REGIONAL FINANCIAL MARKET INTEGRATION: LEARNING FROM THE EUROPEAN EXPERIENCE

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1 Introduction

The European Union's Single Market Programme (SMP) has been an extraordinarily ambitious initiative, involving a massive legislative agenda managed within a large, multi-faceted and highly developed institutional structure. Nearly three dozen directives have been implemented in the area of financial services and capital movements, aimed at liberalizing transactions and harmonizing rules and standards across the EU.

What may be called the 'European model' of market integration has evolved over many decades, and – as is normal with any major political infrastructure – the original blueprint has had to be adapted considerably to accommodate growth in membership, changing economic circumstances, and unintended consequences. In particular, the original plan to integrate Europe economically via a progressive programme of harmonizing national legislation has, especially in the area of financial markets, given way to a radical alternative based upon member states' 'mutual recognition' of existing national legislation and regulation. Whereas this shift had been initiated largely on pragmatic grounds, the mutual recognition approach has since taken on an ideological and strategic dimension in political negotiations which makes the study of its effects on the ground all the more important. This is particularly so when seeking to evaluate whether aspects of the 'European model' could be successfully applied within other regional settings, such as Latin America.

The next section of this paper examines this model in some detail, focusing in particular on the EU's Investment Services Directive, where tension between the harmonization and mutual recognition approaches was most acute. Section 3 then examines the implications of technological change for the construction of regional market integration programmes. We highlight the enormous effect that such change has had on the natural industrial structure of the securities industry, and the significant regulatory implications of this shift. In section 4, we suggest a model for regional integration regimes based upon the lessons of the European experience. Finally, section 5 highlights a number of important general conclusions from the analysis in the preceding sections.

2 The EU Model of Financial Market Integration

2.1 Principles of EU financial regulation

The EU legislative framework for financial markets is grounded in a concept widely referred to as 'competition among rules', which takes the continuing reality of separate and distinct national legal and regulatory systems as given. The principle outlined in the European Commission's[1] 1985 White Paper supporting competition among rules is that of mutual recognition, according to which all member states agree to recognize the validity of one another's laws, regulations and standards, and thereby facilitate free trade in goods and services without the need for prior harmonization.[2] Directly derived from this principle is the Second Banking Coordination Directive (2BCD) provision

[1] See the Appendix for a brief description of the various EU institutions.
[2] See Key (1989) for an in-depth analysis of the EU's mutual recognition approach to financial market integration.

for a single licence, colloquially referred to as a '*single passport'*, under which credit institutions incorporated in any EU member state are permitted to carry out a full range of 'passported services', detailed in the Directive's annex, throughout the EU.[3] Similar guidelines are laid down for the provision of cross-border investment services in the Investment Services Directive (ISD). Reinforcing the market-opening effect of mutual recognition is the assignment of *home country control*, which attributes the primary task of supervising a given financial institution to its home country authorities. Home country control should, in theory, provide some assurance that foreign EU firms will not be put at a competitive disadvantage by host country authorities seeking to protect domestic firms. However, a major exception to the home country control provision exists for 'rules of conduct', which remain the province of the host country.

A second major principle enshrined in the White Paper is *harmonization of minimum standards*, which acts to limit the scope for competition among rules by mandating member state conformity with some base-level EU-wide requirements. The principle is intended to ensure that 'basic public interests' are safeguarded in a 'single market' with different national rules and standards. Whether this principle facilitates or inhibits the free movement of goods, capital and labour depends wholly upon the manner in which it is applied. It can, on the one hand, facilitate free competition by stopping member states from erecting 'standards barriers' against one another's products and services, while on the other it can inhibit free competition by barring certain products or practices from the market altogether.

Prior to the formal launch of the Single Market initiative in 1985 the harmonization approach was predominant in the drive for political and economic integration. Mutual recognition, as the Commission's White Paper made clear, was considered an inferior integration mechanism, made necessary only by Council obstructionism in the Commission's pursuit of common rules.[4] Given that mutual recognition was therefore chosen as the basis for Single Market legislation primarily on pragmatic grounds, it is perhaps not surprising that neither the Commission nor the Council has ever enunciated a conceptual framework for determining where one approach was likely to result in more efficient market outcomes than the other.[5] However, the political dynamics of the Council have since illustrated that harmonization of rules and standards generally operates to curtail liberalization, whereas the combination of mutual recognition and home country control has proven reasonably effective in muting the influence of protectionist lobbies.

2.2 Tension between the principles of harmonization and mutual recognition: the case of the Investment Services Directive

The evolution of the ISD from its initial 1988 Commission draft to its 1992 approval by 'qualified majority' in the Council[6] provides an excellent case study in the interplay between the harmonization

3The institution must be authorized to carry out an activity in its home state before it can invoke its passport rights to do so in other member states.

4'The harmonisation approach has been the cornerstone of Community action in the first 25 years and has produced unprecedented progress in the creation of common rules on a Community-wide basis. However, over the years, a number of shortcomings have been identified and it is clear that a genuine common market cannot be realised by 1992 if the Community relies exclusively on Article 100 of the EEC Treaty. There will certainly be a continuing need for action under Article 100; but its role will be reduced as new approaches, resulting in quicker and less troublesome progress, are agreed. . . . Clearly, action under this Article would be quicker and more effective if the Council were to agree not to allow the unanimity requirement to obstruct progress where it could otherwise be made. . . . In principle, . . . mutual recognition could be an effective strategy for bringing about a common market in a trading sense.' (Commission of the European Communities, 1985:18)

5 'I have to confess', wrote a former director-general of DGXV, 'that I find myself cheerfully unrepentant in face of the criticism that the Commission has not made any serious attempt to develop a theory of harmonization' (Fitchew 1991:1).

6 Italy and Spain voted against the final compromise text.

and mutual recognition approaches. We provide a detailed account and critique of the harmonization proposals presented in the Council in order to illustrate the difficulties involved in liberalizing cross-border market access via directives.

The ISD contains two major components. The first comprises authorization provisions for recognized 'investment firms', which represent the harmonization prerequisites for mutual recognition via the 'single passport'. This component is largely modelled on the provisions of the First and Second Banking Coordination Directives. The second component comprises procedures defining rights of access to organized securities exchanges for recognized investment firms and credit institutions, and single passport rights for exchanges seeking to provide remote foreign membership or access. It is this second component on which we will focus here, as it represents the major source of tensions between the harmonization and recognition approaches in the drafting of the Directive.

2.2.1. Mutual recognition as the basis of the Commission's draft

In December 1988 the Commission presented to the Council an initial draft Directive,[7] the primary aim of which was to liberalize the cross-border provision of investment advice, broking, dealing, and portfolio management. To accomplish this, the draft Directive sought to define a relatively simple and transparent EU-wide authorization procedure, which would rely primarily on *mutual recognition* in facilitating cross-border access for investment firms. With regard to securities exchanges, the draft Directive aimed merely to liberalize access to membership for all European investment firms, regardless of the member state in which they were officially authorized.

What the draft Directive did *not* aim to do was to regulate European *market structure*. No harmonization was proposed regarding the definition of an organized 'exchange' or rules controlling on- and off-exchange trading. In this regard, the draft Directive was highly liberal. Home authorities would remain free to set their own national market structure regulations, provided that these did not interfere with the legitimate rights of access of foreign EU investment firms. However, this meant implicitly that different national market structures would operate freely in parallel, and that investors would have the ability to bypass their home state exchanges and execute their transactions according to the rules applying on another member state exchange. Any attempts by member states to impose trading 'concentration' rules, effectively restricting transactions to domestic exchanges, would almost certainly have been held by the Commission to violate the 1988 Capital Movements Directive (33/361/EEC).

The Commission's approach was endorsed in principle by the six northern member states, and rejected by the six southern states. The latter backed the incorporation of considerable harmonization requirements which would act to circumscribe the proposed single passport rights for exchanges, and allow national authorities to require that securities transactions effected by resident investors take place only on a *recognized* exchange. Certain minimum standards would have to be met to acquire the legal status of recognized exchange. Thus, whereas the Commission's *mutual recognition* approach would have facilitated liberalization by *obliging* host member states to accept application of home states' market structure rules in cross-border trading, the *harmonization* approach taken by the Council's southern members would allow host states to block cross-border trading where home states did not adopt market structure rules which the hosts identified as essential to prudential market operation.

2.2.2. Harmonization as the basis of the Council redrafting

Harmonization of market structure regulations was introduced into the ISD following a formal

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[7]The draft text was amended in January 1990, adding further liberalization measures relating to the cross-border expansion of trading systems via remote membership.

intervention by the French delegation to the Council in December 1989. The French introduced a critical distinction between *des marchés reconnus* (recognized markets) and *des opérations de gré à gré* (OTC operations). Only the former were said to respect the 'principles' of transparency, fairness and security, while the latter were held to reduce the 'global liquidity' of the European markets.

Thereafter, the concept of the 'recognized market' (subsequently relabelled 'regulated market') became critical in the development of the Directive. The French insisted that member states must have the right to require that transactions in domestic securities take place only on a 'regulated market' (the so-called 'concentration' principle), which meant that any market which was not so designated could find cross-border participation in its operations severely restricted. This represented a *reversal* of the *de facto* liberal regime that had hitherto been applied to cross-border trading in Europe. That is, member states had not previously challenged the legitimacy of trading of domestic securities in foreign markets. On a practical level, this meant primarily that non-UK-based financial institutions were free to trade non-UK securities in the relatively liberal London market, rather than in the home market. Once harmonized 'regulated market' provisions were adopted, however, the Capital Movements Directive would no longer offer any protection against the application of host state rules curtailing trading rights outside a 'regulated market'. The definition of a 'regulated market' thus became critical.

2.2.2.1. 'Regulated markets' as the basis for the single passport

The French delegation painted a distinction between 'regulated markets', on the one hand, and OTC or 'off-market' operations, on the other, which relied on three fundamental arguments:

- **Fragmentation.** OTC operations 'fragmented' the European equity markets, which was held to be contrary to the interests of issuers, investors, and intermediaries; to reduce the 'global liquidity' of European securities; and to 'handicap Europe' in the competition among the great world financial centres.
- **Transparency.** OTC operations could not provide the 'transparency' necessary to prevent price manipulation or to monitor the capital structure of quoted companies.
- **Equal treatment**. OTC operations could not guarantee 'equality of treatment' between different bearers of the same security, by which it is meant that large orders and small orders may be executed at significantly different prices.

On logical grounds, each of these arguments is problematic.

First, despite its pejorative ring, 'fragmentation' of trading is generally a natural outgrowth of legitimate competition among trading service providers. This is why the more neutral term 'segmentation' may be more appropriate. Continuous auction market trading is well suited for small to moderate sized trades, where costly dealer intermediation is not necessary. Dealer market trading, on the other hand, is generally preferable for large block trading, where an investor wishes to take on or dispose of a large position quickly. Periodic call market trading, where orders are batched for execution at a single point in time, generally affords considerably lower transaction charges than the other two structures, but at the cost of the investor not knowing how the market price will move while he or she waits for the call to take place. This sort of competitive 'fragmentation' cannot plausibly damage a security's liquidity unless it is the product of a market failure (e.g. a prisoner's dilemma or negative technological externalities): something the French delegation did not assert.[8] To the extent that fragmentation is a real problem in the European equity

[8] In a study of the Paris and London markets in French shares, Pagano and Röell (1993) found Paris Bourse

markets, it certainly does not derive from off-exchange trading, which is minimal in most EU countries, but rather from the remnants of vested commercial and political interests which have slowed the consolidation of European exchanges – all of which now use the same central trading mechanism (continuous electronic auction systems).

Secondly, discussions of trade 'transparency' must distinguish explicitly between trade *reporting* to the regulatory authorities, and trade *publication* to the market. The former is a matter of legitimate regulatory concern, but the latter need not be. Controlling activities such as money laundering and insider trading clearly requires that transaction information be made available to the authorities, and providing such information on a timely basis has, in fact, been made much easier by enormous recent advances in computer and telecommunications technologies. However, given that exchanges can and do sell security price and quotation data into the market at freely negotiable rates, such data do not have the 'public good' characteristics which would normally justify government intervention to ensure adequate public provision. If governments force exchanges to publish their price and quotation data at below-market rates, exchanges will be unable to capture the full returns from their investments in price discovery infrastructure, and thus have less incentive to invest in its maintenance and development.

Finally, the concern about 'equal treatment' presumes that the law of supply and demand should not operate in the market for securities. Given the significant fixed cost component of trade processing, it is natural that small trades will generally be more expensive than moderate sized trades.[9] For large block trades, however, the significant effect on the demand curve must necessarily produce a substantial impact on price. It is therefore logical that a buyer of 10 shares of IBM stock will generally pay more per share (commissions inclusive) than the buyer of a thousand shares, but less than the buyer of a million shares. The French delegation expressed its equal treatment concern in the context of wishing to see shareholding spread across a wider segment of the population, thus leading to a specific desire not to see the small shareholder 'disadvantaged'. However, even if one wishes to justify regulatory intervention in price-setting on social policy grounds, it is critical to recognize that the less well off are increasingly more likely to hold shares via institutions (such as pension fund managers) than the more well off. Thus interventions which increase the cost of institutional share dealing will not generally be in the interests of the less well off, but rather will compel them to subsidize the trading of the minority of relatively wealthy retail shareholders.

2.2.2.2. Defining harmonized standards for 'regulated markets'

On the basis of the arguments discussed above, the French delegation proposed that national authorities must have the right to require that transactions undertaken by resident investors in domestically listed securities take place on a regulated market. This proposal - supported by Italy, Belgium, Spain, Portugal, and Greece - naturally required the adoption of harmonized minimum standards to define what a 'regulated market' was.

The final compromise text of the Directive, approved in June 1992, does not actually contain an explicit definition of a regulated market, but specifies two, and only two, essential requirements in Articles 1.13 and 21 – both of which featured in the French intervention of December 1989. The first requirement is that the market formally 'list' securities, in accordance with the provisions of the Listing Particulars Directive (79/279/EEC), and the second is that the market be sufficiently 'transparent', referring solely to the speed with which transaction data are published to the market.

This rather idiosyncratic definition of a regulated market revealed what the northern member states, in particular the UK, believed to be purely protectionist motives on the part of the French. At the time, the London Stock Exchange's (LSE) rapidly growing SEAQ International (SEAQ-I) dealer market was transacting considerable business in continental European stocks. SEAQ-I trading of

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and SEAQ-I prices to be perfectly arbitraged, indicating a high degree of integration between the markets.

[9] See, for example, de Jong, Nijman, and Röell (1995).

French shares was particularly high, amounting to roughly 35 percent of Paris volumes. Since SEAQ-I neither formally listed stocks nor published individual transaction details, the market would not qualify as 'regulated' under the proposed definition. This meant that without sufficient exemptions and qualifications incorporated into the Directive, member states would acquire the right to forbid their residents, or the residents' representatives, from transacting domestic share business through the London Stock Exchange. Thus a directive which was originally intended to *liberalize* cross-border trading was now being crafted to *curtail* it using harmonization of minimum standards as its vehicle. Other northern states further expressed concerns that the regulated market requirements could be exploited to curtail the future development of OTC derivative products based on exchange-traded securities.

Two and a half years of difficult negotiations produced a compromise text with considerable ambiguities, allowing all sides to claim victory. First, the listing requirement was significantly diluted for cases where the Listing Particulars Directive was 'not applicable', although no criteria were specified to determine its applicability. Secondly, exceptions were incorporated into the transparency requirements for 'exceptional market conditions', 'small markets', 'very large' transactions, and 'highly illiquid' securities, although none of these terms is defined. Finally, investors in countries choosing to invoke concentration rules, banning off-'regulated market' transactions, were given the right to 'opt out' of the requirements, although each member state retained the right to specify the conditions under which this opt out would be valid. The problem with such a compromise is that radically different interpretations of the Directive are allowed to coexist until such time as one member state takes action to which another state objects, thus unravelling a legal process which can easily drag on for five years if the dispute must ultimately go before the European Court of Justice (ECJ). As an ECJ decision is binding and not subject to appeal, an ambiguous directive subjects national governments and market participants to very considerable legal risk.

2.2.3. Evaluating the effects of the ISD

Fewer than one-third of EU member states implemented the ISD by the deadline of 31 December 1995, and many have still not fully done so over two years on. The Commission began enforcement proceedings in September 1997 against three member states – Germany, Spain, and Luxembourg – for not having passed any legislation to implement the Directive. The ISD regime is therefore in its infancy, and it may take some years yet to evaluate its net effect on the markets.

Thus far, the 'regulated market' requirements have had little direct effect on rules governing EU securities trading systems. The London Stock Exchange has increased the speed and quantity of transaction details published to the market on both the domestic and foreign equity systems, but this was driven primarily by domestic regulatory pressure. The Frankfurt Stock Exchange, Europe's second largest, skirted the ISD transparency requirements entirely by declaring the two segments of the market which do not publish trades (telephone trading and floor trading without a specialist *Kursmakler*) to be 'off-exchange', under the belief that this enabled them legally to award a single passport to their screen-based system (IBIS and its successor, Xetra). As it is only this segment of the market which they wished to expand cross-border, this clever strategy obviated the need for any rule changes whatsoever. Regarding the lack of listing requirements on London's SEAQ-I, this has not yet been challenged by any EU government. Continental equity trading via SEAQ-I has fallen significantly since the early part of the decade, owing to competition from screen-based order-driven systems in the home markets, and the LSE is therefore now seen as being much less of a competitive threat. However, the listing requirements pose a significant potential barrier to the development of *proprietary trading systems* (PTSs), as such systems are highly unlikely to impose listing requirements on companies which are already listed on traditional national exchanges. PTSs – companies which sell electronic trading services direct to institutional investors – have expanded rapidly in the US in recent years, in spite of significant regulatory barriers. UK-based Tradepoint is the only such system in Europe regulated as an official exchange, although it does not list companies. Should the company decide eventually to expand its operations cross-border, ambiguity over the applicability of the ISD listing requirements leaves its single passport rights subject to legal challenge by continental governments.

More fundamentally, the ISD-regulated market rules enshrine standards that are very much outdated in terms of technological and competitive developments in the securities trading industry. As we argue in section 3.2, they have erected barriers to the growth of new and innovative trading structures which hold out the promise of significant transaction cost reductions, while at the same time failing to enhance either the efficiency or the stability of the European markets.

The mutual recognition aspect of the market structure provisions, as manifested in the single passport for screen-based systems, has so far proven a modest success in promoting cross-border trading. A number of exchanges—including Frankfurt, Paris, Amsterdam and Milan, the four largest on the continent—have implemented remote membership provisions since 1996. Article 15.4 of the ISD gives a 'regulated market' the right to grant full membership to foreign EU-incorporated intermediaries, even if they have no physical presence in that market, without having to secure the approval of the relevant foreign regulatory authority. However, as we discuss in section 2.5, Article 15.5 gives national authorities a potentially powerful means of blocking the cross-border expansion of exchanges into their territories, even if such exchanges clearly meet the 'regulated market' criteria. This article grants member states the right to 'prohibit the creation of new markets within their territories', leaving unaddressed the circumstances under which a market can be designated as 'new'.

Furthermore, it must be stressed that the ISD does not, and indeed could not, remove the main barrier to the creation of open cross-border stock exchanges, which lies in the governance structure of the exchanges themselves. To date, regulators have not demonstrated overt protectionist tendencies with regard to domestic market penetration by foreign EU exchanges—with the clear exception of the LSE—because direct trading competition among continental exchanges has thus far been minimal. For example, the Stockholm Stock Exchange secured regulatory approval to provide for remote membership in the UK, Denmark, and Norway in 1995 - prior to implementation of the ISD in these countries. However, the intermediaries, which still control most EU exchanges, often resist opening up membership to foreign broker-dealers because they wish restrict competition for order flow. The Madrid Stock Exchange, for example, still requires members to maintain local offices, even though the trading system is fully electronic and capable of supporting direct access from anywhere in Europe. This physical presence requirement represents an entry cost barrier which many foreign intermediaries are unwilling to bear, thus artificially restricting direct trading access and hence limiting the liquidity of Spanish shares.

2.3. Difficulties in harmonizing prudential standards: the case of the Capital Adequacy Directive

The ISD highlighted deficiencies in the harmonization approach relating to its potential for enshrining protectionism rather than facilitating liberalization. The Capital Adequacy Directive (CAD) illustrates another problem, relating to its potential for ossifying prudential standards that both theory and practical experience show to be distortionary and inconsistent with best market practice.

The CAD had two primary aims: to ensure that securities business was conducted prudently in the interests of both financial stability and investor protection, and to establish a 'level playing field' for EU institutions undertaking securities activities. It is increasingly widely acknowledged not only that the standards are less than optimal to meet the first objective, but that they may act as a *hindrance* to achieving a robust and cost-efficient capital base. Furthermore, pursuit of the second objective—a 'level playing field' for banks and securities firms—has made it more difficult to pursue the first, since insufficient efforts have been made to ensure that the systemic risks in banking activities are not increased by banks' exposure to trading risks in the securities sector.

The CAD standards are based directly on the so-called 'building block' methodology applied in the 1988 Basle Accord on capital adequacy for G-10 country multinational banks. This approach sets a minimum ratio of 'recognized' capital to 'risk-weighted' financial exposures. The CAD, like the Basle Accord, eschews a portfolio approach to measuring the riskiness of an institution's assets, relying instead on a linear aggregation of risk-weighted asset values. The risk weights themselves are determined by regulatory fiat and, although allowance is made for 'offsetting positions', co-variances between asset values are ignored. The result is that the correlation between the resulting capital requirements and actual portfolio risk is relatively low.

Since implementation of the Basle Accord in 1992, a growing consensus has developed regarding the deficiencies of the building block approach. Whereas a portfolio approach to setting international capital standards had previously been rejected partly on the grounds that it was insufficiently 'objective', the failure of the signatories to produce any objective criteria for identifying asset deterioration meant that huge variations in provisioning remained across international banks. Thus the Accord, widely hailed as a regulatory milestone when announced, was completely ineffectual in heading off high-profile bank failures around the world. A number of major Japanese, French, and Spanish banks wound up in the perverse position of meeting the Basle standards under local accounting regulations while at the same time being effectively bankrupt. A significant amendment to the Accord was therefore agreed in January 1996, allowing banks to make use of proprietary 'value at risk' (VAR) models as a basis for measuring the market risk element of their regulatory capital requirements.

Embarrassingly for the EU, the CAD – agreed in 1992 and based on the abandoned 1988 Basle approach – officially came into force that same month. While few regulators supported the Directive any longer, it was nonetheless now enshrined – or in the process of being enshrined – in national law across the EU. In late 1997 the Council reached a difficult compromise agreement on amending the CAD,[10] and this may yet come apart in the conciliation process with the European Parliament. Once a CAD II text is finally agreed, member states will still have two years to implement it, meaning that a new regime will probably not be in place across most of the EU until about 2001. Significant differences between Basle and CAD will yet remain, ensuring considerable scope for international regulatory arbitrage.

The level playing field approach, as applied by the EU in this case, will also remain problematic. In particular, it makes it difficult to ensure that banks do not expand their securities activities on the back of public guarantees for their depositors.

The composition of bank asset and liability bases can differ markedly from that of securities firms. Banks' primary assets are generally illiquid loans, rather than liquid securities, while a major component of their non-capital funding derives from retail deposits which can be withdrawn on demand. The non-marketability of a large segment of assets means that banks in financial distress cannot be wound down quickly without jeopardizing the claims of depositors and other creditors. At the same time, this ever-present risk to depositors means that any hint of financial difficulty has the potential to provoke a contagious withdrawal of funds from the entire system. While the risk of contagion may be reduced dramatically through government deposit insurance, this comes only at the cost of encouraging excessive risk-taking, particularly by financially tenuous institutions. Combine these bank-specific risks with their exclusive direct access to national payment systems and it becomes clear that banks do not merit the same type of regulation as securities firms. The level playing field principle cannot be invoked if banks are playing with much wider boundaries.

Securities firms perform only a subset of the financial activities performed by universal banks, and forbearance from engaging in the full range mitigates their contribution to systemic risk. Securities firms are less liable to large and rapid withdrawals of core non-equity funding, are much less reliant

[10] See Clifford Chance (1997b) for details on the CAD II proposal.

on a lender-of-last-resort function, require no government insurance guarantees, and are a step removed from the payments system. Regulatory capital therefore plays a very different role in banks and securities firms. For banks, sufficient *permanent* capital is required to meet the regulatory imperative of keeping them solvent in difficult circumstances, since the systemic implications of bank failures are generally more serious than those of securities firm failures. For securities firms, on the other hand, more reliance on *temporary* capital, such as subordinated debt, is appropriate given their greatly fluctuating needs for capital and the relative ease with which regulators can wind them down without a significant systemic impact.

To establish 'competitive equality' between banks and securities firms, the CAD divides a bank's asset portfolio into banking and trading books, and then establishes uniform capital standards for securities firms and bank trading books. This places capital regulation on a *functional* rather than *institutional* basis, and thus allayed the concerns of Germany and other member states with universal banking systems that the CAD might put their banks at a competitive disadvantage *vis-à-vis* (primarily London-based UK and US) securities houses.

However, the risks incurred by a bank on each book are not in any practical sense segregated, rendering functional regulation inappropriate. Losses on the trading book—which is subject to lower capital requirements than those applied by the 1989 Bank Solvency Ratio Directive—may ultimately have to be borne by the equity capital supporting the banking side of the business in order to prevent a loss of market confidence and a mass withdrawal of deposits. Thus the trading book concept is little more than an accounting fiction. Furthermore, whereas the CAD segregates *assets* used for securities trading, as well as its supporting capital, it does not segregate non-capital *liabilities*. Thus the bank is free to use deposits, which are widely backed by explicit and implicit government-subsidized insurance guarantees, to fund its trading book activities. A moral hazard problem is thus extended from the banking to the securities sector, as governments may ultimately feel compelled to underwrite universal banks in their entirety. This is not merely a theoretical possibility, as the 1995 collapse of Barings illustrated: the bank had, in fact, used depositor funds to finance its Far East derivatives trading.[11]

To conclude, the CAD illustrates a number of dangers in attempting to achieve regional harmonization of detailed prudential regulations. First, the political process through which they are produced makes it very difficult to amend them in light of experience and market developments. Second, regional prudential standards must at least be *consistent* with wider international standards, even as the latter change over time, and not unduly onerous *vis-à-vis* other national and regional regimes under which major multinational financial institutions are operating. The CAD fails on both these criteria, being both inconsistent with the significantly improved Basle standards and considerably more burdensome than the US regime for OTC derivatives business. Finally, functional regulation is only appropriate where performance of the relevant function does not affect, and is not affected by, the performance of other functions subject to a different regulatory regime. Thus the CAD does not actually produce a level playing field between banks and securities firms, as it takes no account of the moral hazard and systemic risk problems associated with banking activities, and how these may be affected by the undertaking of securities business within the same institution.

2.4. Evaluating the impact of the Single Market Programme in the banking sector

The Second Banking Coordination Directive, agreed in 1989 and technically in force across the EU since 1993,[12] represents the primary liberalization directive in the banking sector deriving from the so-called '1992' Single Market Programme. Its significance lies in its bringing into force the

[11] See Dale and Wolfe (1996) for a full analysis of the deficiencies of the CAD in the equities sector.
[12] The implementation deadline was 31 December 1992, but full implementation across the (then) twelve member states was not achieved until 1994.

principles of the single passport and home country control.

Evaluating the effectiveness of the SMP is a delicate exercise, since it requires an estimation of performance *trajectories* both before and after implementation of directives. In other words, one must estimate how the markets would have developed had it not been for the SMP. In this context, disentangling SMP effects from non-SMP regulatory effects, as well as wider technological and competitive developments, is an exceptionally difficult task. Acknowledging these important caveats, the available evidence still suggests that the SMP has not materially aided the creation of an integrated retail banking market in Europe, whereas modest success can be detected in the wholesale sector.

Until very recently, information relevant to evaluating its impact on the behaviour of banks and the structure of the banking industry has been patchy and largely anecdotal. However, in October 1997 the European Commission published the results of a major commissioned study into the impact of the SMP on credit institutions and banking,[13] which provides a considerable wealth of data upon which to pass some informed judgments. Based on a combination of a major postal survey of EU banks,[14] case studies of nine banks, a review of previous research, and an econometric analysis of time series and cross-section data relating to pricing, market structure and firm performance, the study overall reveals a very small direct effect on the behaviour and performance of EU banks:

Pricing and efficiency. The report concludes that the SMP generally had a very small to negligible impact on retail and commercial loan rates, deposit rates, fees and commissions, cross-border transfer costs, cross-border service costs, realization of scope economies, x-inefficiencies, or total factor productivity.

Single passport. Data reported from the Banking Advisory Commission of the European Commission indicate a large rise in cross-border branch establishment in the three years following the 2BCD implementation deadline (i.e. 1993–5): cross-border branches increased by 58 percent, from 308 to 487. While this is highlighted throughout the report as ‘solid evidence of an SMP effect’ (p. 135), there is actually little in the study to justify this conclusion. First, no cross-border branch establishment figures are provided for any period prior to 1993, thus allowing no quantitative basis for comparison. The significance of the rise is nonetheless belied by the findings of the postal survey, which revealed only a very small net increase in foreign branch openings since 1993.[15] Furthermore, respondents continue to rate the financial and informational costs of entering foreign EU markets as significant barriers to cross-border operation.[16] Secondly, the only direct evidence provided of an actual 2BCD effect comes from the conversion of existing subsidiaries to branches, which was explicitly motivated by the Directive. With the exception of the UK, where 14 of the 40 (35 percent) new branches were conversions from existing subsidiaries, not a single member state converted more than two. This apparent UK exceptionalism in exploiting single passport rights is an interesting finding, but the authors offer no commentary on these data.

Retail-wholesale distinction. The survey reveals that the SMP has generally had a very small impact on the strategic planning and behaviour of EU banks in the retail sector. The largest effects, which were still generally modest, were in the wholesale sector – in particular, investment management, off-balance sheet activities, and corporate customer deposits. Increased cross-border activity in these areas was reported for 15–19 percent of respondents, compared with 2–8 percent for retail banking services, such as deposits, loans, mortgages, and insurance. Cross-border activity

[13] Economic Research Europe Ltd (1997).
[14] 115 banks returned a completed survey, representing the holders of just over one-quarter of EU bank assets in first-quarter 1996.
[15] See Table 4.13 on p. 51 of the report.
[16] See Table 5.5 on p. 129 of the report.

in the insurance sector in particular remains very low. Where foreign market activities have been increased, respondents on average only credited the SMP as a significant factor in Greece, Italy, France, Belgium and the UK.[17] The first four of these had highly regulated banking systems prior to the SMP, so the SMP appears to have had a significant effect via the changes instigated in domestic banking legislation. Given that the UK's regulatory structure was among the most liberal pre-SMP, its inclusion among this group provides further evidence that UK-based institutions were generally more aggressive than their continental counterparts in exploiting liberalization abroad.

Perceptions of SMP importance. A 1993 Arthur Andersen survey found that EU banks ranked the SMP as the single most significant factor influencing their competitive strategies. The 1997 survey, however, found that technological change had jumped from bottom of the list to the top, while the SMP fell to one up from the bottom.[18] The authors put a very positive gloss on this finding, concluding that the SMP's current lowly standing derives from the fact that it had been 'effectively implemented' by 1996, and that the 'more intense competition' it gave rise to served to bring other factors, such as technology, to the fore. However, as the study does not actually document significantly intensified competition as a result of the SMP, this finding may simply reflect disappointed expectations on the part of EU bankers post-2BCD.

The most important general conclusion which can be drawn from the study is that the SMP appears to have had a modest positive effect on cross-border competition in the wholesale sector, and a very minimal one in the retail sector. Indeed, in terms of eliminating barriers to cross-border service provision, the banks surveyed ranked the SMP most highly (though still modestly) in three wholesale areas: corporate deposits, corporate loans, and off-balance-sheet activities. There are probably two primary reasons for this disparity.

The first is that the retail banking sector across virtually all of the developed world currently exhibits significant over-capacity, and consolidation of the market within countries will probably have to take place before foreign competitors will generally find entry commercially attractive. It is worth noting that the only retail bank which could legitimately be considered 'pan-European' is state-owned Crédit Lyonnais, and recent revelations would appear to indicate that its expansion was motivated more by political ambitions and private corruption than by legitimate commercial calculation. Second, despite the recent rise in telephone and PC banking, provision of retail banking services still relies strongly on the presence of a large physical branch network. The establishment of such a network involves very significant sunk costs – costs which can be largely avoided in the provision of wholesale services.

The 2BCD itself accentuates this disparity by enshrining two major caveats to the home country control principle, which affect the retail sector disproportionately. Host member states are effectively permitted to 'opt out' of the requirement to honour home state 'single passports' where the conduct of monetary policy or issues of the so-called 'general good' are concerned. Host states have considerable *de facto* powers to declare products, services, or marketing practices illegal on the basis that they either interfere with the conduct of monetary policy or contravene public morality, policy, security or health. As we discuss in section 2.5 below, these provisions have been invoked by host states to limit the conditions under which single passport rights actually obtain, and they are simply much easier to enforce in the retail service sector (since it is clearer where the client is legally based). The study reports that cross-border mortgages have been voided on general good grounds, and notes that Belgium formally classifies its mortgage credit law, and France all of its consumer law, as general good exclusions.

[17] See Tables A.5.6–8 on pp. 240–41 of the report.

[18] See Table 4.38 on p. 109 of the report. Other factors, in rank order, were domestic bank competition, non-bank competition, domestic regulatory developments, foreign EU bank competition, and non-EU bank competition.

2.5. Evaluating EU directives as a tool of liberalization

There is a strong tendency in the popular financial press to equate the passing of a single market directive with actual liberalization on the ground. However, the road from Council approval of a directive, through transformation into national law, through implementation and enforcement, through to actual market conduct is a long and tortuous one, frequently resulting in disappointing performance when measured against stated ambitions and timescales.

Part of the problem in assessing the likely impact of directives derives from the fact that they are frequently neither logically organized nor clearly worded, reflecting the fact that they are invariably the result of difficult political compromise. Understanding the history of the Council debates can therefore be invaluable in assessing how a directive will be actually be implemented, interpreted, and enforced in each member state, but such an understanding is generally difficult to come by as neither minutes of the discussions *nor even the final voting records* of the Council members are actually published.[19]

Not surprisingly, the performance of member states in accommodating cross-border market access varies enormously, often depending upon whether they actually supported the liberalization which a given directive's preamble calls for. The mechanisms by which member states restrict effective market access in spite of single market directives are many and varied. We outline the main ones below, and provide some illustrative examples.

Escape clauses

2BCD Article 14.2. This seemingly innocuous clause, declaring that 'host member states shall retain complete responsibility for the measures resulting from the implementation of their monetary policies', can be invoked by governments to ban virtually any financial product, regardless of the single passport rights which banks appear to have acquired elsewhere in the Directive. Otherwise referred to as the 'monetary policy escape clause', this article was invoked by the French government in order to ban the introduction of interest-bearing current accounts in France by UK-based Barclays Bank. Apparently seeking to protect French banks from foreign competition, the French government argued in Brussels that remunerated current accounts involve disturbance in the flows of liquidity within the banking system, and therefore interfered with the conduct of French monetary policy.[20] As this argument applies in principle to any financial product, no such product can be presumed exportable throughout the EU. Portugal has a similar clause in its 1985 Treaty of Accession, and one major foreign bank asserts that the Portuguese government has even invoked the clause to restrict *entry* by foreign EU banks.

ISD Article 15.5. As discussed above in section 2.2.3, this article gives member states the right to 'prohibit the creation of new markets within their territories'. Prior to implementation of the ISD, the Dutch Ministry of Finance argued that a foreign screen-based trading system wishing to provide for remote access in the Netherlands was seeking to create what was, from the perspective of the Netherlands, a 'new' market. On this basis, they held that such systems would have to continue to apply for a licence as a recognized foreign investment exchange from the Ministry. If this interpretation were held to be valid, the single passport provisions of Article 15.4 would be entirely negated. In the face of major criticism by regulators and market participants in other EU member states, the Dutch formally abandoned this position in early 1995. It is unclear precisely why they took this position in the first place, but it appears that it may have been adopted as a bargaining chip to ensure that other member states were committed to respecting single passport rights for the Amsterdam Stock Exchange before they themselves offered firm legal guarantees to other EU

[19] For these reasons, it was only possible for the author to prepare his critique of the ISD after gaining access to non-public information sources.
[20] See Steil (1995: 28–30) for a more detailed discussion of this case.

exchanges. The inherent ambiguity of Article 15.5, however, leaves open the distinct possibility that it may be invoked against new electronic trading systems (PTSs) looking to expand cross-border in Europe.[21]

Protracted legal battles

Italian SIMs law. Member states may implement national laws which they recognize to be in violation of EU treaties or directives, knowing that it will take years before the ECJ affirms the illegality of their actions. In 1991, Italy passed a law – known as the 'SIMs' law, from the acronym for the new legal financial entity it created[22] – which required foreign securities houses operating in Italy, even from abroad, to establish a separately capitalized Italian subsidiary. The law caused outrage among London-based UK and US investment banks, particularly as Italy was supposedly committed to finalizing the text of an Investment Services Directive which would outlaw such a requirement. The Commission repeatedly warned Italy that the law was even in clear violation of Articles 52 and 59 of the 1957 Treaty of Rome, guaranteeing companies the rights to freedom of establishment and freedom to provide services across the EU, but the Italian government never made good on its promises to amend the law. The Commission took its case to the ECJ in January 1994,[23] but it was not until June 1996 when the Court finally declared the relevant provisions of the SIMs law to be illegal. The law, having been on the statutes for nearly five years, was amended the following month. It remains to be seen whether foreign intermediaries will actually be able to claim effective compensation from the Italian government, as is their right under the terms of the Court's verdict.

'General good' exception

So-called 'rules of conduct' in financial services provision are deemed to be in the interest of the 'general good', and fall under the jurisdiction of the *host* member state. Host states have tended to define 'rules of conduct' very broadly, thus retaining considerable powers to control how financial services are provided within their territory. This has led to numerous complaints from financial institutions that such rules have been unduly restrictive, in particular as they affect cross-border provision. In order to reduce the scope for *ad hoc* protectionist application of such rules, member states are required to publish a full set of conduct of business rules for the complete range of activities covered by the ISD. As of October 1997, however, a number of member states had still not done so.[24]

Failure to implement

Every year, the Commission issues hundreds of 'reasoned opinions' against member states failing to implement EU law, and files dozens of ECJ actions against them. Nearly two years after the legal implementation deadline for the ISD, Germany, Spain and Luxembourg have yet to implement *any* aspect of the Directive, and several others have yet to implement significant components. As illustrated by the Italian SIMs case, ECJ judgments can take several years, after which they are often simply ignored. The Commission has never pursued a recalcitrant member state after a second condemnation by the Court, partly for fear of publicly undermining the authority of a primary institutional pillar of the EU.[25] Furthermore, substantial gaps persist between what generally appears to have been agreed in the Council and what is actually implemented in individual member states. The Commission has formally expressed strong concern about member states' failure to implement directives, to apply them correctly, or to sanction offenders. In the words of one official, 'There is often a clear distinction between an agreement within the council of ministers

[21] See Steil (1996: 129–130) for a more detailed discussion of the problem.
[22] Società di Intermediazione Mobiliare.
[23] See Steil (1995: 31–32) for further details on the SIMs case.
[24] Clifford Chance (1997a).
[25] Hunter (1995).

and implementation on the ground.'[26]

All of these examples serve to illustrate that multilateral agreements are not in themselves sufficient to bring about the necessary liberalization at the national level. This requires a clear commitment on the part of member governments to accommodating foreign financial institutions bringing unfamiliar products and practices into the local market, even where this poses significant competitive challenges for domestic incumbents.

2.6. Evaluating the EU model of financial market integration: the significance of home country control

The provision of retail financial services within EU member states remains largely untouched by the behaviour of foreign producers exploiting single passport rights. Domestic regulatory structures have retained overwhelming predominance in terms of defining what products may be offered and how they may be offered. In terms of recent exogenous forces on the industry, technology and non-bank competition are also far more significant than SMP effects.

As we have discussed in sections 2.2.3 and 2.4 there are, however, modest but clear signs of positive SMP effects in the wholesale sector. Banks and securities houses are increasingly concentrating their securities and investment banking activities geographically (with London being the major beneficiary), and operating cross-border from a single main base. The ISD has clearly encouraged this trend, particularly in the area of securities trading. Remote membership of EU stock and derivative exchanges is spreading rapidly, with little sign of significant interference by host state regulatory authorities. The concerns of US securities houses that their subsidiaries would not actually be given equal treatment appear to have been largely unfounded, as their cross-border operations have been expanding robustly.

However, difficulties have emerged when a host member state considers cross-border services to be provided 'within the territory of [that] Member State', in which case the state will impose formal licensing requirements on the passporting bank or securities firm, with all its attendant legal and regulatory costs. In the case of some member states, such as France, those firms deemed to be operating 'within' their territory and maintaining a 'permanent presence' must also establish a physical branch. Together with over-zealous application of the general good provisions, host state actions intended (a) to establish legally that foreign EU firms are operating 'within' their territory, and (b) to restrict the activities of such firms, have been formally cited by member states and financial institutions as significant deterrents to the exploitation of single passport rights.[27] The Commission has attempted to address this problem by issuing a formal 'Communication', providing its views on how the 'general good' provisions may and may not be applied, and on the determination of where a service is actually provided (i.e. in the home state or host state).

The important general conclusion to draw from these findings is that the EU model has performed reasonably well where *home country control* is effective. This is too rarely the case in retail service provision, although it does frequently apply in the wholesale sector – particularly in the area of securities trading. Thus, a regional liberalization programme is likely to make the most efficient use of its political resources by concentrating efforts on *wholesale financial services*, where cross-border provision without a physical presence in the host state is most feasible, and where the home country control principle is therefore most likely to be effective.

3 Implications of Technological Change for Regional Standards Setting

The regulatory structure in most developed countries contains dysfunctional remnants of the pre-computer era, and it is important to avoid enshrining these in regional standards. Regional

[26] *Financial Times* (1995), reporting on the Commission's June 1995 assessment of the single market.
[27] FT Financial Regulation Report (August/September 1997).

liberalization agreements must be capable of accommodating technological change, rather than stifling it or encouraging costly and inefficient regulatory arbitrage.

3.1. Technological change and market structure

Since the mid-nineteenth century, the state of technology has had a critical impact on the way in which trading is conducted. From 1817 to approximately 1870, the New York Stock Exchange (NYSE) ran a formal 'call auction' for listed stocks, where an auctioneer called out tentative prices into the trading crowd until he arrived at the price that roughly balanced supply and demand on the floor. The tremendous growth in listed stocks and member firms in the late 1860s, however, produced an unbearable strain on this highly labour-intensive technology, and the Exchange was thus obliged to adopt continuous auction trading as a means of accommodating large numbers of stocks and traders in a single physical location.[28] The spread of telegraph technology during this period also served to increase the dominance of the NYSE,[29] as the rapid dissemination of quotation and price information reduced the need for independent centres of price discovery.

The development of the embryonic Nasdaq market in the 1930s coincided with the spread of long-distance telephony in the US, thus making possible decentralized share trading. Continued advance in communications technology further led to a decline in the number of stock exchanges, from over one hundred at the end of the nineteenth century to 22 in 1935, and only eight today. The current figure would almost certainly be much lower still were it not for the distortionary effects of the 'Intermarket Trading System', the development of which was instigated by Congress and mandated by the Securities and Exchange Commission (SEC) in the late 1970s.[30]

The 'market maker' system which has defined Nasdaq since 1971, and the LSE SEAQ system since 1986, was a direct product of 1960s computer technology developments, which facilitated the construction of wide-area proprietary networks. This type of trading structure presumed that firm two-way trading obligations could be imposed on dealers without having to insulate them from competition deriving from *non-intermediated* electronic public order books - a presumption which has broken down in recent years in both the US and the UK. In the US, Instinet has emerged as a major competitor to Nasdaq dealers, accounting for over 20 percent of trading volumes, and dealers have been abandoning market making commitments to small stocks as a result of declining profitability (even in the midst of a bull market). In the UK, competition from continental auction systems (similar to Instinet) in the early 1990s led to a decline in SEAQ-I dealer profits, and a virtual collapse of the system as a disciplined trading structure for continental stocks.[31]

Whereas the telephone and telegraph substantially increased economies of scale and scope to securities trading, bringing natural monopoly characteristics to the predominant national stock exchanges, computerization has had a much more complex effect. Whereas computerization has increased the potential for exploiting network externalities, and hence for concentrating trading, it has also introduced the possibility of *product differentiation* and dramatically *reduced sunk cost barriers to entry.*

3.1.1 Product differentiation

The rapid growth in computer power in the 1980s led to the resurrection of the nineteenth-century call auction—this time in fully automated form. The Arizona Stock Exchange, a non-member-based PTS, introduced computerized call auction trading in 1991, and Tradepoint utilizes the technology for small cap UK stocks. Instinet and Posit run highly successful variations referred to as 'crossing networks', which provide no independent price discovery: participants transact at set

[28] See Kregel (1992) and Steil (1997).
[29] See Stedman (1905) and DuBoff (1983).
[30] See Steil (1997).
[31] See Pagano and Steil (1996).

times at the midpoint of the US ‘Consolidated Quotation System’ (CQS) best bid and ask price. In autumn 1998, OptiMark will launch a highly innovative call auction system on the Pacific Stock Exchange (PCX) which will accommodate order entry in three dimensions: buyers specify in graphical format how satisfied they would be trading at different possible combinations of price and quantity, and supercomputers search for sellers who optimally meet their criteria. The system is expected to be particularly valuable for anonymous block trading, as no information is leaked to the market if the system fails to find acceptable counterparties.

3.1.2 Market contestability

Computerization has also led to a remarkable increase in the *contestability* of the ‘market for markets’, allowing new companies to enter the trading services industry with an extremely low sunk cost investment. It is now possible to assemble a full trading infrastructure—comprising the computer hardware, software, and telecommunications equipment—sufficient to support the entire volume of trading in a major European equity market for under $10 million.

An important general implication of contestability for pricing structures is that cross-subsidies between services are unsustainable.[32] Nowhere has this been more apparent in recent years than in the securities trading industry:

Cross-subsidization of large trades by small trades. Member firm data from the London Stock Exchange reveal considerable cross-subsidization of trades by size, with large profits on small low-risk trades subsidizing losses on mid-size block trades.[33] When new continental European electronic auction systems began attracting small domestic stock trades back from London in the early 1990s, this cross-subsidy became impossible to maintain, and dealer profitability declined sharply. In consequence, SEAQ-I dealer quotes widened dramatically, and the system ceased to function as a market-making structure.

Cross-subsidization of ‘on-exchange’ by ‘off-exchange’ trading. Paris Bourse ‘interaction rules’, obliging block traders transacting away from the central electronic CAC system to satisfy orders on the book at equivalent or better prices, were arbitraged away by London competition: i.e. French block traders merely route their matched block trades to London for execution. NYSE interaction rules are similarly under threat by OptiMark trading on the PCX.

Cross-subsidization of retail trades by institutional trades. NYSE and Nasdaq rules intended to accommodate small retail-size trades on uneconomical terms are being exploited by PTSs focusing entirely on executing large institutional orders.[34]

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[32] As Baumol, Panzar, and Willig (1988) explain: ‘In the past, at least in regulated industries, distributive concerns have explained (in part) the deliberate adoption of sets of cross subsidies; for example, urban-area consumers have been forced to help to defray the costs of transportation or communication to rural communities, younger customers have, in effect, financed the supply of services to retired persons, and so forth. To render such systems of cross subsidy financially viable for a regulated supplier, entry was deliberately impeded or ruled out altogether. But . . . in a contestable market any cross subsidies are incompatible with sustainability of prices. They always invite profitable entry into the subsidizing portion of the business, and so they cannot persist’ (p. 472).

[33] 6-10 times ‘Normal Market Size’ (NMS). NMS is equivalent to roughly 2.5 percent of average daily trading volume.

[34] The Nasdaq ‘Small Order Execution Sytem’ (SOES), set up under SEC pressure after the 1987 crash, allows small orders (up to a thousand shares) to be executed electronically against dealer quotes. Whereas the system was set up to ensure that retail investors could achieve timely executions, SOES is ruthlessly exploited by institutions known widely as ‘SOES bandits’, which fire rapid streams of one thousand share orders at dealers before they are able to adjust their quotes to news or trading activity.

3.2 Maladapted regulation: exchanges as 'public utilities'

Despite the massive changes in the natural industrial structure of the securities trading industry wrought by computerization, national authorities around the world continue to regulate stock exchanges as 'public utilities', dispensing both inappropriate self-regulatory burdens and anti-competitive privileges to these bodies. This is illustrated vividly in the ISD, where so-called 'regulated markets' are defined wholly by transparency and listing requirements.

Transparency. The notion that a stock exchange's price and quotation data are 'public goods' is a phenomenon of the past two decades. Under the post-1975 US regulatory regime, all transactions in 'National Market System' (NMS) stocks must be published to the market within 90 seconds, and exchanges are obliged to post their best bids and offers in a stock on the CQS. Thus the NYSE is effectively obliged to subsidize price discovery on the regional exchanges, by publishing its live quotations at a return below that which it would achieve if it were free to negotiate publication terms with private data vendors. Similarly, a 1984 SEC ruling obliged the National Association of Securities Dealers (NASD) to provide its price and quotation data to Instinet—the largest competitor to Nasdaq dealer members—at no more than its direct costs for collection and dissemination. Similar 'transparency' rules are now imposed on stock markets – but rarely on bond, derivative and currency markets, which are generally more difficult to isolate for regulatory purposes – around the world. Yet the very fact that private data vendors, such as Reuters and Bloomberg, are willing to pay considerable sums for the right to distribute such data indicates that they are *not* public goods, and that regulators have no clear basis in competition law upon which to require publication on uneconomic terms. Such requirements are also wholly at odds with nineteenth-century US case law, ratified in a 1905 Supreme Court decision, which held that the price and quotation data generated by a stock exchange were the private property of that exchange.[35] As more competition comes into the securities trading industry, it becomes increasingly important that such property rights be re-established in order to ensure a neutral regulatory structure for inter-exchange competition.

Listing. Listing is a quality control mechanism, imposed by regulatory authorities and exchanges, as a means of ensuring that investors have sufficient minimum information about a company's past performance and future prospects before its shares are publicly traded. This function is wholly distinct from the function of trading itself, and a trading system provider is clearly capable of operating a fully regulated transaction mechanism without actually having to vet the companies whose shares are being traded. Assuming that regulatory authorities are willing to accept the principle that competition for trading services is a spur to greater efficiency and innovation, as in other industries, they should seek to mitigate barriers to entry by setting the basic national listing standards *themselves*, rather than delegating them to exchanges.[36] Many exchanges will then wish to impose *additional* requirements on the companies whose shares they trade, although it is unlikely to

[35] *Board of Trade of the City of Chicago v. Christie Grain and Stock Company*. A judge in an 1888 lower court decision dismissed the claim of a small exchange that the NYSE should be legally obliged to provide it with price data, in order to prevent it from going out of business, as 'a most astonishing allegation upon which to found a public right' (*Wilson v. Telegram Company*, 18 N.Y. St. Repr. 81, 1988). See Mulherin, Netter, and Overdahl (1991).

[36] Listing should be seen as a sunk cost barrier to entry, thus limiting industry contestability. One mechanism for governments to limit barriers to entry is to bear such costs in the public sector, or to isolate the sunk cost activities under a separate regulatory net. Thus the operation of airports and airlines should be separated, removing the huge sunk cost of airport construction and maintenance as a barrier to competition among carriers. Elizabeth Bailey explained the strategy as follows: 'The single most important element in the design of public policy for monopoly should be the design of arrangements which render benign the exercise of power associated with operating sunk facilities . . . One way to avoid the exercise of monopoly power is to have the sunk costs borne by a government or municipality . . . rather than to have the sunk costs incurred by the firm that is supplying the services' (1981:179).

be commercially sensible for new trading services providers to duplicate these efforts (i.e. companies may be unwilling to pay for additional listings, and there is no public benefit to be had in requiring them to do so). In characterizing listing as an essential regulatory *obligation* of a trading system operator, rather than as a *privilege* of existing national exchanges (the largest of which in Europe earn tens of millions of dollars in listing fees each year), the ISD erects a potentially significant entry barrier to the development of PTSs without actually improving corporate disclosure.

3.3 Maladapted institutional structures: reform of exchange governance

The concept of a stock exchange as a membership-based mutual association, controlled entirely by intermediaries, is itself wholly a remnant of the pre-computer era. Prior to the creation of the computerized auction system, stock exchanges had to be physical places where traders met to transact. Limitations of physical space required rationing access to the trading floor, which was accomplished through the sale of memberships (known as ‘seats’ on the NYSE).

Computerized auctions eliminated the capacity constraint associated with floor trading, and created the possibility of unlimited access. Thus it is no longer a technological necessity for an exchange to place a member firm intermediary between the ultimate buyer and seller, and this enables the development of trading systems within corporate entities rather than within broker-dealer ‘cooperatives’. AZX and Tradepoint are the only two non-member-based trading system operators (PTSs) currently classified by their respective national authorities as ‘exchanges’, although AZX’s precise regulatory status has not yet been firmly established. Under the SEC interpretation of the 1934 Securities and Exchange Act, which is that stock exchanges are membership associations, it was therefore only able to sanction AZX’s operations on the basis of a ‘low volume exemption’ from the full panoply of regulatory requirements. Its status as an ‘Exempt Exchange’ remains only so long as its trading volumes remain low, meaning that the SEC will be forced either to reinterpret the 1934 Act or to halt AZX trading should its volumes become ‘high’. The SEC has made it difficult for AZX to achieve high volumes, however, as the company was not given authorization to trade NYSE-listed stocks during NYSE trading hours until December 1997. This restriction was itself a product of the technological incompatibility between AZX’s 1990s call auction technology and the 1970s Intermarket Trading System (ITS) technology, which is only capable of linking continuous markets.[37]

Largely because of the regulatory burdens which would be imposed on a new trading system operator legally classified as an ‘exchange’, none of the other PTSs operating, or currently applying to operate, in the US have sought this status. Almost all are subject to the much lighter requirements associated with classification as a ‘broker’ – the two largest being Instinet and Posit – while OptiMark has chosen to licence its system to existing exchanges. Instinet trading having grown dramatically over the course of this decade, the SEC in 1997 proposed that the company be subject to an entirely new regulatory classification, somewhere between ‘exchange’ and ‘broker’.

The logical distinction between exchanges and brokers having broken down entirely in the face of computerized trading, the former are now beginning to examine seriously whether their governance structures are appropriate to handle rapid advances in trading technology and growing competition from alternative service providers. The continental European exchanges – which were the first to face heavy direct competition for order flow (from London) – were the first to adopt corporate structures. The Stockholm Stock Exchange ‘demutualized’ in 1993, issuing half the shares in the new corporate entity to listed companies. The shares have since become freely tradable, and the Exchange has about 120 shareholders. Having significantly diluted the influence of the member firms, Stockholm was able to push through access innovations before any of its European

[37] The SEC feared that the AZX call auction might produce a price outside the contemporaneous CQS spread, thus undermining the integrity of the ITS.

counterparts. The Exchange implemented remote membership in 1995, one year prior to the launch of the ISD, and introduced direct electronic access for institutional investors (via a sponsoring member firm) in 1996. Helsinki, Copenhagen, Amsterdam and Milan have since followed Stockholm's lead. Amsterdam's demutualization is particularly interesting: shares were sold to institutional investors, as well as issuers and intermediaries, and the Exchange is considering plans for floating the company's shares on the Exchange itself (as is the new "Stockholm Exchanges", the product of a merger between the stock exchange and the Swedish OM derivatives exchange). The Australian Stock Exchange will formally consider similar plans once it has demutualized in 1998.

Any efforts by a regional grouping to ration cross-border access by trading system operators on the basis of organizational structure – i.e. whether the 'exchange' is an association or a company – are bound to stifle innovation in governance structures, hamper adaptation to new technology, and inflate trading costs. The governance arrangements defining the vast majority of the world's stock exchanges are the product of historical inertia,[38] rather than rational planning, and should not be enshrined as legal standards against which suitability for a 'single passport' will be measured. This is part and parcel of the general problem of defining 'best practice' in the securities markets, as the concept is very fluid in a highly dynamic industry. Regional liberalization agreements must therefore be designed to accommodate the natural changes in institutional and industrial structure to which further technological advance will inevitably give rise.

4 A Model for Regional Financial Integration Regimes: Lessons from the EU

4.1 The use of 'directives' and similar multilateral agreements

Things which ought to be taken for granted lose their force when they emerge in the form of arbitrary pronouncements. . . . Objects mistakenly made subject to legislation result only in the limitation, if not the complete annulment of that which is attempted to be safeguarded.

This incisive and insightful observation by the nineteenth-century Austrian statesman, Klemens von Metternich (1880:557), highlights an endemic problem with the formal propagation of 'rights'. It applies with particular force to the case of the EU securities markets.

These markets entered a period of rapid competition-driven integration a decade ago – well before the ISD text was even agreed. Competition from the LSE in equities and LIFFE in derivatives spurred enormously effective reforms on the continent: most notably the development of electronic auction markets, demutualization of exchanges, remote membership (extended to the US by the German DTB derivatives exchange), and – most recently – mergers in trading systems (as has been announced by DTB and the Swiss Exchange, and the Stockholm and Copenhagen exchanges).

The ISD represented an attempt to spell out formal legal rights to cross-border access which were already being firmly established on the ground, and it is not surprising – as Metternich would have predicted – that threatened vested interests lobbied their governments effectively for the formal *annulment* of such *de facto* rights. This is manifested in the market 'concentration' provisions (Article 14.3), the 'new market' restrictions (Article 15.4), and indeed the very concept of a 'regulated market' as it is enshrined in various articles.

In principle, multilateral agreements enumerating legal rights to cross-border access on the basis of mutual recognition and home country control should facilitate market integration by reducing regulatory entry barriers and legal uncertainties inherent in multi-jurisdictional operations. However, the fact that such agreements must necessarily emerge from a political process in which

[38] The heads of a number of newly created emerging market exchanges are very receptive to this argument, and would like to adopt a corporate structure. Their regulators, however, do not generally appear to welcome the idea. Having said this, the Yerevan Stock Exchange in Armenia has managed to establish itself as a corporate entity, even attracting a number of foreign shareholders.

domestic producer interests will have considerable influence means not only that such rights are likely to be severely circumscribed, but that *existing* cross-border operations are liable to be subjected to *new* restrictions. While institutional arrangements can help to mitigate such tendencies, as we discuss below, they cannot eliminate them. With or without formal multilateral agreements, the effective liberalization of a regional market relies very much on the cultivation of an enlightened self-interest in the participating states. Perceptions of self-interest can and do change over time. A fine example is the 'new market' restrictions in the ISD (see section 2.5), the *inclusion* of which was supported by the French authorities when the Paris Bourse was in a weak competitive position *vis-à-vis* the LSE, and the Dutch *application* of which was resisted by these same authorities when it threatened the cross-border expansion of a revitalized Bourse a few years later.

4.1.1 Home state versus host state regulation

National governments tend naturally to behave as advocates and protectors of their incumbent domestic institutions and market structures when negotiating international regulations, even while simultaneously pursuing major reforms at home. For example, the UK Treasury argued strongly in Brussels against the inclusion of *any* market 'transparency' standards in the ISD, while at the same time the domestic authorities (the Securities and Investments Board and the Office of Fair Trading) in London were actually pushing for tighter transparency rules on the London Stock Exchange.

Regional integration regimes can harness the local 'advocacy' tendencies of national authorities by applying *home state* regulation wherever possible. Home state authorities have the incentive to ensure that their domestic institutions are not disadvantaged when competing in foreign markets, and can therefore act as forces for cross-border liberalization on the ground. Host state control in the EU, as in the case of 'rules of conduct', has tended to impede the expansion of cross-border provision and the importation of innovative foreign products and practices. In principle, potential entry barriers can be mitigated by requiring prior publication of business conduct rules by the host authorities, although this requirement is certainly not sufficient in itself (as illustrated in section 2.5).

Before national governments will agree to accommodate home state regulation, a considerable degree of trust and confidence must be developed among the authorities in the region. This does not emerge spontaneously, but rather develops over time through formal and informal contact and collaboration. The prior implementation of bilateral *memoranda of understanding* (MOUs), facilitating information sharing and investigative cooperation, can create a foundation upon which to build mutual recognition and home state control regimes at some future date, once the relevant authorities have developed confidence in one another's competence and integrity.

4.1.2 Harmonized prudential standards

Agreements on securing regional prudential standards of necessity require harmonization. The major problem with such agreements is that each member state tends to want its own status quo as the basic 'standard', and is often concerned more with the competitive position of its major producers than with ensuring the spread of prudent business practice throughout the region.[39]

In the case of capital adequacy, the experiences of both the Basle Committee and the EU provide an important lesson: that proper management of financial risks, at both the micro and the macro level, requires a *holistic approach*. A number of specific observations may be drawn:

Common capital standards cannot of themselves ensure a 'level playing field', since an institution's *cost* of capital can depend heavily on such factors as taxation and the scope of the official financial 'safety net', both of which vary significantly across countries.

[39] Testifying before the US Congress in 1987 regarding the need for minimum international capital adequacy standards, the then Chairman of the US Federal Reserve, Paul Volcker, said, 'I cannot emphasize strongly enough our interest in the competitiveness of US banks.'

Raising capital requirements for credit risk alone may simply encourage financial institutions to take on more interest rate risk. Such risks cannot be managed in isolation from one another. A study of US implementation of the Basle Accord concluded that US banks reacted to the relative increase in the cost of lending by cutting loans and increasing holdings of government debt. This swap of credit risk for interest rate risk was estimated to have resulted in a $150 billion credit crunch, without any clear reduction in the riskiness of bank asset portfolios.[40]

Setting capital requirements for a bank's trading book without legally segregating it from the bank's other activities will understate its true asset risk. Segregating assets used for trading is also insufficient if non-capital liabilities are not also segregated; otherwise banks may use government-backed deposits to fund proprietary trading activities.

A 'building block' approach to risk assessment may appear prudent and conservative, but accurate risk measurement requires explicit consideration of *co-variances* between asset values. It is also not as transparent as it may seem, since provisioning standards across banks in different countries will differ markedly so long as no objective criteria are agreed for identifying asset deterioration.

A large degree of subjectivity must therefore remain: accepting this premise should lead to greater tolerance of proprietary VAR models—properly stress-tested and independently audited—in setting capital requirements. Additionally, it is important to recognize that regional standards will be embedded in an increasingly global marketplace, so that the avoidance of competitive distortions *vis-à-vis* other national and multinational jurisdictions must be a priority.

4.2 Institutional arrangements

International and/or supranational bodies have to be created, at least on an *ad hoc* basis, in order to produce agreements and to arbitrate disputes emerging from them. Aspects of the EU regime can be effectively adapted to these tasks, although significant modifications would be required. Regional groupings outside the EU are highly unlikely to aspire to a federal political structure, with significant executive, legislative and judicial powers lodged in supranational bodies. Accommodating a financial integration programme within an institutional structure heavily dominated by national governments will therefore be a political necessity, but it raises difficult problems in terms of restraining protectionist influences. As we have shown, this is a significant problem even with an EU structure according exceptional political powers to supranational bodies.

The legislative powers ceded by EU member states to the European Commission are not at all necessary to pursue a financial integration initiative successfully, nor is the granting of such powers clearly desirable. A supranational legislature is apt to pursue its own political and economic agenda, which may be inconsistent with the original integration initiative. Much of the EU's social legislation in the late 1980s, which is now widely seen as overly prescriptive and potentially damaging to employment, derived primarily from a Commission initiative championed by the then President, Jacques Delors.[41]

4.3 Initiating agendas

The power to launch integration initiatives should therefore reside wholly within a 'council of ministers', comprised of national finance ministers and their surrogates. This council should aim to publish a clear written remit for an independent 'commission', specifying precise aims for a prospective regional market liberalization agreement. Such a document would be used as the sole basis on which this commission would prepare an initial draft text for the council within a specified period.

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[40] Hall (1993). Between 1989 and 1992, US banks increased their holdings of US government debt by 50 percent.
[41] See Steil (1994).

4.4 Drafting agreements

A multinational commission or panel—comprised of independent experts from academia, research institutes, and broadly based open-membership cross-border industry groupings—should bear responsibility for the initial drafting of regional financial integration agreements. The inclusion of experts from outside the region on this body should be seriously considered in order to enhance its independence from national governments. Its draft texts should be *published* as a means of ensuring that the subsequent revisions are not driven by the interests of privileged insiders.

4.5 Revising and ratifying texts

Once the commission's draft text is in the hands of the council, no institutional mechanism can possibly prevent protectionist forces from coming to the fore. It is endemic to multinational bodies that sovereign members will seek to have their perceived interests reflected in policy, and such perceptions are bound to be shaped by powerful domestic vested interests. Where members cannot achieve the support of their council counterparts, they will invariably seek the incorporation of clauses which allow them considerable latitude regarding the extent and timing of the required liberalization. So-called 'free trade' agreements tend to be exceptionally lengthy documents not because of the complexities of removing trade barriers, but rather because of the complexities of specifying the enormous number of *exceptions and qualifications* that the various parties insist upon.

There are, however, mechanisms that the regional grouping can apply to *mitigate* the diffusion of protectionist 'standards' and 'escape clauses' throughout a text. The primary one should be the adoption of the stated principle that *mutual recognition* and *home state control must* apply within the entire scope of the agreement, except where the commission's draft text specifies otherwise, or where the council sponsor or sponsors of *specific minimum standards*, *harmonized rules*, or *host state control* provide a *published* justification for such exceptions. Such justification must be based wholly on grounds of identifiable *market failure*, with a clear explanation provided as to why the operation of free market forces in a given area posed unacceptable risks to systemic stability or consumer welfare. Such a requirement would by no means eliminate the possibility of protectionist clauses slipping into the text disguised as prudential safeguards, but it would make it more difficult by obliging dissenters to the mutual recognition and home state control regime to make their arguments *public*, rather than allowing them simply to threaten privately to withdraw support if their position were not incorporated. A further safeguard is to allow members of the commission to participate in the deliberations as observers, and to comment formally on the content of the deliberations through their chairman.

EU single market directives can be approved by 'qualified majority', but it is unlikely that the members of any other regional grouping would be willing to participate without the right to veto a text, or to 'opt out' of the agreement entirely. Thus, unanimity will be a practical necessity for ratifying a text within the council, after which changes to national law will have to be implemented in each member state. As a practical matter, a unanimity requirement is not a radical departure from EU practice, as the Council of Ministers generally seeks a consensus before putting a text to a final vote (although there were two dissenters to the ISD). It is assumed that no counterpart to the supranational European Parliament will be desired by the members of a regional grouping, so that agreements approved by the regional council will simply be submitted to national parliaments for ratification according to the legislative procedures applicable in each member state.

4.6 Dispute settlement

Difficulties will inevitably emerge in the process of transforming agreements into consistent applications of member state national law, and implementation and enforcement on the ground will undoubtedly reveal discrepancies in interpretation. A dispute settlement procedure will therefore be necessary.

The ECJ would not be an appropriate model for an arbitration mechanism, as its powers are far too wide-ranging, extending into areas of political treaty interpretation, and there is no appeals procedure. A supranational judiciary is also apt to take an expansive view of its power to interpret agreements, rather than a strict constructionist view, and this can effectively result in the judiciary writing law across the participating states. The ECJ has in the past even justified its decisions by reference to the *preamble* to the Treaty of Rome, which calls for 'ever closer union'. Such supranational powers are not necessary to pursue a focused market access agenda. Furthermore, complaints may be lodged with the ECJ by member states, the Commission, or private companies and individuals, and access on such a scale is likely to overwhelm the arbitration capacity for which other regional groupings would be willing to provide.

An arbitration panel should therefore be established along the lines of the NAFTA or WTO dispute settlement models, although the participation of non-member state citizens should be considered to enhance its independence. Access would be limited to national governments, and a challenge brought by one member state against another could be upheld only where the latter were found to be in clear violation of an explicit provision of an agreement.

5 Conclusions

The European model of economic and political integration has generated enormous interest around the world. Although no other regional grouping is likely to aspire to the creation of a single currency or a federal political structure in the foreseeable future, aspects of the EU's financial integration regime can clearly be accommodated within much looser political groupings, and are therefore worthy of serious study and consideration. On the basis of the preceding analysis, a number of important conclusions are worth highlighting:

- **Supranational bodies.** Assuming that the focus of the integration programme is purely economic, and not political, the creation of powerful supranational bodies is neither necessary nor clearly desirable. As the EU experience with the Commission and the Court of Justice indicates, such bodies are apt to pursue their own proprietary agendas. Nonetheless, allowing a first draft of an agreement to be drawn up and published by an independent panel is an excellent way of ensuring that local producer interests do not unduly distort the basic vision which all member state governments are presumed to share. Likewise, a separate independent dispute settlement panel will help to underpin the integrity of the agreement after implementation.

- **Harmonization.** Formal legal harmonization of rules and standards should be kept to the strict minimum necessary to ensure that regulatory gaps in one jurisdiction do not threaten systemic stability throughout the region, or undermine basic retail consumer protection in other jurisdictions. Professionals should be presumed capable of managing their own affairs cross-border via private legal arrangements, rather than via harmonized standards or government supports. The EU experience has shown that harmonization is apt to be applied in support of protectionist aims, rather than purely to ensure proper prudential regulation. The conclusion of multilateral memoranda of understanding (MOUs), facilitating information sharing and cooperation in investigations, will serve to bolster the effectiveness of national regulators without constraining industry innovation or cross-border competition.

- **Mutual recognition.** 'Mutual recognition' combined with 'home country control' is the most effective way of ensuring that cross-border service provision actually materializes. Home country control harnesses the natural advocacy instinct of governments towards their national producers in the service of greater cross-border access, while simultaneously neutralizing the protectionist tendencies of host state authorities.

- **Wholesale versus retail markets.** Political efforts should be focused overwhelmingly on liberalization of wholesale financial service provision. Wholesale services require less foreign direct investment than retail services, thus limiting the scope for host state interference, and transactions between professional counterparties require less government oversight than those involving individual consumers. EU directives aimed at liberalizing cross-border retail service provision have been largely ineffective, although they have nonetheless required significant political efforts to define harmonized minimum rules and standards for the protection of retail consumers.

- **Third countries.** The EU experience shows that third countries have strong reason to support regional integration initiatives provided that subsidiaries of their financial institutions enjoy single passport rights on the same terms as institutions based in the region.

- **Accommodating technological and competitive change.** Regional agreements must be living frameworks, capable of flexible and timely adaptation to market developments, rather than specific rigid guidelines enshrining aspects of the status quo. Recent technological advances have had an enormous impact on the natural industrial structure of the securities business, as well as the most efficient institutional structures for organizing trading. As a consequence, much of the regulatory apparatus in developed markets is now considerably outdated, and it is imperative that governments avoid enshrining maladapted rules and standards across an entire region. Indeed, the process of 'competition among rules', which has come to characterize the most successful components of recent EU directives, represents an excellent means of ensuring that national regulatory regimes do not ossify in the face of major market change.

Appendix: EU Dramatis Personae

Five institutions are involved in the initiation, drafting, revision, ratification and arbitration of EU directives:

- **European Commission.** The Commission has considerable executive and legislative powers, as it has not only the responsibility for the initial drafting of directives, but the right to initiate a legislative agenda on its own. The Commission also monitors the implementation of directives, and can bring enforcement actions against member states to the European Court of Justice. Directorate-General XV, currently under the direction of the Italian Commissioner Mario Monti, is responsible for financial services legislation.
- **European Council of Ministers.** The Council is comprised of representatives of the member state governments. The Council has the power to rewrite the texts of draft directives from the Commission and ultimately to ratify them. Under provisions of the 1986 Single European Act, measures 'essential for the completion of the Single Market' are subject to 'qualified majority' (i.e. country-size-weighted) voting, rather than a unanimity requirement.
- **European Parliament.** Under the 'co-determination' provisions of the 1991 Maastricht Treaty, the directly elected Parliament has the right to require amendments to a directive agreed by the Council before it is legally ratified. If the two bodies cannot agree on the terms of such amendments, the directive cannot come into force. The Parliament did not yet have these powers at the time the ISD was agreed, and the seven amendments it recommended were all rejected by the Commission, and never submitted to the Council.
- **National parliaments.** European directives must be translated into national law in each member state. Some member states have legislative systems which can accommodate the direct application of a directive text into national law, while others require more complex procedures in which the provisions of a directive are 'translated' into appropriate legislative text. This sometimes results in a directive being implemented across multiple pieces of legislation.
- **European Court of Justice.** The Court is the final arbiter on all disputes pertaining to EU law, including both treaties and directives, and its decisions are not subject to appeal. The Commission, member state governments, companies and private individuals all have the right to bring cases before the Court.

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