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Stock Exchanges and Issuers: A Changing Relationship*

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Summary: The nature of the relation between stock exchanges and firms seeking a listing has changed considerably over the past decades. In this paper, we argue that the relationship has lost most of its historic complexity and has almost been reduced to a standardized contract in the sense that there are few contractual properties distinguishing listing on different exchanges apart from granting access to a specific liquidity pool. Analyzing the actual specifications of listing agreements at five major stock exchanges, we demonstrate that the contractual features are converging towards a standardized agreement. Furthermore, we show that some of the functions formerly fulfilled by exchanges are now performed by other institutions. We analyze whether these changes are reflected by policy makers in their efforts to create integrated European capital markets.

Zusammenfassung: Die Beziehung zwischen Börsen und Eigenkapitalemittenten hat sich in den vergangenen Jahrzehnten fundamental verändert. In diesem Beitrag argumentieren wir, dass diese Beziehung einer standardisierten Vertragsbeziehung gleicht, die ihre historische Komplexität weitgehend verloren hat. Während Börsen in der Vergangenheit unterschiedlich gestaltete Listinganforderungen an Unternehmen gestellt und durchgesetzt haben, ist heute ihr wesentliches Differenzierungsmerkmal die Liquidität der gehandelten Aktien. Eine Untersuchung der Listinganforderungen von fünf bedeutenden Börsen zeigt, dass die wichtigsten Vertragsbestandteile des Abkommens zwischen Emmittent und Börse weitgehend vereinheitlicht sind. Wir zeigen weiterhin, dass neue Institutionen wie etwa nationale Börsenaufsichtsbehörden einige der früher von Börsen wahrgenommenen Aufgaben übernommen haben. Abschließend untersuchen wir, ob und in welchem Maße diese Veränderungen in den gegenwärtigen Bemühungen zur Schaffung integrierter europäischer Kapitalmärkte berücksichtigt werden.

1 Introduction

The European securities exchange industry is currently undergoing a fundamental transformation. Driven by both political reform and competitive pressure it has turned into a dynamic industry that is in a state of flux and develops at a remarkable pace. The drivers on the political side include the liberalization and deregulation of national exchanges during the Eighties and Nineties of the 20th century as well as the current efforts to fully integrate European capital markets and to open up cross-border competition. Fuelled by political reform, competition among stock exchanges has unfolded in several ways. Exchanges have demutualized and were turned into for-profit entities. Moreover, merger and acquisition activity has caused the formation of large multi-national exchanges. Facing increasing

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competitive pressure, exchanges have developed different approaches to covering the value chain of securities trading while competing for liquidity.

It is a peculiarity of stock exchanges that the markets they supply for their customers are two-sided (Rochet and Tirole 2003, Armstrong 2004). In this paper we solely focus on the issuer side of exchanges' business and assess to what extent the contractual relationship between an exchange and its issuers has changed during the recent transformation of the industry. In line with Macey and O'Hara (2002), we conclude that this relationship has lost most of its historic complexity and has almost been reduced to a standardized contract in the sense that there are few contractual properties distinguishing listing on one exchange from on another.[1] Nowadays, both parties, the company seeking a listing and the exchange, enter an unspecific relationship that has lost formerly important attributes. For example, historically exchanges provided standardized corporate governance rules with which listed companies had to comply. Acceptance of these rules helped issuers to transmit a quality signal to investors. Yet over the years, the provision of standardized corporate governance rules has been seized by legislators. On the one hand, the transformation of the exchange issuer relationship is caused by political advances, such as the creation of the single market in Europe and the introduction of the Euro. On the other hand, it is also sparked by technological advances within the industry and by the emergence of new institutions which provide functions formerly delivered by exchanges.

Our analysis is supplemented by an empirical examination of the convergence of listing requirements across the industry. Examining the current specifications of listing agreements we find that exchanges do hardly differ along these lines, but can only differentiate themselves through the liquidity pools they provide for potential issuers. Also, we find that listing fees and exchanges' revenues from listing activities are decreasing. This reflects the reduced scope and complexity of the contractual exchange issuer relationship. As the paper proceeds, we identify the public and private institutions that now provide the functions formerly contained in the listing agreement. Finally, we analyze whether the current political activities in Europe reflect the changing nature of the exchange issuer relationship.

The rest of the paper is organized as follows. Section 2 examines the various elements of the listing relationship as it presented itself in the past and discusses whether and in which form the different contractual properties endure to the present date. Section 3 goes on to examine the convergence of initial listing requirements and follow-up obligations and briefly discusses the development of listing fees and revenues generated from listing activities. To reduce complexity, we limit our analysis to the five major stock market in the United States and Europe (NYSE, NASDAQ, LSE, Euronext and Deutsche Börse), which share among themselves 70% of global share trading turnover and 60% of global market capitalization. Section 4 analyzes how current policy debates in Europe reflect the changing exchange issuer relationship. Finally, section 5 briefly summarizes our findings and concludes the paper.

1 Since we intend to analyze these changes from a purely economic point of view, we abstract from the underlying legal arrangements to a certain degree. However, we are fully aware of the legal diversity to be found in admission and listing procedures and agreements. Hopt et al. (1997) provide a comprehensive overview over these differences for all markets considered in this paper.

2 The Changing Nature of the Exchange Issuer Relationship

2.1 Provision of Standardized Corporate Governance Rules

Strict corporate governance rules protect stockholders and potential investors from fraud, manipulation and possible misconduct of a firm's management and hence lower the cost of capital for firms (La Porta et al. 1997, Shleifer and Vishny 1997). Historically, many stock exchanges provided codified rules of corporate governance long before legislators explicitly turned to this problem by creating superordinate public regulatory bodies (Davis et al. 2003, Macey and O'Hara 2002). The rules set by exchanges included detailed accounting and disclosure requirements as well as rules regarding capital structure or voting rights.[2]

It should be noted that the predominant role of stock exchanges as a primary source of legal rules for listed companies largely eroded when policy makers turned to the problem in the last century. In particular, state legislation as well as common and business law advanced within the last century and both now contain comprehensive regulation concerning the governance of public corporations. Moreover, when policy makers realized the importance of efficient capital markets for national economies during the 20th century, they started to establish independent legal authorities overseeing trading on stock exchanges and prescribing additional listing requirements to issuers of securities. More and more, these institutions replaced stock exchanges as major source of legal rules. For instance, in the United States the SEC was established as early as 1934 as a consequence of the 1929 stock market crash (Benston 1973). In Western Europe comparable single regulator institutions like Bundesanstalt für Finanzdienstleistungsaufsicht (Bafin) in Germany and the Financial Services Authority (FSA) in Great Britain have been founded only towards the end of the 20th century. In addition to these national initiatives, the European Union currently develops a unified framework for the whole Financial Services industry (see Lamfalussy Group 2001, European Commission 2005, 1999 and Section 4 for more details). As a consequence of the introduction of state regulation, legal structures are currently set by legislators and courts and do thus supersede stock exchanges as sources of corporate governance rules.

2.2 Signaling Function

In addition to the provision of corporate governance standards, stock exchanges can also be seen as reputational intermediaries who generate and transport signals to investors. Macey and O'Hara (2002) argue that a firm's decision to list its shares on a stock exchange conveys a quality signal to investors since investors can derive information from the very fact that this particular exchange has agreed to list a firm for trading. These requirements include the number of outstanding shares, minimum market capitalization or minimum revenues realized in the past. Second, and of at least tantamount importance to investors, when listing their shares on a certain exchange firms have to commit to obeying

2 It is beyond the scope of this paper to provide a detailed discussion of all these rules and their historic evolution. Davis et al. (2003) give a comprehensive analysis of the provision of corporate governance and disclosure rules set by the four leading stock markets in the 19th century.

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the rules set by the stock exchange and the according regulating authorities with regard to corporate governance and timely disclosure of information.

Clearly, the value of a signal transmitted by a stock exchange's decision to accept securities from a firm for listing depends on the willingness of the exchange to enforce the set of rules it established as well as the availability and the cost of alternative signals on the quality of firms. Nevertheless, there seems to be evidence that the value of the 'listing signal' decreased over the last decades. Concerning the enforcement of rules there are several indications that stock exchanges have become less willing to enforce their listing requirements due to increasing competition for listings among exchanges. The New York Stock Exchange (NYSE) provides the most cited example. During the 1980s, when several firms ignored the NYSE's rules prohibiting dual class voting stock the NYSE declined to enforce these rules by delisting the offending companies. Finally, with the approval of the Securities and Exchange Commission (SEC) the rules preventing firms from listing shares with different rights were abandoned (Gilson 1993). Moreover, it can be argued that the relative value of the 'listing signal' decreased due to the widespread availability and the good quality of alternative signals, in particular reports produced and published by stock market analysts. Several studies show that analyst reports convey valuable information for investors (Asquith et al. 2005, Barber et al. 2001, Irvine 2003, Womack 1996) and that the number of US firms covered by analysts rose by more than 100% over the Nineties of the 20th century (Barth et al. 2003).

2.3 Provision of Clearing and Settlement Services

Firms issuing securities and investors trading in them face a counterparty risk with regard to the payment for securities sold and the delivery of securities purchased. Historically, stock exchanges minimized this risk by offering clearing and settlement services which in fact constituted a core business of exchanges. These clearing and settlement services included the necessary infrastructure as well as rules for dispute resolution. However, market developments proved that clearing and settlement services can largely be unbundled from trading services. This transfer of post-trading services was largely driven by economies-of-scale arguments disposing stock exchanges from another once important and profitable activity (Schmiedel et al. 2002).

In the US, the Depository Trust Company (DTC) provides both clearing and settlement services in a centralized form for most US stock exchanges including NASDAQ[3] and NYSE. In Europe there is no integrated clearing and settlement system. In fact, there are currently two major clearing and settlement organizations, i.e. LCH.clearnet/Euroclear or Clearstream. However, in addition to these leading companies there are still a number of smaller firms serving smaller European exchanges.[4] This fragmented structure hampers particularly cross-border transactions and is responsible for comparably high clearing and settlement costs in Europe (Cruickshank 2001, Cayseele and Wuyts 2005). The economic problems associated with high-cost cross-border clearing and settlement in Europe and the

3 The name NASDAQ derives from an acronym for National Association of Securities Dealers Automated Quotation.

4 London Economics (2004) contains a detailed overview of the current state of the European clearing and settlement industry.

barriers to efficient cross-border post-trading services have been put on the EU-level agenda by the Giovannini Group in 2001 (Giovannini Group 2001). Yet to a large extent, these problems remain unsolved and hamper further integration of the securities services infrastructure in Europe (FESE 2004, Schmiedel and Schoeneberger 2005).

2.4 Provision of Liquidity

Given the decreasing importance of stock markets in providing and enforcing corporate governance rules and the detachment of clearing services, the provision of liquidity is probably the most important function of stock exchanges at the moment. First, the availability of deep liquidity pools enables companies to quickly raise equity at low cost in primary markets. Thus, a market's ability to absorb equity offerings is of paramount importance for companies seeking an initial listing or planning a capital increase. Second, high levels of liquidity allow investors to buy and to sell their shares quickly in secondary markets without causing a significant influence on market prices, which in turn reduces the cost of equity for companies (Muranaga and Shimizu 1999).

Considering the recent emergence of electronic communication networks (ECNs), that is electronic non-intermediated for-profit financial trading systems, one might wonder whether the predominant role of established stock exchanges in providing liquidity has also been eroded. Due to different market structures ECNs have attained relatively large market shares in the United States while they are more or less irrelevant for the European capital markets. McKinsey and JP Morgan Securities (2002) and Degryse and Van Achter (2002) estimate that for secondary markets ECNs gained a market share (in terms of traded NASDAQ shares) of 37% in the US.[5] There is sound empirical evidence for the United States suggesting that despite the success of ECNs traditional exchanges still provide highest liquidity levels, which leads to lowest transcation costs (Christie and Huang 1994, Bessembinder and Kaufman 1997, Bessembinder 1999, Degryse and Van Achter 2002). For primary markets however, ECNs have failed to establish themselves as alternatives to traditional stock exchanges. To date, there have been no significant initial public offering activities outside traditional stock exchanges. Given these results, we conclude that out of the multitude of functions formerly provided by exchanges to listing firms the provision of liquidity remains currently their most important function.

3 Current Specifications of Listing Contracts

Recent trends such as deregulation, technological advances and changing investor behavior intensified the competitive pressure on financial market institutions in general. Especially in Europe where the introduction of the Euro has laid the groundwork for a single capital market by eliminating intra-European currency risk the institutional arrangements are currently in a state of flux. This is especially true for stock exchanges where ongoing changes in the ownership structures from member-owned towards share-holder owned or-

5 There are no comparable numbers for European markets, but it is a reasonable assumption that the market shares of ECNs in Europe are less than 5% (Degryse and Van Achter 2002, McKinsey and JP Morgan Securities 2002).

ganizations further increased competition and led to a number of cross-border mergers among stock exchanges in Europe (Treptow 2005).

In the following, we focus on the most important aspects for firms deciding whether to list their shares on a specific stock exchange: formal listing requirements which have to be satisfied (initial and follow-up obligations) and the costs associated with a stock market listing (initial and continued costs). We analyze these two parameters for five major stock markets: NYSE, NASDAQ, London Stock Exchange (LSE), Euronext and Deutsche Börse. Together, these exchanges cover over 70% of global share trading turnover and 60% of global market capitalization (FESE 2005). We argue that both listing requirements and pricing structures are converging for these markets.

3.1 Listing Requirements

Table 1 shows the most important listing requirements raised by major stock markets in Europe and the US. With the exception of NASDAQ all exchanges require new listings to provide audited accounts for the last three fiscal years.[6] All stock exchanges require the fulfillment of minimum demands on a company's size and free float. With decreasing size, equity issues become less liquid making transactions more expensive. However, since the *raison d'être* of exchanges is to reduce transaction costs by amassing liquidity, they protect their markets through minimum size barriers. While US stock markets do not require minimum free float ratios for listed firms, European exchanges almost uniformly require a free float ratio of 25%. The situation is different with regard to requirements on minimum size. The minimum market capitalization required to obtain a listing varies between £0.7 million (LSE) and $60 million (NYSE). This difference could be a consequence of the fact that the US capital market is served by several exchanges simultaneously. This provides companies that do not meet the NYSE's listing requirements with alternative listing venues.

The second set of rules frequently found in listing requirements are minimum requisites for profitability and operating history. The object of these rules is to ensure a going concern in the company aspiring a listing. Companies with insufficient track records are extremely difficult to value from an investor's perspective, since they bear a high degree of uncertainty. While being similar in intention, such rules are based on a number of different financial figures such as operating cash flow, revenues or pre-tax income. Euronext Amsterdam even requires companies to be profitable for a number of years.

The third kind of provision common to all listing requirements is usually contained in the follow-up obligations. Follow-up obligations are additional rules and provisions a listed company has to comply with on an ongoing basis after its initial listing. Failure to do so is either finable or at worst results in delisting. The most common requirements are minimum disclosure and financial reporting standards, but also include commitment to voluntary codes of conduct such as corporate governance standards. By committing companies to comply with a certain standard of disclosure, reporting or conduct beyond the legally

6 Listing mechanics, that is the formal process of registration for obtaining a listing, as well as the mandatory content of the offering circular are neglected in this analysis since they are mostly beyond the exchanges' power of constituting rules.

Table 1

Listing Requirements

	Free Float	Min. Equity Min.	Market Cap Min.	Number of Shares	Other Minimum Quantitative Standards
Deutsche Börse					
Official Market	25%	–	€1.25 million	10,000	–
Regulated Market	–	–	–	10,000	–
Euronext					
Amsterdam	10%	€5 million	–	–	Profitable in 3 of the last 5 fiscal years
Brussels	25%	€15 million	€15 million	–	Either min. equity of min. market cap are required
Paris	25%	–	–	–	–
LSE	25%	–	£0.7 million	–	Working capital for the next 12 months
NASDAQ					
Standard 1	–	$15 million	$8 million	1.1 million	Pre-tax income of $1 million in latest fiscal year of 2 of the last 3 fiscal years
Standard 2	–	$30 million	$18 million	1.1 million	–
Standard 3	–	–	$20 million	1.1 million	Market value of listed securities of $75 million OR total assets and total revenues of the same amount
NYSE	–	–	$60 million	1.1 million	Aggregate pre-tax earnings of $10 million over last 3 years OR aggregate operating cash flow of $25 million of last 3 years OR revenues of $75 million in last fiscal year

This table displays the main listing requirements imposed upon their respective issuers by five major stock markets in Europe and in the United States. It contains the major criteria a domestic company has to meet in order to be admitted to an initial public offering of its shares on a specific exchange's main market. Small cap markets and markets tailored to growing businesses have been excluded from the analysis. With the exception of NASDAQ all exchanges require new listings to provide audited accounts for the last three fiscal years. *Min. Market Capitalization* refers to the minimum market value of publicly held shares. Listing mechanics, that is the formal process of registration for obtaining a listing, as well as the mandatory content of the offering circular are neglected. Additional provisions that aim at providing a minimum standard in the post-listing quality of trading, such as a minimum number of market makers in a newly listed stock, are neglected as well.

Source: Deutsche Börse, Euronext, LSE, NASDAQ, NYSE.

Table 2

Continuing Obligations

	Financial Reporting	Disclosure	Other obligations
Deutsche Börse	Annual financial statements and publication of an interim report	Ad-hoc disclosure in accordance with §15 and §21 WpHG	Compliance with German Takeover Act and German Corporate Governance Code, additional transparency provisions for Prime Standard
Euronext			
Amsterdam	Annual and semi-annual report, quarterly figures are recommended	Publication of any price-sensitive information and in compliance with the Listed Companies Act of 1996	Compliance with the Listing and Issuing Rules of Euronext Amsterdam and the Dutch Corporate Governance Code
Brussels	Annual and semi-annual reports	Any price-sensitive information and information related to the modification of rights attached to financial instruments	
Paris	Annual report and accounts, half-yearly reports and quarterly turnover figures	Public disclosure of any material facts likely to have a significant impact on price	Compliance with the Regulations of the Autorité des Marchés Financiers
LSE	Audited annual reports, unaudited half yearly figures	Public notification of any price-sensitive information	Compliance with the Listing Rules of the UK Listing Authority and the Companies Act
NASDAQ	Annual report independently audited and filed with SEC on Form 10-K, publication of interim earnings reports	Public disclosure of material events and notification in case of various predefined events (Para. 4120 NASDAQ Marketplace Rules)	Rules, standards and maintenance criteria applicable according to the NASDAQ Marketplace Rules and SEC regulations
NYSE	Annual report independently audited and filed with SEC on Form 10-K, publication of interim earnings reports	Public disclosure of material events and notification in case of various predefined events (Para. 204 NYSE Listed Company Manual)	Corporate governance standards and other business standards in compliance with the Listed Company Manual and SEC regulations

This table displays the main follow-up obligations imposed by five major stock markets in Europe and the United States upon their respective issuers. It contains the major criteria a domestic company has to comply with continuously in order to remain admitted to a specific exchange. Small cap markets and markets tailored to growing businesses have been excluded from the analysis. Financial Reporting covers obligations to provide and publish financial results. Disclosure encompasses all obligations to inform the market of certain events.

Sources: Deutsche Börse, Euronext, LSE, NASDAQ, NYSE.

required, exchanges ensure that the investing public disposes of reliable financial information and is kept informed on the progress of a company's affairs. As Table 2 demonstrates, the follow-up obligations which constitute the largest share of the costs associated with a stock market listing are very similar at the different markets and are not a means of differentiation for exchanges when competing for listings. We do not find empirical support for models treating listing requirements as major means for differentiation of stock exchanges like in Foucault and Parlour (2004), Fluck and Stomper (2003) or Huddart et al. (1999).

3.2 Listing Fees

Listing fees are fees that firms have to pay in order to be listed by a certain stock exchange. In general, listing fees are composed of initial fees which have to be paid once at the beginning of the listing relationship and continuing fees payable on an annual basis. Table 3 presents the composition of listing fees for important stock exchanges and shows that listing fees are a function of the characteristics of the issuing firm. There is considerable evidence, that stock exchanges have identified listing fees as an effective parameter to attract further listings to their market. For instance, in 2004, NASDAQ announced to waive listing fees for dual listings for one year in an attempt to lure companies from the NYSE. Similarly, in 2003 the LSE slashed listing fees for its AIM market and thus managed to continue to provide a flotation venue for high growth companies.

Table 3

Listing Fees Overview

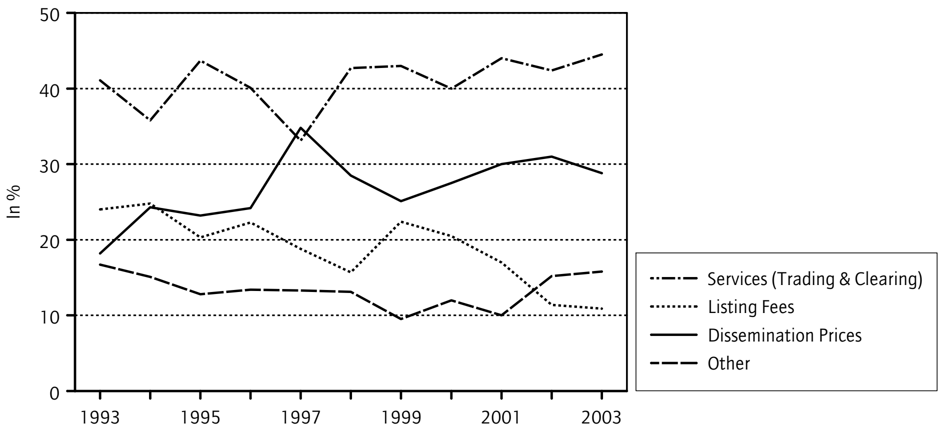
	Fixed Commissions	Market Capitalization	Number of Shares	Minimum Fee	Maximum Fee
Panel A: Initial listing fees and charges for admission					
Deutsche Börse	X			€ 7,500	€ 7,500
Euronext		X		€ 10,000	€ 3,000,000
LSE		X		£ 5,320	£ 265,988
NASDAQ			X	$ 100,000	$ 150,000
NYSE			X	$ 150,000	$ 250,000
Panel B: Fees payable on an annual basis					
Deutsche Börse	X			€ 7,500	€ 10,000
Euronext			X	€ 3,000	€ 20,000
LSE		X		£ 3,503	£ 34,517
NASDAQ			X	$ 24,500	$ 75,000
NYSE			X	$ 35,000	$ 500,000

This table displays the pricing models of five major stock markets for the calculation of listing fees to be levied upon issuers. The pricing models apply to the respective main markets. Fees apply to domestic issuers only. Deutsche Börse's *Fixed Commissions* vary over different market segments only, but are independent of firm characteristics. The *Market Capitalization* during IPO is used to compute initial listing fees while yearly averages are used to determine continuing fees.

Sources: Deutsche Börse, Euronext, LSE, NASDAQ, NYSE.

Figure 1

Revenue Composition of Exchanges World-Wide



Exchanges included have participated in the annual Cost and Revenue Survey provided by the World Federation of Exchanges. Their numbers vary between 44 (1993) and 50 (2003) respondents.

Sources: World Federation of Exchanges Cost and Revenue Surveys 1993–2003 and own computations.

As the different pricing models presented in Table 3 show, stock exchanges found different solutions to the trade-off between attracting listings with lower fees and generating profits for the owners of the exchange. Existing theoretical models (Foucault and Parlour 2004, Chemmanur and Fulghieri 2005) do not provide a convincing explanation of the observed variety of pricing models.

Figure 1 displays the average percentage of revenue generated by members of the World Federation of Stock Exchanges (WFE) between 1993 and 2003. Figures are split up in trading fees, listing fees, services (essentially price dissemination and membership fees if applicable) and other activities. In fact, the share of listing fees of the total revenues decreased from almost 25% in 1992 to only slightly more than 10% in 2002. Without presenting formal evidence, we associate this decrease with the changing nature of the relationship between issuers and exchanges. As presented in Section 2, many of the functions initially provided by stock exchanges (provision of corporate governance rules, signaling and the provision of clearing and settlement services) are no more part of the contract between issuers and exchanges since they are provided by different institutions. We argue that the decreasing importance of listing fees for stock exchanges is a direct consequence and a clear sign of the reduced set of features a listing contract comprises.

4 Do the Current Policy Debates Reflect the Changing Nature of the Exchange Issuer Relationship?

The previous chapters have outlined the fundamental changes in the contractual relationship between issuers and exchanges. In Europe, these changes are accompanied by major structural reforms of the financial landscape after the introduction of a single currency. In the following, we will briefly discuss whether the changing nature of the exchange issuer relationship is reflected by the efforts undertaken by policy makers to create an integrated European capital market. Moreover, we focus on the current regime of regulation and supervision of cross-border activities for both issuers and exchanges.

The recent organizational reshaping of the European securities trading industry landscape poses a challenge for policy makers. In particular, the emergence of legal entities operating in more than one jurisdiction and the transformation of the issuer exchange relationship has to be considered. These phenomena mark two distinct changes that have to be taken into account in the pursuit to create unified capital markets in Europe.

Organizations which operate stock markets in more than one European country have to report to different regulatory authorities according to the respective national laws. Making things worse, each report to national authorities is slightly different from the others and does not follow a fully standardized reporting procedure. Apparently, this is of limited benefit in terms of providing an accurate picture of the regulated entity, but is instead costly and causes a substantial amount of duplicate work. The same applies to multi-listed issuers. In fact, the European regulatory supervision of stock exchanges is highly fragmented and entrusted to around 60 bodies in 25 member states (Murray 2004). This dense net of regulatory bodies with overlapping responsibilities does not only increase the cost for existing international stock exchanges, but also delays new cross-border activities by the unclear regulatory requirements caused by this fragmentation.

The Committee of European Securities Regulators (CESR) has identified the emergence of multi-jurisdictional market players as a key challenge to cope with. Yet the supervisory improvements considered by policy makers address the symptoms but not the causes of the problem. For instance, CESR has mostly restricted their considerations to measures that can be put into place rapidly such as joint inspections and communication channels and consultations between the involved regulators (CESR 2004). Though beneficial in the short run, these measures fail to resolve the problem in its entirety. To fully resolve the problem, two different approaches are being discussed. The first concept maintains the current regulatory institutions, but proposes the introduction of a lead supervisor, so that the respective institutions would deal with one supervisory authority only. This supervisor should be the single point of contact for the regulated institution and have the authority to decide on all reporting and authorization procedures (EFR 2004). The second concept calls for a more centralized solution in the form of a central European body to control the single market and to oversee national regulators (Murray 2004). Though this approach seems overambitious for the moment, it would yield not only the desirable benefit of having a European counterweight to the SEC in transatlantic regulatory affairs but also solve the problem of overlapping responsibilities of national regulators.

While the lack of a unified European regulatory framework for stock exchanges needs to be solved with highest priority, changes in the relationship between stock exchanges and issuers also require attention. For instance, Chapter 2 has demonstrated that signaling activities formerly performed by exchanges have shifted to other institutions. In particular, investors in financial assets increasingly rely on rating agencies' and analysts' opinions on their current or prospect investments. Rating changes and analysts' upgrades or downgrades have already become widely observed signals on a security's quality and influence markets significantly. To investors, their informational support provides substantial comfort regarding the risks and potential returns which makes these institutions more and more important for capital markets.

A rating agency's assessment of the risks associated with a security largely influences the cost of capital for the issuer. Despite their important role for investment decisions, rating agencies are private companies which are neither substantially regulated in Europe nor in the United States. However, recently a debate on rating agencies emerged on different levels and focused not only the highly concentrated structure of the industry but also the codes of conduct of the agencies (Schwarcz 2002). In September 2003, the International Organization of Securities Commissions (IOSCO) published a technical statement, which formulates basis principles regarding the activities of credit rating agencies (IOSCO 2003). In Europe, there have been ongoing discussions on the creation of a state-funded European credit rating agency without leading to clear results. However, as the cited literature clearly shows, these discussions largely focus on credit rating agencies. Other institutions providing ratings or analyses of equity prospects to investors like equity analysts or investment banks have not been paid attention to. As we argued in Section 2, these institutions replaced stock exchanges in providing capital markets with quality signals on firms.[7] Several cases of concealment of price relevant information and insider trading by analysts have demonstrated how vulnerable the financial system is to improper behavior of these institutions. It might be hard to find an internationally agreed regulatory framework or a code of conduct for institutions rating equity titles. However, legislators might consider creating a uniform level of legal protection and compensation for investors suffering losses from misconduct of theses institutions.

5 Conclusion

Over the past decades, the nature of the relation between stock exchanges and firms seeking a listing of their shares has changed considerably. In this paper, we argued that listing agreements once contained complex assignments of duties to the two parties involved and that many of these features have not necessarily been specified in the formal listing contract. However, most of them are no longer provided by stock exchanges but by other institutions which led to a reduction of the previously rather specific listing contract to a more or less standardized contract. In particular, stock exchanges are no longer the dominant source of corporate governance rules for listing firms nor do they necessarily provide clearing and settlement services. In addition, a listing on a major stock exchange is no longer a quality signal to investors who nowadays rely on information provided by stock market analysts and investment banks. Analyzing the actual specifications of listing agreements for five major stock markets, we demonstrated that the contractual features are converging and that listings are becoming a commodity. Moreover, listing fees constitute a decreasing share of the total revenues generated by stock exchanges which is a further indication that the value of the services provided to the listing firm actually decreased.

7 In the UK more than 1,000 firms are currently covered by stock market analysts who publish at least one report a year. In Germany this figure is about 550 and slightly less than 500 in France (I/B/E/S Database as of March 2005).

In Europe, these changes are accompanied by major structural changes of the financial landscape after the introduction of the single currency. Section 4 showed that major implications of the changing nature of the listing agreement have been considered. However, the proposals made still have to be implemented at their full scale and without significant differences so that both issuers and exchanges can safely disregard jurisdictional and national borders when dealing with each other. Furthermore, the current debate does not sufficiently reflect the increasingly important role of institutions providing investors with information and ratings on equity investments. While the regulation of credit rating agencies is contained in the discussions, there are no considerations on how to provide a single framework for the monitoring of stock market analysts or investment banks whose recommendations have a strong impact on share prices. We hope that our paper further stimulates the discussions on this issue.

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