market participant to a single settlement infrastructure covering the European capital markets; 2) cost savings for users from the availability of the single settlement feed; 3) a gateway to non-European capital markets and counterparties; 4) timely and efficient relationships with local markets (including issuers, registrars, tax authorities); 5) high settlement efficiency, yielding a reduction in credit and collateral needs, and financing costs; 6) low set up and operating costs; and

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<sup>60</sup> See Euroclear (5/1999).

7) an overall reduction of settlement risk. Amongst the criticisms of the proposal were that it diminished the perceived value of the national European CSDs, that national CSDs thought that believed that the high-profit institutional business would be handled by the Hub, while they, as Spokes, would be left with the low-profit retail business, and that the cost savings were over-estimated.

### **Eurolinks<sup>61</sup>**

The Eurolinks model was put forward by the European Central Securities Depositories Association (ECSDA) and Crest. Essentially, it advocates direct bilateral links between independent CSDs, in order to give customers of one CSD access to the securities in another. Each CSD would provide its customers with a single point of entry that would allow them to hold and transfer securities issued into any other CSD participating in the network using their local CSD's software and connectivity. This would avoid the need to develop an expensive network of custodial relationships, or open settlement memberships at multiple CSDs.

The main advantages of Eurolinks were anticipated to be as follows: 1) the links are cheaper and can be put in place more quickly than those that result from mergers or more formal alliances; 2) It would allow a degree of competition between clearers; 3) technology was developing fast enough to make it possible; 4) differences in regulations, taxes and settlement practices, would not stop the usefulness of the model. 5) standardisation reducing complexity and cost for CSDs and their members; and 6) genuine cross-border DVP reducing cross-border settlement risk. The benefits for firms were that it would: 1) reduce their overheads by limiting the number of interfaces they required for different CSDs; 2) bring their holdings and transactions within the single legal framework of their chosen CSD; and 3) take advantage of their existing investment in software and connectivity by using their local CSD to settle foreign securities, and mobilise collateral cross-border.

There were also shortcomings, however, with the Eurolinks approach. Inter-depository links between domestic CSDs solve bilateral problems, rather than multilateral, multi-currency problems. Preserving national CSDs makes it harder to obtain economies of scale. The approach ignores the banking and value-added services that some market participants believe are necessary to attract major cross-border investors. Finally, it is difficult to fashion flexible and effective links between markets at different levels of development.

### **CCP Linkage**

This essence of this model, proposed by Crest and Clearstream prior to the aborted iX merger, was that international trades by customers of each domestic CSD should be cleared through that country's domestic CCP. Then, just the net balances between the CCPs would need to be settled internationally via national CSDs. Although the cost of

these net cross-border trades could be high, there would only be a very small number of them, and thus the unit cost of settling international trades would be sharply reduced.

#### *4.7. Marketing*

The marketing of any market is a critical element of its success. Two forms of regional cooperation in such marketing are examined here: Euro.NM, which aimed to brand together several continental European high-technology markets, and the creation of some new indices by Euronext.

##### **Euro.NM**

In 1998, the stock exchanges in France, the Netherlands, and Belgium set up an alliance called Euro.NM to market their growth-company boards. The aim was to create a network of European stock exchanges which provided high-growth companies with access to the international investment community, within an accessible and well regulated market structure. The central elements of Euro.NM were: 1) common admission criteria, geared specifically to provide growing company with a route from their domestic investment community to an international one; 2) combined marketing; 3) harmonised membership, trading and disclosure standards; and 4) a proposed cross-market electronic trading facility.

At its height, Euro.NM was composed of five separate markets: Le Nouveau Marché from Paris, EURO.NM Belgium from Belgium, the Neuer Markt from Frankfurt, the Nuovo Mercato from Milan, and NMAX from Amsterdam. The dominance of Euro.NM by Deutsche Börse's Neuer Markt, in terms of the number and capitalisation of its listed companies, however, put a strain on the alliance, and Deutsche Börse was repeatedly reported as considering leaving the alliance. With the commencement of Euronext, Euro.NM was phased out at the end of 2000.

##### **Euronext Indices**

The development of a market index is one way of attracting investor interest in a regional market. Euronext is a typical example. It is constructing four new indices to promote its market: 1) the "Euronext 100" which is composed of the 100 largest officially listed securities in the Euronext stock market, represents approximately 87% of Euronext's total market capitalization, and reflects trends in blue-chip securities in the Euronext region; 2) the "Next 150" index which is composed of the 150 largest companies on the basis of market capitalization not represented in the Euronext 100 index; 3) the "Next Economy" index to allow market participants to follow trends in the "new economy" sector; and 4) the "Prime" index, to improve the visibility of high quality companies in traditional sectors.

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<sup>61</sup> See ECSDA (1999).

#### *4.8. General Comments<sup>62</sup>*

Of the many attempts at cooperation between market infrastructure institutions that have been proposed, few have been implemented; of those that have been realized, most have failed. There are many ways in which such institutions can effect a linkage, joint venture or merger with each other. Any subset of the various functions undertaken by them can be shared, including marketing, listing, order routing, information dissemination, order execution, matching, clearing, and settlement. There are also different contractual procedures by which shared delivery of these services can be implemented. For example, one market structure institution can purchase services from another such institution, both may agree to sub-contract delivery to a third party, the first can buy the second, or vice versa. Given their diversity, a general comparison of market linkages and other joint projects between market structure institutions is not useful, let alone feasible. Four important and closely associated aspects of such schemes are, however, common to many of them.

#### **Costs**

A prime aim of any market structure institution in entering a linkage, joint venture or merger, is normally to reduce costs. The relevant costs are not simply those incurred by the institution itself, but also those borne by all its “patrons”.<sup>63</sup> The term patron is used here in broad terms to include, amongst others, the institution’s owners, members, controllers, management, and consumers.

Cost savings can arise from many different sources. For example, an exchange may establish an order-routing mechanism or joint clearing arrangement with another exchange in order to offer some of its products to members of the other exchange, without requiring them either to buy a seat on its market, or to deal through a local intermediary. This may allow traders who are not members of the first exchange cheaper access to its products than would otherwise be available. The presumed cost advantage of an exchange-sponsored linkage may, however, be less than anticipated. If an individual firm at one exchange does enough business at another exchange, it may pay the firm to establish its own dedicated link to the second exchange, rather than deal via any exchange-sponsored linkage. If a sufficient number of firms do this, the exchange-sponsored linkage will not attract enough order flow to cover its costs. Similarly, if the firms trading on one exchange that has a linkage with another exchange, are bought by larger firms which have direct access to both markets, they may have no need for a link between the two exchanges. Internal linkages will be sufficient.

Many other types of efficiencies may be realized by two or more cooperating market structure institutions.

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<sup>62</sup> This discussion draws on pp. 61-65 Lee (1999).

<sup>63</sup> This use of the term “patron” comes from Hansmann (1980) & (1996).

Economies of scale may be available to both, if their shared costs in any joint facilities are less than the sum of their separate costs would otherwise be. This may occur in investment not only in physical facilities but also in such intangible items as marketing, education and product development. A link between two markets that operate sequentially in different time zones may reduce the risks incurred by market participants. The ability for traders with positions at one exchange to liquidate their positions on the other exchange, for example, means that they will face lower timing risks than if they were not able to liquidate their positions on the second market, and had to wait till the first one was open again to do so. Linkages between CCPs may reduce the costs of maintaining off-setting positions on both CCPs, such as the need to pay two margin requirements. A linkage may also allow cooperating exchanges to benefit from a network externality associated with the attraction of order flow. If the linked exchanges are able to combine the order flows they receive for similar products in a manner that is unavailable without a linkage between them, they may together be able to achieve a more liquid market than either would be able to realise separately.

When considering what the cost savings might be from any cooperative project between market infrastructure institutions, it is vital to conduct a full cost-benefit analysis. Without such an assessment, it is easy to over-estimate the potential gains from such projects, a mistake that has frequently occurred in practice.

Mergers can also be extremely costly both in terms of transition expenses and the amount of management time needed to make them successful. Indeed, it is well known that mergers are typically not cost-effective for shareholders. They may also be costly and hard to complete successfully, if the negotiating parties are evenly balanced in economic strength, if significant differences exist in their business, operational or technical models, if their respective shareholders have competing economic interests, or if they have overlapping capabilities, or different organizational cultures or governance structures.<sup>64</sup> Bilateral cooperative arrangements can also, however, be costly as they multiply in number and in complexity.

## **Technology**

A second critical element common to most cooperative initiatives between market infrastructure institutions is the central role that technology plays in their development. Its significance is unsurprising given its importance as one of the primary sources of costs incurred by such entities. Five simple aspects of technology development have proved important in past projects:

- 1) It frequently takes longer, and is more expensive, to build appropriate technology for market infrastructure projects than is initially anticipated.

- 2) It is frequently cheaper and more efficient to buy a technology package off-the-shelf, than attempt to

develop a new one for a single project.

2) One good time to consider embarking on a cooperative project is when the useful life of a particularly important technological aspect of market infrastructure is coming to an end..

4) Changes in technology should normally not be the prime motivation for attempting a cooperative venture to deliver regional capital market integration. When this has happened in the past, the underlying business rationale for the project is frequently ignored to the final detriment of the project.

5) The rapidly shrinking costs of both computing and communications technology, and the ever-increasing power and sophistication of software being developed, are strong factors militating against the need for a cooperative solution to market infrastructure barriers to regional capital market integration. When the costs of entering a market for a particular activity, including those related to the provision of capital markets infrastructure, are declining, competition will frequently deliver the optimal outcome.

## **Governance**

The third important element common to most cooperative market infrastructure projects is the pivotal influence that governance has both on their development and on their success. Linkages, joint ventures or mergers, are never neutral in terms of their effects on the various patrons of the participating organisations. As a result, one or more constituencies at the institutions potentially cooperating in a joint initiative frequently fear that it, or they, may be worse off if such a project were established. The governance structures of the collaborating institutions determine how any benefits obtained by the scheme will be distributed, and whether those constituencies which believe their interests might be harmed have the power to change or obstruct its implementation.

For example, the adoption of the technology necessary to implement an exchange linkage may be associated with a reform in an exchange's operating structure, and typically with the elimination of floor trading. In such circumstances, conflict may arise between traders based on the floor of the exchange, who are typically relatively small in capitalization, and the larger firms which have offices in many locations and are members of many exchanges. Floor members may worry about the possibility of business either moving from the floor to the electronic system, on which they believe they will lose their privileges, or worse migrating to the other exchanges participating in the linkage. In contrast, the institutional members of the exchange may believe that significant benefits will accrue to them.

Sometimes, the resolution of such conflicts is in favour of those members whose welfare is most closely linked to the functioning of the exchange, namely the floor traders, rather than the other groups whose interests are not so integrated with those of the exchange. This often occurs when the governance structure of the relevant exchange grants

each member only one vote, and when the exchange has a relatively large number of floor members. In other circumstances, the larger, wealthier members triumph, normally because it is they who are required to fund the necessary investments for any modernization of the exchange. Sometimes the wealthier members can succeed in buying off the resistance of the smaller members, by reimbursing them for the future losses which they believe will incur.

Joint ventures may give rise to conflict both within a particular institution participating in such a scheme, and between the institutions supposedly working together on the project. The resolution of these conflicts may be dependent not only on the contractual agreements signed between the relevant parties, but also on their relative commercial power.

Notwithstanding the ever present potential for conflict, there are several ways in which tension between cooperating capital market institutions may be reduced. The simplest occurs where the ownership configurations of the participating institutions are exactly the same. In such circumstances, the success of the link is solely dependent on whether the combined trading volume of both of them increases as a result of the link. The benefits of any growth in trading volume that occurs at either institution will accrue to the same people, namely the shareholders of both institutions, and there are thus no concerns about the distribution of any benefits obtained as a result of the link.

A similar instance may arise if both the governance structures of the linking organisations are dominated by their members, and if there is a large overlap in membership between the participating organisations. For example, if the member firms of two potentially cooperating exchanges are indifferent where they conduct their business, they will not be concerned about movements in trading volumes between the exchanges, and the intensity of competition between the cooperating exchanges will again be attenuated. This often occurs when the regional exchanges in a country merge to form a single linked exchange, as has taken place for example in Australia, France, Italy and Switzerland. Conflict between cooperating exchanges may also be diminished if the exchanges operate in different time zones – the possibility of their members competing may appear less.

### **Credible Contractual Commitments**

A fourth noteworthy aspect of cooperative market infrastructure projects is the difficulty of creating credible contractual commitments between the cooperating partners. To achieve this, not only do such agreements have to be initially beneficial for the participants, they have to continue to be so even in a changing environment. If material circumstances vary, as often occurs, one or more of the participating entities may decide that the original contractual agreement is no longer appropriate. It is normally then hard for the other participating organizations to insist that the dissenting institution honour its original agreement. The costs of enforcing any such contract are typically too high to warrant any legal attempt to do so, particularly in an international environment. More importantly, however, even if a participating entity could be forced into an action it perceived as unfavourable, the market participants for whom the entity cannot be compelled to use it. There is thus little point in forcing an unwilling organisation to continue honouring

an initial participation agreement without the active support of its customers.

One of the benefits of a merger over a cooperative venture is precisely that contracts do not have to be fully specified in merger, as they do between cooperating but distinct institutions. Internal incentives are normally sufficient for the different components of a merged entity to work together even in changing circumstances.

## **5. A Strategy for Latin America and the Caribbean**

The aim of this section is to propose a strategy to promote capital market integration in Latin America and the Caribbean. It is recommended that a two-stage strategy be used. The first stage should be to develop and implement an institutional mechanism that can both pose, and answer, some initial key questions that need to be addressed in order to promote capital market integration. This part of the strategy is described in detail here, including the roles that all parties interested in the development of regional capital market integration should play in it. The second stage of the strategy should be to take the answers from the first stage of the strategy, a key element of which will be a series of recommendations for what all interested parties should do, and implement them. Only summary aspects of the second stage of the strategy are described here, not least because its development requires that the first stage be completed. It is vital to stress at the outset that the strategy is critically important for the development of the region, that it will be difficult but very worthwhile to achieve, and that to do so the strategy will require support at the highest political levels.

The section is composed of two parts. In the first, the key questions that the first stage of the strategy needs to address are identified, and in the second, the institutional framework that can best answer these questions is described.

### *5.1. Key Questions*

It is crucial when preparing a broad strategy of this nature, that the key questions which it needs to address be specified in advance. If this is not done, it is likely both that the strategy will become unfocused, and that its output will not be useful. It is recommended that the strategy deliver answers to four broad sets of questions relating, respectively, to the benefits of integration, the region or regions to which the strategy should apply, the barriers to integration, and the method by which the barriers should be removed. This part contains a listing of the key questions, and brief justifications for why they are important.

#### **Benefits of Integration**

##### **1) What are the benefits of regional capital market integration?**

Answering this question is important to obtain support for the whole process of regional capital market integration. The benefits that regional capital market integration can bring need to be analysed and widely disseminated. Amongst the benefits that should be identified are: lower prices for all financial services; more efficient, more liquid,

and broader securities markets; innovative financial products and services; an industrial transformation of all sectors of the capital markets industry; cheaper financing for companies; more efficient allocation of capital; higher returns on investments; enhanced risk-return frontiers; and improved macroeconomic performance.

### **Determination of the Region**

**2) What parts of the entire region of Latin America and the Caribbean should be covered by the strategy?**

This is an important and non-trivial question. If the region is taken to include the whole of Latin America and the Caribbean, it will be difficult for the strategy to deliver anything more than some high-level aspirational proposals which are unlikely to be implemented. The smaller is the number of countries in the designated region, the more likely to be successful will be the strategy, but the less important will be any agreement that is reached. Other factors affecting the choice of region might include the cultural affinity between the different countries in the region, and also the potential benefits that could be obtained by more enhanced capital market integration in the region. It might be appropriate to work on several options, or groups of countries, simultaneously.

### **Barriers to Integration**

**3) What are the barriers to integration, and of these, which have the most detrimental effects?**

As noted at the beginning of the report this requires answering two key subsidiary questions:

**4) Where are the costs of trading on a regional basis unnecessarily high?**

**5) Are there any restrictions on market participants' ability to undertake their business activities wherever they wish in the region?**

Amongst the areas where these barriers might arise are: the convertibility of currencies, domestic or regional monopolistic or oligopolistic practices, the existence and costs of multiple regulators, legislative and regulatory impediments, transaction costs, taxation, accounting, a lack of information about aspects of capital markets across a region, and issues related to the region's history and culture.<sup>65</sup>

### **Removal of Barriers**

**6) How can the barriers to regional capital market integration be removed?**

**7) What are the costs and difficulties in attempting to remove these barriers?**

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<sup>65</sup> Some barriers to region capital integration in Latin America are noted in Pieper & Vogel (10/1997).

## 8) Which barriers would it be most beneficial to remove?

Answers to these questions will determine how the second stage of the strategy should be implemented. Amongst the major alternatives for removing the barriers to regional capital market integration that will need to be considered are: removing unnecessary legislative and regulatory barriers to regional competition, stopping monopolistic and oligopolistic practices, regional cooperative market infrastructure projects developed by the private sector, the establishment of mutual reliance scheme between regulators, the establishment of home-country control, and harmonisation of regulation.

At this stage it is important to emphasise at all times the merits of competition. It is true that regulatory differences can create significant costs, especially if market participants have to comply with rules from multiple jurisdictions. However, neither the harmonization of laws or of regulation is essential for regional capital market integration. Furthermore, the process of harmonisation is frequently used as a protectionist anti-competitive device.

### *5.2. Institutional Framework*

This part contains recommendations for the institutional framework that should be created in order to best address the questions noted above. Two aspects of the framework are described: some attributes which it should have, and its institutional structure.

#### **Attributes**

For the strategy to have a practical chance of success, it needs the following important characteristics:

1) **High-Level Political Support.** Without the highest level of political support, the strategy will fail. This is because difficult and sometime painful decisions will need to be taken to achieve it, specially given the likelihood that powerful vested interests may seek to stop the strategy working. In order to obtain this political backing, the benefits must be seen to have a strong political payback, and be clearly understandable by a wide section of the population.

2) **Ambitious, but Realistic, Targets.** The strategy must aim for targets that are ambitious but not unrealistic. Unless they are ambitious, there is little to be gained from implementing the strategy, but if the targets are unrealistic, expectations about what the strategy will deliver will not be fulfilled.

3) **Legitimacy.** The institutional framework must have widespread legitimacy. Without such legitimacy, relevant capital market participants will not participate in the strategy's development, and its recommendations are unlikely to be implemented.

4) **Initial and Continuing Momentum.** The institutional framework must gain a strong level of public support, both initially, and throughout its lifetime.

5) **Adequate Financing** will be required, otherwise the strategy will not be realised.

6) **Flexibility.** The institutional framework needs to be flexible enough to respond to changing circumstances and demands on it.

## **Structure**

It is recommended here that the best institutional framework for posing and answering the key questions necessary for the promotion of regional capital market integration, and for delivering the attributes noted above, is to establish a “Committee of Wise Men” composed of no more than ten members, with an appropriate mandate to promote regional capital market integration. This committee should be established in an appropriate forum by the highest political levels possible, and ideally at Minister of Finance or Economics level. It is crucially important that the members of the Committee be of the highest possible reputation in the region’s financial markets, that they come from throughout the region, that they are willing to work hard on the Committee, and that they be representative of different constituencies in the markets. The mandate of the Committee should be to pose and answer the key eight questions noted above.

As already discussed, the approach of establishing a Committee of Wise Men has recently been used in the EU to do something similar to what is being proposed here. However, it is not because such an approach has been used in the EU that it is recommended here. Rather it is believed that this institutional framework can best deliver the desired strategy. Establishing a Committee of Wise Men will have the following benefits: 1) They can immediately gain a reputation for independence and expertise that is difficult to match in other institutional contexts. 2) They can set their own agenda, and make appropriate recommendations, without fear of political comeback. 3) They will not easily be captured by any particular constituency. 4) They can be flexible and work fast.

In order to deliver the attributes noted in the previous part, it is recommended that the Committee employ the following procedures and attributes:

1) **Formal Process of Publication, Consultation, and Justification:** The Committee must have a formal process of publication of proposals, request for comments from all interested parties, consultation, publication of an intermediate set of recommendations, and publication of final resolutions. At all stages, full justification and analysis of the Committee’s findings should be provided. The Committee should have an on-line questionnaire so that interested parties can comment on it via the internet.

2) **Permanent Staff:** The Committee should have a small but permanent staff dedicated to delivering its needs for its limited lifetime.

3) **Timescale:** The Committee should establish an ambitious and publicly stated timescale for the delivery of

its final report. If the Committee believes that an ongoing institutional framework is needed to deliver the strategy, appropriate reports should be published on a regular basis about ongoing aspects of the strategy.

4) **Expertise:** The Committee should seek out the best expert advice possible on all areas under its remit.

5) **Independence:** In order to establish its credentials for legitimacy, it is vital that the Committee be seen to be independent. This is best done by inviting participants who have no vested interests in the outcome, and these could include participants from outside Latin America and the Caribbean, to participate in appropriate ways in the Committee's workings.

6) **Marketing:** The Committee should actively disseminate the results of its deliberations and conclusions via all forms of the media. This would include establishing a website, with all relevant information.

### **Roles of Interested Parties**

It is anticipated that the key types of parties interested in the promotion of regional capital market integration should play the following roles in the strategy:

1) **IADB.** The IADB could seek five key roles in the strategy: 1) To mobilise support for the strategy at the highest political levels throughout Latin America and the Caribbean. 2) To participate in the Committee of Wise Men, by allowing its President to sit on it. 3) To liaise with other relevant international financial institutions, both to keep them informed of the strategy, and much more importantly to seek their participation in it, and support for it, at appropriate levels. 4) To fund the strategy. 5) To be a neutral sponsor to facilitate the strategy's implementation. In particular, this could mean providing appropriate expert staff for the workings of the Committee.

2) **National Governments** should seek the following roles in the strategy: 1) To support the initiative at the highest political level. 2) To should use their influence to have the highest-quality people sit on the Committee. 3) to make available to the Committee whatever resources it reasonably needs, possibly including funding.

3) **Regional Organisations** interested in the capital markets, such as the Council of Securities Regulators of the Americas (COSRA) and the Federacion Iberoamericana de Bolsas de Valores (FIABV), **National Regulators** and **Private Sector Participants**, will all need to play an essential role in the successful implementation of the strategy. They should be involved at all stages in the Committee's work – delivering advice, submissions, and information to the Committee, answering all questions raised by the Committee, and where appropriate garnering support for the project, and disseminating the results of the Committee's findings to other market participants and the wider public.

4) **The Press** should be contacted right from the outset of the strategy, as it could play a vital role both in disseminating information about the project, and in garnering support for it. This requires that the Committee hold appropriate press conferences and briefings, and that all relevant information be circulated efficiently to the press.

## **6. Conclusions**

The promotion of regional capital market integration is critically important for regional development. For this reason, its importance is becoming progressively more widely accepted, not only by market participants, but also at the highest political levels. Regional capital market integration requires two key elements: that cross-border transaction costs of all types be lowered, and that market participants be allowed to deliver their services across borders without restrictions. While it is possible to further these goals at a domestic level, the potential gains of doing so at a regional level are significantly larger.

This paper presents four analyses central to the promotion of regional capital market integration generally, with special reference to Latin America and the Caribbean. It provides a summary of the costs and benefits of, and barriers to, regional capital market integration. The manner in which legislative and regulatory initiatives may, or may not, further regional capital market integration is evaluated. Key types of cooperative initiatives in the provision of market infrastructure that can be used to promote regional capital markets integration are described and assessed. Finally, a strategy to promote capital market integration in Latin America and the Caribbean is proposed. Eight key questions that the strategy needs to answer are identified, and an appropriate institutional framework for answering these questions is recommended.

## Acronyms

AMEX	American Stock Exchange
ASP	Application System Provider
ATS	Alternative Trading System
BBO	Best Bid and Offer
BCEAO	Banque Centrale des États de l’Afrique de l’Ouest (Central Bank of UEMOA)
BRVM	Bourse Régionale des Valeurs Mobilières (Regional Stock Exchange)
CAD	Capital Adequacy Directive
CCP	Central Counter Party
CFA	Communauté Financière Africaine (African Financial Community)
CFR	Code of Federal Regulations
CME	Chicago Mercantile Exchange
COSRA	Council of Securities Regulators of the Americas
CPU	Central Processing Unit
CQS	Consolidated Quotation System
CSA	Canadian Securities Administrators
CSD	Central Securities Depository
CTA	Consolidated Tape Association
DTCC	Depository Trust and Clearing Corporation
DVP	Delivery versus Payment
ECN	Electronic Communications Network
ECSDA	European Central Securities Depositories Association
ECU	European Currency Unit
ESF	European Securities Forum
EU	European Union
FESCO	Federation of European Securities Commissions
FIABV	Federacion Iberoamericana de Bolsas de Valores
ICSD	International CSD
IOSCO	International Organisation of Securities Commissions
ISD	Investment Services Directive
ITS	Intermarket Trading System
iX	International Exchanges
LCH	London Clearing House
LIFFE	London International Financial Futures Exchange
MOU	Memorandum of Understanding
MRRS	Mutual Reliance Review System
NASD	National Association of Securities Dealers
NMS	National Market System
NOREX	Nordic Exchanges
SEC	Securities and Exchange Commission
SIMEX	Singapore International Monetary Exchange
SME	Small and Medium sized Enterprise
TSE	Toronto Stock Exchange
UMOEA	Union Monétaire Ouest Africaine (West African Economic and Monetary Union)

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