

CONTRACTS AND COMPETITION IN THE REGULATION OF EUROPEAN STOCK EXCHANGES

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Abstract

This paper explores the arguments for regulatory competition among stock markets in Europe. It suggests that some of the pressure for uniform regulation stems from a specific view about the nature of the implicit contracts governing the relationships between regulators, listing firms, investors, traders and society. By making these contracts more explicit it shows that there may be more extensive arguments for regulatory competition. In deriving implications it draws on an extensive study of the nature of competition and efficiency of securities markets in recent years.

Typically the discussion of who should be regulating what and for whom is rather inexplicit when it comes to securities markets. The answer to the question ‘Why regulate?’ also tends to receive rather diffuse answers. The emergence of new embracing regulators in the large European securities markets means that these questions are being addressed, although of course there is no requirement for a single answer. Similarly the setting out of a clearer route forward as a result of the Lamfalussy Report with a structure for discussion, co-operation and decision-making on the regulation of financial markets at the EU level sharpens the focus.

At the same time securities markets themselves are developing rapidly, assisted by rapid improvements in information technology and the reduction in barriers between markets (Hasan *et al.* 2002). Recent changes in Europe have been lowering costs towards US levels and reducing spreads but substantial differences and ‘inefficiencies’ remain. Overlaid by the emergence of the euro, this sets the scene for a very different structure of financial markets from the traditional idea of predominantly national players transacting in their own market, regulated by the national authorities in which the market is sited. With open outcry in a physical market place it is clear who is doing what where (but necessarily for whom). (Domowitz and Lee 1998) goes as far as suggesting that it is no longer possible to distinguish between the functions of exchanges and brokers. Some of the automated systems operated by brokers are not far from being an exchange and some of the most automated specialist exchanges have difficulty fitting into the definitions set out in the regulations. The changes thus far have been substantial (Hasan *et al.* 2002) with the merger of some exchanges, linkages between others and complex inter-relations both horizontally across countries and vertically

between functions. As Fig. 1 illustrates, the number of active proposals has been even larger and as a result it is difficult to forecast with any accuracy what the pattern some years hence will look like. This mutual uncertainty, with participants not clear about where regulation is going and regulators not clear about the environment they will have to regulate is bound to generate problems for both parties.

There are thus two related forces operating to transform the structure of regulation and of the markets themselves in securities markets in the European Economic Area. The attempt by the authorities to create a single financial market in Europe involves the removal of barriers between the national and local markets and the creation of a common framework for the resulting European markets. At the same time participants in financial markets are themselves trying to get a more global ability to operate as people seek to diversify their risks across markets and products and seek out opportunities for improved rates of return elsewhere. The European authorities cannot ignore the global nature of financial markets when deciding upon their own rules otherwise they will merely tend to drive mobile activity elsewhere, particularly into US markets. There therefore has to be a balance between international agreement and the particular regulatory structures chosen in Europe that reflect the whole environment in which regulation has to operate.

It should however be stressed at the outset that talking about a 'single' European financial market does not imply that there will be only one market place for securities in Europe, although some centralisation along those lines might be believable if one were to look at the US as a model for the likely direction of development. Since the national European markets are likely to continue to have substantial national features as the result of different tax and benefit structures and social institutions for some time to come more localised markets are to be expected. They could be in the form of a number of related groups or indeed in some sort of hierarchical form with a European level and more localised levels operating together. With electronic access and improved platforms markets can become interlaced and their location may be more difficult to pin down in purely geographic terms.

1 The Development of Regulation and the Development of the European Market

The structure of regulation somehow has to be consistent with the structure of the markets. However, regulatory structures change only slowly and tend to react rather than anticipate. In an ideal world today's regulations enable tomorrow's markets to develop in a nondistortionary manner that assists efficiency does not discriminate between institutions and yet meets society's concerns. In the European environment there are choices about how to achieve this. One route, favoured in the de-

velopment of the single market since 1987, has been to seek minimum agreement on the essentials to be harmonised, such as market conduct, issuance, prospectuses, accounting rules etc. Beyond that point there can then be competition among rules and voluntary agreements to harmonise further. Alternatively one could try to set out a European system. Going beyond the first step implies that the European authorities themselves need at least to create European level institutions and probably harmonise and integrate at a more local level. To some extent that is happening where policies are borrowed across country borders. The Nordic supervisory systems are becoming more integrated as the private sector institutions they deal with run more across borders and their legislation is having more common elements.

The instruments available will usually be some combination of public law, under which the authorities constrain the activities of financial institutions to varying levels of detail; private law where contracts are agreed among the users and providers of financial services, where the form of such contracts may also be regulated and 'soft law' where the participants agree to a framework of rules as a condition for being allowed to participate. Such self-regulation is common in the field of securities markets. The balance between these various instruments is usually substantially affected by history. Self-regulation grew up in cases where the participants had to be able to develop a framework of trust in which they could operate. Although it might be possible to apply sanctions after the event in order to recover losses incurred because one party did not follow the rules in particular instances, markets can usually only operate because such breaches are not expected. Loss of future membership rights and limits on exposures that can be incurred along the way can be effective measures.

Most financial institutions operate under competitive conditions. Although the fact that the authorities may control the right of entry may confer a rent on the participants, if collusion is not permitted then the market can work effectively. There are some exceptions to this, where the market has monopoly characteristics – the ability of a company to move its listing may be very limited. The ability to trade in particular securities may be limited to a particular exchange. To some extent regulation and competition are complementary means of disciplining markets but regulation enables the authorities to have different objectives. One of the major features of regulatory regimes that have been distinguished in recent years is that their objectives can be distinguished into those that relate to the stability of the financial system as a whole and those that relate to the effective operation of the market. The concern in this second regard has to some extent been focused on transparency and the availability of information for markets to make judgements. The same information will also help the authorities monitor compliance. However, the competitive forces and market discipline will not operate if they cannot be exercised, say because ownership is not contestable. Corporate structure and

governance therefore form key features of the operation of the system as a whole. The level of quality of operation of financial markets required by the authorities remains somewhat unclear. In some respects the authorities seem to have been concerned to limit the number of failures of institutions and the volatility of markets. The extent and indeed rationale for these objectives tends not to be spelt out, although the Basel2 discussions give some indication of the authorities appetite for risk avoidance. The attitude to volatility, particular with respect to correlated risks over the course of the economic cycle remains under discussion.

It would, however, be possible to introduce more certainty into the system if it were to be clearer what regulation is expected to achieve. Many of the relationships between financial market participants are governed by tight and fairly explicit civil contracts. The regulations imposed by the authorities on the other hand have a tendency to focus on what should be done rather than on setting out the objectives. It is rather easier to predict where regulation will go if the point is clear. There are two main areas where the point tends to be somewhat obscure. One is in the requirements for systemic stability and the characteristics of a system in which the public can have confidence. The second is in the degree to which the exposure of the public to risk should be limited. The first of these relates to the prudential side of regulation and the second to the ‘conduct of business’.

The reasons for the obscurity on the prudential side are well-known. The authorities face a dilemma in that they do not want to underwrite individual institutions (and their shareholders) but in a highly monopolised framework it will be difficult to maintain the viability of the system without in effect maintaining some support for the institutions - a classic example of moral hazard. In the second area, much of the problem comes from the discrepancy between the public’s perception of risk and the actual – usually higher – risk. The authorities face a dilemma in trying to educate the public on the one hand and limit the risk on the other. It is a political reality that governments will not accept the realisation of too great a risk in these circumstances. The expectation and the practice is therefore that the authorities will act but the nature of this commitment is not clear. This commitment can be viewed as an ‘implicit contract’. However, because it is not expressed none of the parties are clear what it involves. This will tend to distort the other contracts that the parties have with each other, whether implicit or explicit. If people think there is some implicit insurance provided in the background they will be prepared to take risks they would not otherwise. One of the problems with leaving contracts for regulation implicit is that the rules that are developed may not actually be well tuned to the unstated objectives and the incentives under which the participants act may be rather different from that intended.

It would help if the nature of the guarantee could be spelt out. However, it is not necessary for there

to be a blanket guarantee. Financial services are offered with differing risks. The problem is to understand the extent of that risk in a world of incomplete information. One possible approach is to make the commitments explicit in the regulation of the financial market institutions themselves. The commitments could themselves take the form of a contract where the institution agrees to certain limitations on the risks it runs. In return the state's implicit guarantee to the public could be more explicit. The institution's performance of its part of the contract would be subject to effective monitoring and the contract would be withdrawn if performance were inadequate. This form of 'contract regulation' enables different institutions, running different risks, to operate side by side. The same would apply to the extent that the institutions offer different services and would in effect enable a price to be placed on these differences.

Market participants are concerned that the regulatory regime should be fair – not unreasonable slanted either against the incumbents or against innovation. This is not without its own difficulties. Insofar as the regulatory environment is for a common standard then users of the services can have a clearer view of what is entailed. However, a level playing field in that sense removes a large part of the ability to compete and innovate. A move towards more explicit contracts and towards contract regulation might form a basis for allowing financial institutions to compete particularly across borders. Regulations do not need to be identical if the contracts are clear, particularly the implicit contracts. In the EEA with institutions regulated in one country being able to operate in others, the implicit contract also runs across borders. The regulating authority is implicitly offering guarantees to all users, not just those within the home jurisdiction. However, the host government is faced with the problem that they need to allow for the fact that the guarantee may or may not be exercised in practice by the foreign authorities if it is implicit. Clearing up these unstated contracts is thus more important in a system where institutions and regulations run across borders.

One of the issues that tends to be unstated is the balance between the parties. For example, it is possible for some marketplaces to trade using price discovery from the primary market (Hasan *et al.* 2002) take the example of the NYSE). In these circumstances the other exchange may be thought to be 'cream skimming' but their actions also have the effect of reducing the validity (quality) of the NYSE price and increasing the spread. While pricing the information might alter the balance it remains that the end investor and the primary exchange might be disadvantaged. In their study of efficiency among 49 exchanges over the period 1989-98, (Hasan *et al.* 2002) also conclude that having a common regulatory environment, having competition within the same country and having a greater proportion of costs going on 'technology' all lead to greater efficiency.¹ The interaction with

¹ Efficiency is measured by comparison to a stochastic frontier production function (Mayes *et al.*, 1994).

the regulatory structure thus appears to be important from the point of view of the cost of trading. Different aspects of regulation have distinguishable effects but ones that potentially could conflict. For example, a common regulatory environment may encourage amalgamation and hence reduce competition. It is particularly noticeable from the study's results that in the period 1993-8 relative efficiency improved in Europe by nearly 10 percentage points, bringing European stock exchanges closer on average to best practice than the exchanges in any of the other main regions. Other characteristics of exchanges also affect their efficiency, with exchanges that combine equities and derivatives or are automated or are 'for-profit' organisations tending to be the more efficient. Efficiency cannot be a criterion on its own.

The following sections seek to clarify the nature of the regulatory contracts relating to securities markets; to explore the impact this may have on the rapidly developing structure of European markets and suggest means of achieving the objectives of regulation more effectively by spelling out the regulatory contracts in those terms. Section 2 considers the nature of some of the implicit contracts that exist, particularly between governments, the public, regulators and the regulated. Section 3 explores how this is being complicated by the increasingly cross-border nature of activity in Europe. Section 4 then goes on to consider some approaches that may allow a more flexible structure for regulation that permits different market structures to coexist and for market forces rather than regulatory constraints to have a bigger role in determining the future landscape of securities markets in Europe.

2 The Network of Implicit Contracts

There are various ways of cutting the cake. The description that follows identifies 11 interest groups in securities markets who are involved in the network of implicit contracts but it is readily possible to sub-divide these groups or amalgamate them differently. These groups can overlap in the sense that people can hold more than one interest. Indeed if the groups were not overlapping the problem would be much more tractable. Fig. 2 sets out the network of relationships to which these various implicit contracts apply. The basic picture is simply that some people wish to undertake securities transactions with others, which they normally do through intermediaries, who use some marketplace for the transactions. However, this is the secondary market in existing securities and someone has to issue the securities in the first place. As this is a highly technical concern and information is perhaps the most important element in the system, these transactions are often undertaken subject to expert advice. The whole system is regulated. No attempt has been made to consider the settlement and securities depository functions explicitly nor indeed the payments system that is necessary to complete the transactions.

The 11 interest groups identified are

- i *the general public*, particularly in their role as electors and taxpayers. If something goes wrong with financial markets or they operate inefficiently, society as a whole suffers. Standards of living and wealth generally are affected
- ii *customers*, who may be private individuals, firms, trusts and public sector entities. Customers and the general public overlap. Electors who hold securities directly will probably have different views about how securities markets should be run from those who hold them indirectly through pension funds or those who do not hold them at all. It would be nice to draw a clear dividing line between those who have taken a conscious decision to acquire risks by (non)participation in securities markets and those who are simply innocent bystanders, affected by the outcomes. The distinction drawn here is perhaps better expressed as being between specific and general risk.
- iii *institutional investors* in the sense described here are knowledgeable participants with large funds at stake. Clearly large individual customers could fit into this category in the sense that they do not need to operate via an intermediary. The main reason for identifying this group, however, is that they are managing funds on behalf of others. There is clearly a complication we could introduce here as there is more than one type of beneficiary from the activities of the institution. Some people will have placed funds with the institution for management, others may be beneficial owners of the institution itself.
- iv *traders, market makers* are the parties directly involved in undertaking the transactions. It depends very much on the particular market as to whether traders deal directly with each other or through market makers who are also trading on their own account in order to keep the market liquid enough to operate readily
- v *government* has the role of deciding on behalf of society as a whole what the nature of the regulatory system should be and in setting in place the legislation necessary for it to operate. As electors the general public has an implicit contract with the members of parliament but the regulatory institutions may have contracts with parliament or the government depending on the constitutional position.
- vi *regulators and supervisors* form a relatively heterogeneous group. It depends on the nature of the legislation covering a market how much an outside regulatory authority has scope to make the rules. In some structures those running the exchanges can make many of the rules themselves and are substantially self-regulating. Regulation itself can be divided into three generalised areas: - business conduct, prudential and systemic – which need not be undertaken by the same organisation. The central bank is bound to have a role in ensuring that the public has confidence in the financial system as a whole and it may have a wider role in the payments system and with respect to banks even if it has no direct role in the regulation and supervision of the institutions involved in

securities trading and settlement.

vii *managers of exchanges* is simply a generic term for those who are directly responsible for the running of the exchange on behalf of the owners. Clearly one can take a broad view of what constitutes the exchange as this can extend into the settlement system and to the securities depository and to some extent to the custody system

viii *owners of exchanges* can follow a variety of models. The exchange may simply itself be a public company with shareholders or some more mutual arrangement owned by some or all of the traders or ‘members’. Clearly the nature of ownership affects the incentives and the way in which both actual and implicit contracts should be formed.

ix *advisors, analysts, auditors and commentators* form a heterogeneous group whose input is expected to be objective and independent in important respects. Markets can only function properly with high quality information. It is essential that the players understand the relationships with these parties, as people with similar names can play different roles.

x *listed companies* are of course essential to the picture as it they who want to raise the finance in the first place and are required to produce a flow of information in return. Similarly ownership of the securities normally conveys certain rights over the conduct of the company, particularly when they take the form of voting shares.

xi *(primary market players)* form part of the network of relationships in practice. However, here we concentrate purely on the secondary market. The nature of the regulation in the primary market is nevertheless key to whether firms seek a placement and listing in a market at all. Competition in the primary market has a crucial impact on the structure of securities markets in Europe. Insofar as the ‘home’ market begins to have no particular role in the search for finance then the whole competitive and regulatory structure becomes much more complicated.

In Fig. 2 we have identified 18 contractual arrangements between the 11 interest groups we have listed. Only some of these are spelt out clearly and they will all be incomplete in the sense that the detail of the contract cannot specify all of the actions required of the parties in every circumstance. Other contracts will also exist. The government, for example, may use external institutions to manage tranches of funds for it. It will also have relationships with listed companies as owners, customers and tax collectors. It will issue securities itself.

2.1 *The Contract Between the Public and the Government*

Since governments/members of parliament are elected on a platform, where there is no ability to decide on some of the components rather than the complete package, the contract is completely soft. Governments are not compelled to carry out their promises, although electors will punish them on

the next occasion if they break too many commitments. The nature of any commitment with regard to the public will therefore be expressed either in legislation or in the form of statements by regulators. Because these ‘contracts’ are indirect it is easy for the public to believe one thing when the written commitment or the unstated commitments are actually something different.

The most obvious example comes in the guaranteeing of banks. Bank deposits are insured in all EEA countries at least to an extent specified in the directive. This means that most people think their deposits are entirely safe. The existence of a haircut or an upper limit or a period of time when they will not have access to the insured funds will tend not to be factors taken into account. But beyond this will be implicit guarantees. Most depositors think that household name banks will not fail. A sophisticated reason would be because they are ‘too big to fail’ in the sense that their ceasing trading could have a sufficiently large impact on public confidence in the banking system and would directly have a knock-on effect on too many transactions. The doctrine of ‘constructive ambiguity’ means that in many cases the public does not have prior knowledge of exactly what the authorities will do. The explicit and implied contracts inherent in this between the government and depositors ipso facto imply the absence of an implicit contract between the public as taxpayer and the government to the effect that the taxpayer will not be called on to support the financial system if it comes under risk. Indeed the unwritten contract is probably that the taxpayer *will* be called upon without any stated limit. The taxpayer here of course is not just current taxpayers but future generations when the increased public sector debt has to be repaid and serviced.

The commitments with respect to securities markets are even less stated. In what sense can securities markets collapse? Who pays to keep them going? Since the public is an implicit partner to these contracts there is always a danger that they have subscribed to more risk than they would like to bear, given an explicit choice. Turning this remark round, the degree to which individuals who are consciously acquiring risks have those risks limited by society at large may be different from what would be concluded in a more open discussion. This is in addition to the well-known problem that the authorities face with regard to the general public who are involved directly or indirectly in securities markets. Many people, pension-holders, for example, are unaware of the risks they are running. This is not because they are uninformed, although that might be the reason. It is because there is an implicit contract with government that at some point, anyone whose income is harmed beyond a certain point will get redress. There is usually an explicit contract through the social security system, even in countries where the pension system is funded through contributions. However, the expectation is that should something serious go wrong with securities prices and hence the ability to pay pensions, the government will step in. As (Merton *et al.* 2002) suggest, this is equivalent to having a put option but since the contract is implicit it is difficult to know how to value that option.

(Miller *et al.* 2002) suggest that in US there may have been a deliberate underwriting of securities markets by the Federal Reserve (the so-called ‘Greenspan put’). The model that they develop enables a value to be placed on that option. The net result of the supposed underwriting of stockmarket prices is of course that they are higher than they would otherwise be, as the put is priced in. The existence of the put is of course only an hypothesis. There is no explicit commitment on the part of the Fed. Nevertheless it is clear that the Federal Reserve cares about the volatility of asset prices. The famous remarks about ‘irrational exuberance’ made in a speech in December 1996 (and repeated in the semi-annual testimony to Congress the following February) were part of a continuing set of reservations about the degree to which stock market prices were rising until their peak in 2000. That reservation occurs simply because financial markets can exacerbate shocks to the real economy. There is a strong tendency for ratings and risk assessments to be ‘procyclical’ – too optimistic on the way up and rather too pessimistic when the economy turns down. Assuming that markets do believe in the existence of a Greenspan put, then the discovery that such a put did not exist, which would be most likely to occur when securities prices fell substantially and the authorities did not react as expected, could exacerbate the downwards adjustment.

However, the main concern is usually asymmetric owing to the implicit and explicit requirements of the authorities to maintain the stability of the financial system as a whole. Asset prices tend to move substantially just at the time that the number of nonperforming loans increases thus generating the danger of a downward spiral of debt deflation (King 1994). Banks need to liquefy assets that are normally held to maturity, increase capital and cut back on loans thereby putting pressure on other borrowers and asset holders who in turn get into difficulty. The authorities thus need to act on the downside in a way that is not so explicitly matched on the upside. When risks are realised the concerns are obvious but on the upside it is inherently impossible to decide accurately the degree to which any rise in securities prices is the result of a perceived change in prospects (‘fundamentals’) or an unsupportable ‘bubble’.

In these circumstances two implicit contracts are being acted upon at the same time. The government is protecting society at large from volatility in household incomes and employment by trying to limit economic fluctuations and their knock on consequences through financial markets. It is also more directly protecting those exposed to the contraction of financial institutions. Nevertheless in all of these cases current and future taxpayers (and beneficiaries, as benefit rates may be cut) are involuntarily called upon. It is unlikely that they are particularly aware of this prior commitment or indeed that either beforehand or afterwards that they are aware of the cost of providing that insurance. That particular contract is decidedly unwritten. Interestingly enough the Stability and Growth Pact in the EU sets out some limits to this implicit contract in a way that national governments did not

find necessary except perhaps through internal fiscal federalism in Germany.

The implicit contract with the government is however much more complex than just some unstated support either for the markets or for those adversely affected. It has other aspects related to efficiency and fairness. It has become more common in recent years to try to spell out the contract rather more clearly in terms of three main respects: prudence by financial institutions, conduct of business and ensuring the system. The Wallis Committee Report in Australia (1997) and the subsequent tri-partite regulatory system is one route. The declaration of objectives by the FSA in the UK is another.

Conduct of business standards face a dilemma. Higher requirements tend to increase costs (Llewellyn 2000) but it is difficult to balance out the marginal benefit against the marginal cost. Clearly at the point that marginal benefit is lower then it would be beneficial for providers to contribute to an insurance fund that compensated customers for any remaining losses. Where regulation imposes costs somebody has to pay that cost. While some of the cost may be borne by the shareholders of the firm the chances are that much of the costs are borne by the customer. However, these costs are not stripped out nor are they normally voluntary. For the retail investor there are only limited occasions on which one can insure against risk in an unpackaged manner but for the large or institutional investor this form of offsetting is widespread, not just through the choice of portfolio but through the use of derivatives. The problem in the case of the risks towards which regulations are directed is that the costs of both the risk and the insurance are difficult to assess. ‘Guaranteed’ returns on insurance policies may not be worth what they appear if changes in the market mean that the insurance firm goes under. As (Merton *et al.* 2002) point out, the defined benefits of a large number of major US company pension schemes are well in excess of the market capitalisation of the company. Were the company to get into trouble then it is highly debatable what the results for pensioners will be, despite the existence of government protection. The value of that protection will only be clear if there is an attempt to exercise it a concerted manner. In practice the protection will be contingent on the size of the claims made. Even defined contribution schemes can have problems if valuations are not appropriately marked to market.

2.2 *Implicit Contracts Between Regulators and the Regulated*

Much of the foregoing discussion has been predicated on the largely unwritten contracts between governments and the general run of small-scale participants in financial markets. There are also implicit contracts between regulators and the financial firms whom they regulate. This is most obvious in the case of securities markets where the main basis for regulation has been developed by the par-

ticipants, ie self-regulation rather than the imposition of external standards.

In some professions, such as medicine, there are heated debates about the virtues and drawbacks of self-regulation and European regulation and competition has tended to reduce the extent of self-regulation (Brazier *et al.* 1993). Similar debates exist in the context of securities markets, primarily because it was those who wanted to trade who drew up initial rules for how that activity should take place. The trend here has been for these rules to become more and more explicit and indeed externally administered. Since traders in securities markets are usually agents, rather than acting on their own behalf, the contract between agent and principal will be equally important. Indeed the rules of the exchange will limit the scope of any possible agreement between principal and agent. An agent cannot agree to transact ‘at best’ if the exchange does not readily provide that facility or necessary information. Mutual organisations face greater difficulties in taking actions that bind all their members when interests are not homogeneous (Di Noia 2001b).

One of the difficulties in establishing what the contracts are is that there are multiple regulators and objectives. In Finland, for example, it is the Financial Supervisory Authority (Rahoitustarkastus) that is responsible for the supervision of securities markets. However, the Bank of Finland has a duty to ensure the ‘efficiency’ of financial markets. The Bank has tended to take its role in a fairly proactive manner, pushing the market when new developments that might improve efficiency seemed to be slow to develop. Thus the Bank was an innovator in the field of smart cards, setting up a subsidiary to develop and issue them (which has since been sold). It developed and operates the RTGS payments system, now part of TARGET and is currently concerned with e-settlement. It is a part owner of the main securities and banknote printer Setec OY. In the field of securities markets it is part owner of the securities exchange HEX and has a member on the board. The authorities could therefore take the role of competitor, owner or regulator in pursuit of their objectives on behalf of society. Although the FSA is an independent institution, it shares facilities with the Bank of Finland and reports to a member of the Bank’s board. In practice this close relationship and the ability to influence the markets in a variety of ways has generated very considerable benefits for all the parties involved. In a different and less cooperative environment such an overlaying of relationships could present a problem, as the IMF (2002) noted in its last report on Finland in a related context.

3 Implicit Contracts in a Cross-border Framework.

Up to this point the discussion has been conducted in a purely closed market framework. In a cross-border framework there is no longer a good match between the geographical ownership of the financial assets, the physical location of any real assets on which they are secured or the ultimate ‘in-

surers' in the sense of the taxpayer, who may be separated from them by both time and space. It is not that this implies that any current arrangements are incorrect; simply that by making them explicit the parties do not know what the contracts are (and might want themselves to take out insurance against some of the consequences). To quite an extent these implicit contracts relate to events with a low probability but with a high cost if they do occur. Thus although their present value may be small their consequence will be nontrivial. Governments and courts can (re)classify the realisation of risks so that they are borne by tax payers rather than insurance companies.

In the case of difficulty for a financial institution or market the first point of call will be the home authorities even where there are substantial international activities and claims on the institution. In general it is likely to be very difficult to provide any assistance or support that distinguishes between the rights of claimants according to either proximate or final country of ownership. Indeed in many respects it would be contrary to EU law to attempt to do so. Nevertheless it remains the case that the authorities may have some reluctance in paying out if the benefits are likely to flow to other countries. At the very least they would like to see some participation by the other beneficiary governments. In the case of banks there is an explicit minimum contract with regard to the insurance of small deposits. Insurance will be paid out across borders in the case of branches, not just within the EEA but also to depositors outside Europe altogether. Deutsche Bank's General Disclosure Statement in New Zealand makes it clear that all local depositors will be paid out by the German deposit insurance fund. However, even though some contributors to insurance funds might complain if they realised how different the nature of the payouts might be, it is the implicit or vague guarantees where the greatest problem lies.

It is often argued in a European context (see (Lannoo 2002) and (Di Giorgio and Di Noia 2002) for a discussion) that because of the overlaps and possible inconsistencies that there should be an EU level regulator or at least a pyramid of regulation with an EU institution at its apex. However, in the context of securities markets the problem is 'global'. While Nokia is by far the most important company on the Helsinki stock exchange much of its beneficial ownership is in the United States, where it is also listed. It is not normally suggested that therefore there should be a global regulator, trivially because it is impractical. Even if umbrella arrangements are made within Europe a large portion of securities markets transactions and indeed ownership will lie outside European jurisdiction because of cross-border activity in both directions.

European exchanges therefore face a double difficulty. Not only are they concerned that regulation of traditional exchanges and new systems are conducted on a 'fair' basis but that the legislation applied inside the EU does not put them at a disadvantage compared with outside mar-

kets. In the same way that US restrictions were helpful in creating euro dollar and other euro- markets in London similar actions could move business out of Europe altogether.

One implicit contract that we have thus far not discussed (in part because it is largely illegal in the context of the EEA) is that between the government and the firm. Firms that are large by comparison to GDP may expect that governments will help them out in the case of difficulty. Even though public procurement is technically open there is nevertheless a stronger than expected preponderance of national purchasing (Mayes 1997). However any such support will accrue to the shareholders irrelevant of their country of residence – even though such support is usually envisaged by government as being more focused on employment or other spillover effects in the domestic economy.

4 Competition and Contracts

4.1 *Pressures on Competition and Variety of Regulation from Market Forces and Views of Efficiency*

The structure of European securities markets is steadily changing. The increasing openness of markets, the innovations of information technology that make distance largely irrelevant in many transactions and reduce costs and the existence of economies of scale all point to increasing concentration of trading activities. This concentration may occur through alliances and the use of common trading platforms rather than outright mergers as there is considerable evidence that listing and the provision of the primary market have advantages from localisation (Malkamäki 1999; Di Noia 2001a; Hasan *et al.* 2002, for example). The concentration is extending beyond trading to vertical integration, including settlement systems and depositories. Internationalisation tends to result in greater homogeneity of regulation, something that is positively encouraged within the framework of the European Union.

It is therefore to be expected that with the development of these networks that the forms of regulation adopted by the major trading centres, New York, London, Frankfurt etc. will become the dominant paradigm. These centres have strong regulatory institutions and have been developing the codification of procedures and hence reducing the extent of the implicit parts of contracts among the direct participants.

There is, however, no guarantee that as the number of choices falls that existing systems will meet the needs of such a large proportion of participants either for transactions or regulation. The rise of alternative trading systems (ATSS) particularly in the US gives witness to the variety of need. By 2001 there were 79 ATSS using five different types of trading system, according to (The Bond Market Association 2001) (TBMA). There is considerable debate over what constitutes an ATS as the

traditional definition includes both systems that match buyers and sellers outside traditional marketplaces and systems that enable traders to concentrate the demands of their clients in a way that enables them to get better deals across traditional exchanges.² Thus ATSs may be substitutes for traditional exchanges or just intermediate steps in their use by some traders (Korhonen 2001). The boundary of what constitutes an ATS is rather arbitrary and usually determined by the regulatory authorities. Thus the Evlinet brokerage system in Finland, which in many respects is similar to an ATS with a single dealer platform is classed as an order routing system.

How ATSs are classified matters very much for their regulation. While ATSs currently escape the same regulation as traditional market places the new Investment Services Directive is intended to bring them under the same rules. Thus instruments that are traded on a regulated market can only be traded on regulated markets (although brokers can continue to undertake internal trades and such ATSs will be treated differently).

The authorities seem to have ambivalent views about the value of competition. In designing near monopoly RTGS systems it is not clear that central banks have put an explicit price on the systemic risk that they are reducing. Competition is affected not just by horizontal agreements between securities markets but also by the vertical linkages between the markets, payments and settlements systems and depositories. The access of other markets for the securities to the settlement systems could be inhibited by some arrangements and indeed the ability to run parallel systems for the whole sequence might be eliminated. It is not at all clear that monopolies in each individual country would compete in a particularly meaningful sense in an open European financial market.

4.2 *Competition Among Regulations*

It is a different question whether all ATSs *should* be regulated under the same scheme or indeed whether there should be common regulation of exchanges. From one direction the regulation needs to be common otherwise there is not a 'level playing field' for fair competition among exchanges. However, competition among rules is an integral part of the EU internal market (see the chapter by Woolcock in (Mayes 1997) for example). The migration of trade from one exchange to another may well signal which rule systems are preferable in the eyes of the users (they may of course signal other aspects of functionality such as the ease of remote access). This faces regulators with the di-

² (Korhonen 2001) contrasts the TBMA and FESCO (2000) classifications of ATSs. TBMA distinguishes auction, cross-matching, interdealer, multidealer and single-dealer systems, while (FESCO 2000) distinguishes active bulletin boards, order-driven automated trade matching systems (which may use auction or continuous matching), quote-driven systems and crossing systems. The concept of an ECN (Electronic Communication Network) runs across both these forms of classification. ECNs are normally profit-making companies that charge commissions to buyers and sellers but do not trade as principals themselves or profit from the bid-offer spread.

lemma of whether to change their own rules or see the trade migrate outside their jurisdiction. It is by no means clear that such competition among rules would lead to a rush for the bottom or indeed a rush to quality for that matter. Systems with different levels of regulation could coexist where the demands of clients are different. What is key to the effective operation of such a competition is that the rule systems themselves should be transparent and known to those making the choice. In this case security, insurance and quality of service can be functions for which customers pay. The nature of the contract needs to be clear for this choice to be made. Indeed the nature of this competition would give a clear idea of the value of various risks to customers.

ATSS offer different levels of information and different settlement arrangements. Clearly prospects for these systems would change if the speed of settlements could be increased to something much closer to the speed of payments. If greater speed increases the operational risk then it would still be possible to insure against some of these risks if the operators can produce reliable estimates of the risk.

4.3 *Contract Regulation*

The relationship between the regulator and the regulated is in some respects an explicit contract. The financial institution is permitted to operate in return for agreeing to adhere to the terms of a complex rule book, which will itself evolve as time passes. However, there is not normally a performance contract, in the sense that the objectives of the regulatory contract are set out and the institution agrees to bind itself to a certain quality of service that the authorities can monitor – with penalties in the event of a breach. The use of such contracts is most obvious when the authorities contract out particular services, such as parts of the payments system – there is a private contractor for the RTGS system in New Zealand for example. Pre –commitment contracts of the form explored by (Kupiec and O’Brien 1997), which have been trialled in the United States, enabled banks to promise a standard of performance in capital provision in return for less intrusive regulation.

One of the big advantages of this form of contract is that it aligns the incentives for the institution with the objectives of the regulator. Thus in the pursuit of profit or market share the institution is keen to see that it follows the terms of the contract, because a breach will lead it to lose that privileged position. The RTGS operator will find its contract terminated and the bank will find that it has to return to the more expensive detailed regulation. The advantage of such contracts for the service provider is that they can choose whichever way they wish to provide the services to the agreed standards – usually within certain limits. This enhances the ability of institutions to compete. Even in the event of monopoly services, the market can remain contestable if the licence comes up for

renegotiation periodically.

5 Concluding Remark

It is too early to map out how the network of relationships among securities markets in Europe is going to stabilise as the single market in financial services becomes more complete. It seems clear that while there are persuasive arguments for economies of scale and irrelevance of location in some respects, especially in transactions and settlements, there are other areas related to listing and initial placements which imply the continued existence of fairly localised markets. Nevertheless, whichever system emerges it will be necessary to spell out much more clearly, the nature of the implicit contracts that exist between the public (as taxpayer) and government and between the government and the public as consumer of financial services as these run increasingly across borders. The expectations of the various parties will otherwise vary quite substantially from the reality that will apply in the case of a major problem. While such problems are more likely in other parts of the financial system, particularly banks, than in securities markets it would assist the prudential management of risk for the position to be clearer.

The nature of the regulatory environment may on the other hand have quite striking implications for the shape of financial markets. If institutions offering different services with different degrees of security and prices are permitted to coexist the range of institutions will be much greater than if strong restrictions are applied that drive some of the services outside Europe. The arguments for regulatory competition, permitting a variety of institutions and concluding regulatory contracts for varying qualities of service seem quite compelling. At the same time developments in Europe are going to be driven very strongly by the nature of the agreements at the international level and the decisions of the largest markets.

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Figure 1.

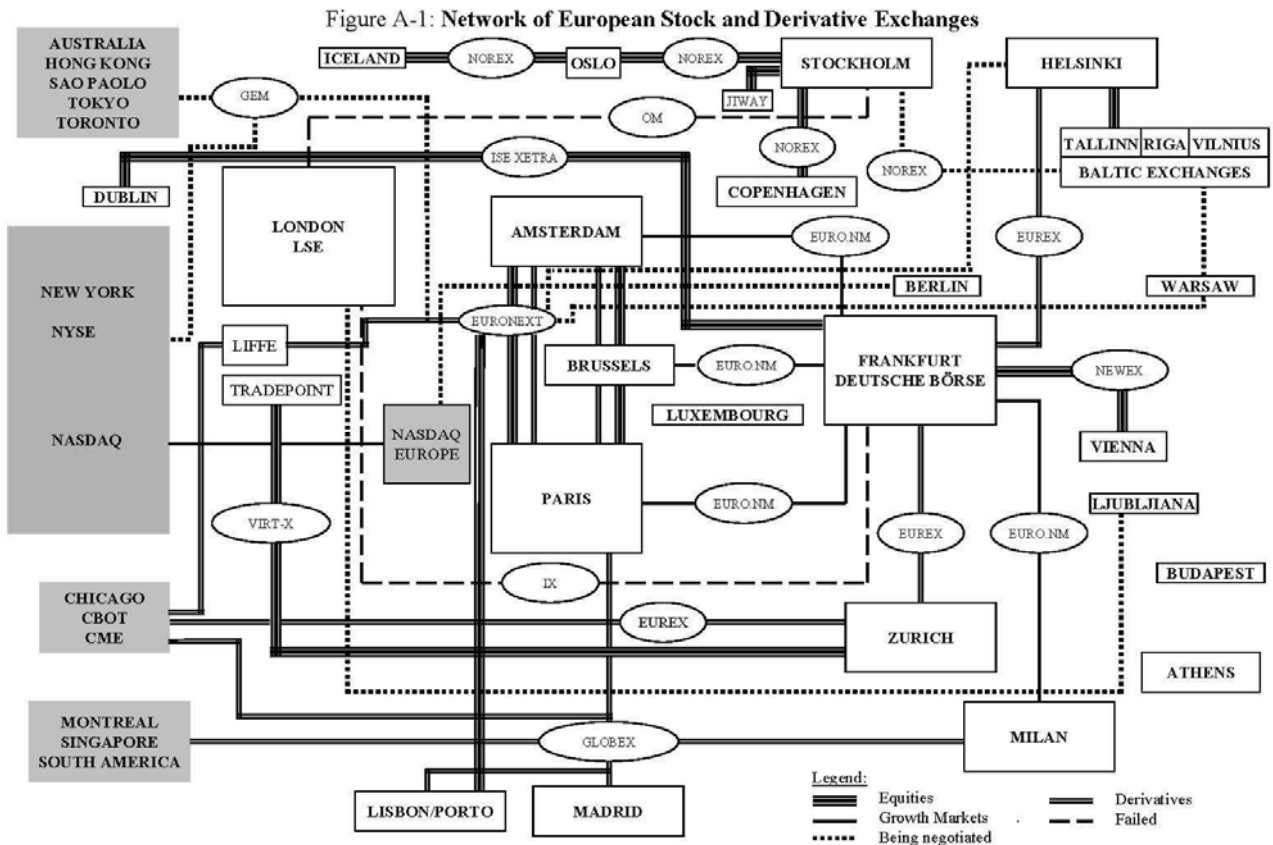


Figure 2 The Network of Contractual Relationships in Securities Markets

