european corporate governance institute

ecgi

Corporate Disclosure in a Competitive Environment
-The ECJ's Axel Springer Case and the Quest for a European Framework for Mandatory Disclosure-

Law Working Paper N°.55/2006
February 2006

Wolfgang Schön
Max Planck Institute for Intellectual Property, Competition and Tax Law

© Wolfgang Schön 2006. All rights reserved. Short sections of text, not to exceed two paragraphs, may be quoted without explicit permission provided that full credit, including © notice, is given to the source.

This paper can be downloaded without charge from:
http://ssrn.com/abstract=885961.

www.ecgi.org/wp

european corporate governance institute

ECGI Working Paper Series in Law

Corporate Disclosure in a Competitive Environment
-The ECJ's Axel Springer Case and the Quest for a European Framework For Mandatory Disclosure-

Working Paper N°.55/2006
February 2006

Wolfgang Schön

This Working Paper is based upon a draft prepared for the Sloan Project on Business Institutions/ Anton Philips Fund Conference on International Markets and Corporate Governance (Washington DC, October 2005) organised by Georgetown University Law Center and Tilburg University Faculty of Law.

©Wolfgang Schön 2006. All rights reserved. Short sections of text, not to exceed two paragraphs, may be quoted without explicit permission provided that full credit, including © notice, is given to the source.

Abstract

European Company Law requires both closely-held and listed companies to disclose their financial situation (annual accounts) to the general public. The European Court of Justice has recently decided that also competitors of a company are in the position to enforce this obligation. This gives rise to the question how the effects of disclosure in the capital market (towards investors and creditors) and the effects of disclosure in the product market can be aligned. In order to give a full account of the framework, both the legal rules on disclosure under EC law and the basic economic concepts on the interaction of product and capital markets are laid out. A decisive role is played by "competitive costs", i. e. the costs resulting from a disadvantage in the product market. The harmful effect of these competitive costs has also a major impact on the financial market because it prevents companies from deliberately disclosing sensitive data to existing and potential investors and creditors. Taking a closer look one finds out that there exist three basic situations where the efficiency aims in the product market and in the financial market clash: The access of competitors, suppliers or customers to "innovative" data, the abuse of a dominant market position in the course of "predatory pricing" and the mutual exchange of sensitive data in an oligopolistic setting.

An economic analysis of the interaction between product and financial markets leads several policy proposals: a first insight would be not to extend mandatory disclosure to non-incorporated market participants; a second step should be to dismantle full mandatory disclosure for closely-held companies, and a third step should be to provide specific rules for the above mentioned cases of "innovative" data, "predatory pricing" and "mutual information".

Keywords: European company law, competitive costs, capital and product markets, disclosure, innovative data, predatory pricing, mutual information, financial markets, mandatory disclosure, closely-held companies.

JEL Classifications: K22, K23, G38

Wolfgang Schön
Max Planck Institute for Intellectual Property, Competition and Tax Law,
Department of Accounting and Taxation
80539 Munich,
Germany
e-mail: wolfgang.schoen@ip.mpg.de

Corporate Disclosure in a Competitive Environment
– The ECJ's *Axel Springer* Case and the Quest for a European Framework
For Mandatory Disclosure -

WORKING PAPER

Wolfgang Schön*

I. The Case and its Facts

On 6th February 2002, *Axel Springer AG*, one of Germany's leading press conglomerates, filed a request with the local court in Essen (*Amtsgericht Essen*) to impose a penalty payment on a small closely-held competitor, *Zeitungsverlag Niederrhein GmbH & Co. Essen KG* in order to enforce *Zeitungsverlag*'s legal obligation to disclose its annual accounts for the year 2000 with the local commercial register.

This request was based on § 335 (2nd sentence) German Commercial Code (*Handelsgesetzbuch*)[1] which grants any third person the right to apply to the courts to enforce disclosure against any German company (and any limited partnership of which the general partner is a company). § 335 GCC implements Art.2 (1) (f) and Art.6 of the First Council Directive 68/151/EEC of 9 March 1968 in the field of company law[2]. While Art.2 (1) (f) of this directive requires Member States "to take the measures required to ensure compulsory disclosure by companies of (…) the balance sheet and the profit and loss account for each financial year", under Art.6 (1st bullet) of the directive Member States are further obliged to "provide for appropriate penalties in case of: failure to disclose the balance sheet and profit and loss account as required by Article 2 (1) (f)".

---

*Director, Max Planck Institute for Intellectual Property, Competition and Tax Law, Department of Accounting and Taxation, Munich; Honorary Professor, Ludwig Maximilian University, Munich; thanks for valuable information go to *Jean-Nicolas Druey, Stefan Enchelmaier* and *Martin Hellwig*, to *Jill Fisch* and other participants of the Sloan/Philips workshop on Corporate Governance and International Markets at Georgetown and the members of the research team on Disclosure and Business Secrets at the Max Planck Institute.

[1] Handelsgesetzbuch of 10th May 1897 Reichsgesetzblatt 1897 p.219; last amendment: Gesetz zur Einführung internationaler Rechnungslegungsstandards und zur Sicherung der Qualität der Abschlussprüfung (Bilanzrechtsreformgesetz – BilReG), Bundesgesetzblatt 2004 p.3166.

[2] See *Klaus J. Hopt* and *Eddy Wymeersch* (Ed.), European Company and Financial Law, 3rd Ed. (Oxford University Press, 2003, p.277 et seq.

The local court sustained the request. Upon review, the regional court in Essen (*Landgericht Essen*) decided to refer the case to the European Court of Justice[3]. A similar reference was made by the regional court in Hagen (*Landgericht Hagen*) where *Axel Springer* had started proceedings against another small competitor, *Betriebsgesellschaft Radio Ennepe-Ruhr-Kreis mbH & Co. KG* and its director, *Hans-Jürgen Wenske* for non-compliance with financial disclosure rules[4]. The regional courts put to the ECJ the questions whether

- the legal basis for the 1st Directive (Art.44 (2)(g) EC) empowers the Community to grant inspection rights to third parties which do – in the view of the referring court - not require protection?
- Mandatory disclosure in the above-mentioned cases infringes the freedom to exercise a trade or profession and the freedom of the press as they have evolved in the jurisprudence of the ECJ?
- it is compatible with the general principle of equality if a limited partnership is required to fully disclose its accounts depending on the status of the general partner (an individual or a corporate entity)?

The ECJ did not see any reason to doubt the validity of the disclosure requirements under the 1st Directive[5]. It affirmed the right of all third parties – including competitors – to urge any company covered by European accounting rules (private and public limited companies, partnerships with companies as general partners) to file its accounts with the public commercial register. It did see only very limited room in this Directive to take care of the confidentiality of business information in the competitive environment of incorporated enterprises. The same result has been reached by the Supreme Court of Austria in a similar case where customers of the company were interested in strengthening their bargaining power by gaining information

---

[3] Landgericht Essen, decision of 25th November 2002 EC O.J. C 44 of 22nd February 2003; full text in: Neue Zeitschrift für Gesellschaftsrecht (2003) p.579 et seq.; see also *Jan-Pieter Naujok*, Gemeinschaftsrechtswidrigkeit der Offenlegungspflichten der GmbH & Co. KG, GmbH-Rundschau (2003) p.263 et seq.; *Jens M. Schmittmann*, Vorlage an den EuGH zur Offenlegungspflicht einer GmbH & Co. KG, Steuern und Bilanzen (2003) p.304 et seq.; *Klaus D. Höfner*, Die Offenlegungspflicht bei der GmbH & Co. KG erneut auf dem Prüfstand, Neue Juristische Wochenschrift (2004) ß.475 et seq.

[4] Landgericht Hagen, decision of 11th February 2003 EC O.J. C 12 of 10th May 2003.

[5] Order of 23rd Sept 2004, Case C-435/02 and C-103/03 (*Axel Springer AG vs. Zeitungsverlag Niederrhein GmbH & Co. KG and Axel Springer AG vs. Hans-Jürgen Wenske*) nyr; on the impact of this judgment on German law see: *Christian H. Schmidt*, Offenlegungspflichten bei der GmbH & Co. KG nach dem Beschluss des EuGH vom 23.9.2004, Die Information (2005) p.75 et seq.; *Jens Schmittmann*, Offenlegungspflichten einer GmbH & Co. KG, Steuern und Bilanzen (2005), p.1063 et seq.; *Hanno Kiesel* and *Hanno Grimm*, Die Offenlegungspflichten bei Kapitalgesellschaften & Co. nach dem Beschluss des EuGH vom 23.9.2004, Deutsches Steuerrecht (2004) p.2210 et seq.; *Dietrich Blaese*, Zur Publizität von Jahresabschlüssen, Neue Wirtschaftsbriefe (2005) p.49 et seq.

as to the financial situation of their contractual partner[6]. This harsh result deserves a closer look.

II. The Legal Framework of European Accounting Law

1. Primary EC Law

According to Art.5 (1) EC the institutions of the European Community are not allowed to take any measures which are not covered by explicit or implicit powers conferred upon them under the EC Treaty. This principle holds also true in the field of European Company law where Art. 44 (2) (g) (formerly Art.54 (3) (g) EEC) provides that the Council, the Commission and the European Parliament shall "coordinate to the necessary extent the safeguards which, for the protection of the interests of members and others, are required by Member States of companies or firms within the meaning of the second paragraph of Article 48 with a view to making such safeguards equivalent throughout the Community". It has always been common ground that this provision forms the basis for EC legislation meant to protect shareholders, creditors and staff. But it has been highly controversial whether it also empowers the European legislator to act on behalf of other third parties like competitors or even the general public.

Against this background, German company legislation had originally restricted the right to request a fine against a company which fails to disclose its accounts to the members of this company, to its creditors and the works council representing its staff. The European Commission regarded this enactment as an insufficient implementation of the 1st Directive and instituted proceedings against the Federal Republic of Germany in 1995. A practical case in point was the *Daihatsu* case which was also referred to the ECJ in 1995: The *Daihatsu Deutschland GmbH* which was in charge of importing *Daihatsu* cars from South Korea to Germany did not file its annual accounts with the local commercial register. The Association of German *Daihatsu* dealers applied for a fine against *Daihatsu Deutschland GmbH* which was dismissed by the local and regional courts. The Court of Appeal *(Oberlandesgericht)* in Düsseldorf referred to the ECJ the question whether Art.6 of the 1st Directive must be construed as precluding the

---

[6] Supreme Court, decision of 29th March 2000 Neue Zeitschrift für Gesellschaftsrecht 2000, p.1045 et seq., at 1046; on the impact of the ECJ's decision in *Axel Springer* on Austrian law see: *Michael Gruber*, EuGH: Bilanzpublizität primär- und grundrechtskonform, wbl (2005) p.161 et seq.

legislation of a Member State from restricting the right of application to members or creditors of the company or its staff representatives[7].

In both cases – the case *Commission vs. Germany* and in the *Daihatsu* case – the ECJ opted for a wide interpretation of Art.44 (2) (g) EC. The Court pointed out that the very wording of Art.44 (2) (g) EC refers to "others" in general, without distinguishing or excluding any categories falling within the ambit of that term. "Consequently" – the Court said – "the term 'others', as contemplated in Article 44 (2) (g) of the Treaty, cannot be limited merely to creditors of the company"[8]. Moreover, the Court suggested that the true ambit of this Article has to be established in the general framework of the Common Market (as laid out in Art.3 (h) EC) and specifically the freedom of establishment (Art.43 EC) which might require more than the protection of a limited range of constituencies. In his opinion, Advocate General *Cosmas* made clear that future creditors of the company, its commercial partners and all persons interested in acquiring a shareholding in the company might be protected by legislation under Art.44 (2) (g) EC[9]. In *Axel Springer* the ECJ confirmed that the Court is not willing to reconsider this broad understanding of the Treaty[10].

2. Secondary EC Law

a) Limited Liability and Disclosure Requirements

While it is easy to defend a wide reading of Art. 44 (2) (g) EC in general, it is harder to explain why Art.2, 6 of the 1st Directive should truly be meant to protect the general public, giving any third person – including competitors – the right to request penalties against any company registered in a Member State of the European Union. The first question is: What is the rationale behind this disclosure obligation which has been introduced with respect to all sorts of companies – excluding partnerships and sole traders on the one hand, but not restricting disclosure to companies listed on the stock market on the other hand? Why do we in Europe oblige even small and medium-sized close companies to file their accounts with the commer-

[7] Der Betrieb 1996, p.319.
[8] Judgment of 4th December 1997, Case C-97/96 (*Daihatsu Deutschland*), ECR I – 6843, 6864 para 18 et seq.; Judgment of 29th September 1998, Case C-191/95 (*Commission vs. Germany*) ECR I – 5449, 5504 para 66.
[9] Opinion of 5th June 1997, Case C-191/95 (*Commission vs. Germany*) ECR I – 5449, 5463 para 32.
[10] supra, para 28 – 31.

cial register, while under U.S. law disclosure rules are rooted in securities law, thus applying only to companies whose shares or bonds are listed in the capital markets[11]?

According to the preamble of the 1st Directive, "coordination of national provisions concerning disclosure (…) is of special importance, particularly for the purpose of protecting the interest of third parties"[12]. In these matters Community provisions must be adopted in respect of such companies simultaneously, "since the only safeguards they offer to third parties are their assets"[13]. Evidently, the 1st Directive (and this approach has been confirmed in the 4th Directive on Annual Accounts[14]) dwells upon the hypothesis that "disclosure" has to be regarded as a collateral to "limited liability"[15].

While the validity of this argument – in terms of public policy – will be discussed later it is quite clear that such interpretation must lead to the assumption that persons who have entered (or consider to enter) into a financial relationship with the company are the target of financial disclosure[16]. It is by no means clear that the general public, including competitors, is entitled to request full disclosure under these auspices. In the *Daihatsu Deutschland* and in the *Commission v. Germany* cases, this particular relationship between limited liability and disclosure was not even discussed by the Advocate General and the Court[17]. In very general terms, Advocate General *Cosmas* referred to the necessity to ensure "utmost transparency" of the company and to the protection of all sorts of persons who might enter into commercial relationships with it. Specifically, he stressed the entitlement of the *Daihatsu* dealers to gain knowledge about the financial situation of *Daihatsu Deutschland*, as their own economic existence was closely tied to the situation of the company controlling the car imports of their brand. But he did not distinguish between the financial risks the car dealers might bear with respect to the "limited liability" of the company and their general interest to strengthen their economic posi-

[11] *Thomas Lee Hazen*, Treatise on the Law of Securities Regulation, 4th Ed. (West, St.Paul, 2002), Vol.2, § 9.3, p.15 et seq.
[12] 2nd recital
[13] 3rd recital
[14] Fourth Council Directive 78/660/EEC of 25th July 1978 based on Article 54 (3) (g) of the Treaty on the annual accounts of certain types of companies, see: *Hopt/Wymeersch supra* p.312 et seq.
[15] *Pierre van Ommeslaghe*, La Première Directive du Conseil du 9 Mars 1968 en Matière des Sociétés, 5 Cahiers du Droit Européen (1969), p.495 et seq., at 557; for a detailed description of the legislative process see: *Eric Stein*, Harmonization of European Company Laws, (Indianapolis, Bobbs-Merrill, 1971), p.195 et seq.
[16] Advocate General *Kokott,* opinion of 24th October 2004, Case C-387/02, C-391/02 and C-403/02 (*Berlusconi*) para 74 nyr.
[17] For a critical assessment see *Wolfgang Schön*, Anmerkung, 53 Juristenzeitung (1998) p.194 et seq.; see also *Joachim Schulze-Osterloh*, Anmerkung, 18 Zeitschrift für Wirtschaftsrecht (ZIP) 1997, p.2157 et seq.

tion in negotiations with a contractual partner. The ECJ did not address at all this issue in his two decisions from 1997 and 1998.

This point was raised again in *Axel Springer* where the Court was asked to explain why full disclosure was not required in the case of a limited partnership the general partner of which was not a company but a natural person. The ECJ did not hesitate to point out that it makes a difference whether a business entity offers only its assets (or the assets of a company as general partner) as safeguard for other parties or whether there is full liability of individuals available[18]. Nevertheless, the Court did not draw any conclusions from this finding which could lead to a purposive interpretation of the disclosure requirement as such although it is evident that the relationship of an enterprise to a competitor is in general not affected by the legal form of an enterprise.

b) Unlimited Access to the Commercial Register

The strongest argument for the wide interpretation of disclosure rules under the 1st and 4th Directive lies in the fact that Art.3 of the 1st Directive requires Member States to establish a "central register" where annual accounts and other documents relating to the legal or financial situation of the company have to be submitted[19]. In *Daihatsu Deutschland* the ECJ held that

"Article 3 of the First Directive, which provides for the maintenance of a public register in which all documents and particulars to be disclosed must be entered, and pursuant to which copies of the annual accounts must be obtainable by any person upon application, confirms the concern to enable any interested persons to inform themselves of these matters."[20]

In *Axel Springer* the ECJ reiterated this argument, stressing again that persons filing a request for disclosure are not required to put forward a "protected interest" in order to justify their application[21]. It is quite evident that the institutional design of a public register is not framed to enable the administrating body to decide in any individual case on the legitimacy of an application. It is even more convincing that – once the company has fulfilled its obligation to file its annual accounts with the register – it is not easy to deny access to this public domain to specific parties. This leads to intriguing questions: Shall it make a difference for the situation

---

[18] *supra* para 66 – 69.
[19] See most recently ECJ, judgment of 3rd May 2005 Case C-387/02, C-391/02 and C-403/02 (*Berlusconi*) para 56 et seq.
[20] *supra* para 22.
[21] *supra* para 31 – 33.

of a company whether it is approached by a competitor directly or whether the competitor uses information which has been filed upon request of a creditor or a shareholder? What happens if the competitor persuades such creditor or shareholder to file an application on his behalf? Once the information is in the public domain, it acquires the qualities of a "public good", i. e. it can be used in a non-rivalrous, non-excludable way. Nevertheless, the mere fact that the factual availability of annual accounts for anyone – once they have been filed – cannot be restricted should not lead to the normative assumption that "anyone" is legally protected under the rules laid down in the 1st and 4th Directive on European company law.

c) A Level Playing Field for Companies in Europe?

Art. 44 (2) (g) EC does not only aim at sufficient protection of shareholders and other constituencies in the field of company law. Moreover, it is meant to ensure a certain "equivalence" of legal rules governing the business activities of companies in Europe. Therefore, the ECJ stressed in his decisions that the requirements of the 1st Directive have to be understood in the context of the general policy of the EC Treaty to establish an Internal Market. The "extent of the financial information that should be made available to the public by companies that are in competition with one another" should – the ECJ said in *Daihatsu Deutschland*[22] - be approximated in order to establish a level playing field for competing enterprises[23]. This statement - which was confirmed in *Axel Springer*[24] - sounds reasonable when we merely look at the competitive situation of incorporated businesses as such. On the other hand, the Court does not take into account that competition in product markets is not restricted to corporate enterprises; specifically in Europe (and particularly in Germany) we find many market participants in the legal form of partnerships or sole traders. This holds especially true in the case of small and medium-size enterprises. So – when we look at European disclosure regulation from the perspective of a "level playing field" for enterprises competing in product markets – it is not convincing to restrict the public availability of financial information to incorporated business. When we look at competition in capital markets and try to establish a level playing field in this direction it would suffice to set up a set of common rules for mandatory disclosure for companies listed in a stock market. It is here where the drafters of the 1st Directive were not precise enough when they stressed the interchangeability of stock corporations and

[22] *supra* para 22.
[23] This effect has already been stressed when the Directive was drafted; see *Hugh J. Ault*, Harmonization of Company Law in the European Economic Community, 20 Hastings Law Journal (1968), p.77 et seq., at p.91 et seq., 96 et seq.
[24] *supra* para 32.

limited liability companies[25] and did not refer to the individual listing of a company as a prerequisite for compulsory information of the general public.

Moreover, even if we accept the premise that there is a case for harmonisation of disclosure rules for companies in Europe, we still have to discuss whether – under the principle of "subsidiarity" and the rule laid down in Art.44 (2) (g) EC that all measures in European company law have to be "necessary" to further the goals of the Internal Market – it is actually required to burden companies with extensive obligations to disclose financial data. We have to take into account the possibility that companies' managers themselves will use their discretion to disclose data in an efficient way while mandatory disclosure rules are presumed to lead to high compliance costs – ranging from information processing to competitive disadvantages incurred by the companies. It is quite clear that the original framework of the EC Treaty embodies a tendency towards "ever closer" approximation of legal rules but at least from a policy-oriented point of view the burden of proof for an extensive interpretation of the legal basis for harmonization and of secondary law flowing from this source should be on the side of the harmonizers.

d) The Influence of European Capital Market Law

From the development of the 1st and the 4th Directive it has become clear that capital markets are not the only (and by no means the prevalent) addressee of mandatory disclosure under European accounting law. Nevertheless, European securities law has always referred to the accounting rules laid out in the company law directives enacted under Art. 44 (2) (g) EC. Starting with the "Council Directive 79/279/EEC of 5 March 1979 co-ordinating the conditions for the admission of securities to official stock exchange listing"[26] European securities law has obliged listed companies to present their annual accounts to the capital markets. Currently, Art.66 (1) of "Directive 2001/34/EC of 28 May 2001 on the admission of securities to official stock exchange listing and on information to be published on those securities"[27] states that any company whose shares are admitted to official listing "must make available to the public, as soon as possible, its most recent annual accounts and its last annual report". This obligation finds a complement under Art.68 (1) of this directive which provides that "the

---

[25] *Stein supra*, p.197; *Wolfgang Fikentscher/Bernhard Großfeld*, The Proposed Directive on Company Law, 2 Common Market Law Review (1964) p.265 et seq.
[26] *Hopt/Wymeersch supra* p.1119
[27] *Hopt/Wymeersch supra* p.1241.

company must inform the public as soon as possible of any major new developments in its sphere of activity which are not public knowledge and which may, by virtue of their effect on its assets and liabilities or financial position or on the general course of its business, lead to substantial movements in the prices of its shares". In our context it is worth noticing that Art.68 (2) contains an explicit permission to the competent authorities to "exempt the company from this requirement, if the disclosure of particular information is such as to prejudice the legitimate interests of the company".

From 1st January 2005 on, publicly traded companies have to draw up their consolidated accounts under the International Accounting Standards/International Financial Reporting Standards endorsed according to Art.3 of the IAS Regulation[28]. This directive aims at "contributing to the efficient and cost-effective functioning of the capital market". Moreover, Member States are at discretion to extend this obligation to the individual annual accounts of publicly traded companies and to the individual and consolidated accounts of non-listed companies under Art.5 of the IAS-Regulation. In the framework of the International Accounting Standards and International Financial Reporting Standards we do not find any reference to the sensitivity of information and any permission to withhold information the publication of which might lead to a competitive disadvantage of the company (or group). Thus, the advent of IAS/IFRS has led to further pressure on companies to reveal to the general public details of financial and other information which might worsen the company's position in its competitive environment.

e) The Role of the Competitor in European Accounting Law

aa) Protection of Competitors under Accounting Law?

While the effects of mandatory disclosure with respect to creditor protection and capital market rules are quite evident and have been discussed at length in the literature, the question whether the publication of annual accounts also envisages to further the interest of a competitor has not been in the focus of the debate so far. In the German legal tradition it has even been said by the Imperial Court of Justice in 1897 that a person who makes public the annual accounts of a businessman to a third party, commits an offence under the rules governing un-

---

[28] Regulation (EC) No 1606/2002 of the European Parliament and of the Council of 19 July 2002 on the application of international accounting standards, O.J. L 243/1 of 11th September 2002.

fair competition as the annual accounts have to be regarded as "trade secrets"[29]. When we look at the 1st and 4th Directive and their drafting we do not find a single hint that mandatory disclosure was meant to be used by direct competitors of the disclosing company.

Nevertheless, in recent literature it has been brought forward that also competitors form a constituency which should enjoy the advantages of public information provided by a company under the mandatory disclosure rules laid down in European company law[30]. The main argument behind this proposal lies in the assumption that the dissemination of information is helpful to improve the functioning of markets in general and that competitors are market participants in their own right and should therefore not be exempted from the addressees of mandatory disclosure.

While this very general approach deserves a closer look in terms of public policy[31], it can be ruled out that in the past the European legislator had something similar in mind. Although there has been a debate during the legislative process that the "general public" might have an interest in the activities and financial situation of large enterprises[32], neither the European Directives nor other official documents contain any explicit reference to "competitor information" in the framework of European Company Law. Taken seriously, this would have been a major extension of EC legislation, going beyond the boundaries of "company law" and the "safeguards" which go along with it. This would have been a project of business law in general (irrespective of the legal form) and had to be either developed in the context of the Internal Market legislation (under Art.94, 95 EC) or in the context of European Competition Policy (under Art.81 et seq. EC). Also in the U.S., the inclusion of competitors into the group of protected parties under securities law has been regarded as doubtful[33]. Anyway, *de lege lata* the idea to improve market conditions for competitors by forcing incorporated business to disclose their financial situation does not look convincing.

bb) Tackling of Competitive Disadvantages under European Accounting Rules

---

[29] *Reichsgericht*, judgment of 2nd March 1897 Reports of Criminal Law Judgments of the *Reichsgericht* 29 (1897), p.426 et seq., at 430; for a thorough analysis see *von Kevin von Gamm*, Betriebsgeheimnisse und bilanzrechtliche Publizität (Heymanns, Köln, 1998).

[30] *Hanno Merkt*, Unternehmenspublizität (Mohr Siebeck, Tübingen, 2001), p. 321 et seq., p. 413 et seq.

[31] See *infra* V.

[32] *Stein supra,* p.210.

[33] *Roberta Romano*, The Need for Competition in International Securities Regulation, 2 Theoretical Inquiries in Law (2001) p.387 et seq., at p.419.

To the contrary, the topic of competitive disadvantages – specifically for small and medium-sized enterprises - has always been on the agenda of European lawmakers with respect to corporate disclosure rules[34]. When the 1st Directive went into force in 1968, the full obligation to disclose company accounts was restricted to public limited companies while for private limited companies this requirement was suspended until harmonisation of substantive accounting law was to be achieved (Art.2 (1) (f) (3rd sentence) of the 1st Directive). This happened in 1978 when the 4th Directive on annual accounts of certain types of companies was enacted. Some Member States had asked to exclude small companies altogether from the scope of the directive but this proposal was rejected[35]. Although this directive effectively extended mandatory disclosure to all privately held companies, the drafters acknowledged that "certain derogations may likewise be granted in this area for small and medium-sized companies"[36]. In 1988 the topic was raised again and the Commission proposed to exempt small closely held companies from mandatory disclosure of annual accounts, but this was rejected as well[37].

Currently, the 4th Directive defines two thresholds for small companies (Art.11) and medium-sized companies (Art.27) according to their balance-sheet total, their net turnover and the average number of employees during the financial year. With respect to small companies, Member States are permitted to exempt them from the audit requirement, to allow them to draw up an abridged balance sheet, an abridged profit and loss account and abridged notes and to omit the annual report altogether. The publication requirement may be reduced to the balance sheet as such. With respect to medium-sized companies, Member States are at liberty to permit them to publish an abridged balance sheet, to draw up and to publish an abridged profit and loss account and to publish abridged notes on the accounts. The relevant thresholds have been raised several times since 1978.

Irrespective of the size of a company, the most important reference to competitive disadvantages which can be found in the legal framework laid down in European Accounting Rules concerns segment reporting. Generally, under Art.43 (1) (8) of the 4th Directive, "the net turnover (…) broken down by categories of activity and into geographical markets" has to be shown in the notes, "so far as, taking account of the manner in which the sale of products and

---

[34] *Karel van Hulle* and *Leo van der Tas*, European Union – Individual Accounts, in: *Dieter Ordelheide* and *KPMG* (Ed.), Transnational Accounting, 2nd Ed., 2001, p.773 et seq., at 79 et seq.; see also *Stein supra*, p.209 et seq.

[35] *Van Hulle/van der Tas supra*, p.794.

[36] 6th Recital

[37] *Van Hulle/van der Tax supra*, p.794.

the provision of services falling within the company's ordinary activities are organised, these categories and markets differ substantially from one another". As segment reporting makes it possible for competitors to track down the profitability of certain lines of production or geographical areas, this information has always been regarded to be highly sensitive. According to Art.45 (1) and (2) of the 4th Directive the information prescribed by Article 43 (1) (8) of the directive may "be omitted when their nature is such that they would be seriously prejudicial". For small and medium-sized companies under Art.27 of the directive the omission of all disclosures prescribed by Art. 43 (1) (8) of the directive can be permitted by the Member States. Yet, for one-segment companies (e.g. the smallish press enterprises in the *Axel Springer* case) all these alleviations are not sufficient as big competitors are in the position to draw substantial conclusions even from the abridged balance sheet filed under the above mentioned rules.

III. The Economics of Disclosure – some Preliminary Remarks

1. Perfect Markets and Their Limits

Any policy assessment of the above-described current legislation and judicature in Europe has to take care of the economics underlying mandatory disclosure rules and corresponding secrecy provisions. In order to get an overview of the involved topics we have to ascertain the implications of the production of corporate information, its dissemination and the use third parties make of it[38]. For this goal, we have to begin with some general remarks. Starting point of any functional analysis of markets according to the neo-classical theory of economics is the "perfect market" where economic agents receive all information they wish instantly and at no cost. They are capable to foresee future developments and are able to enter into complete contracts which can be monitored and controlled with absolute precision. Under this working hypothesis, market prices do reflect all existing information about products and their qualities as well as about supply and demand. In such a "perfect market" no market participant is in the position to influence the market price by her individual behaviour. Economic agents do neither witness an information problem nor do they have to cope with competition problems – there are no monopolies, oligopolies or cartels around which control the market. Our topic – how to coordinate disclosure and competition – simply would not exist.

[38] an overview of the „state of the art" is given by *Robert E. Verrecchia*, Essays on Disclosure (June 2001), JAE Rochester Conference April 2000. http://ssrn.com/abstract=276699.

Naturally, such a "perfect world" does not exist either[39]. For our topic, three different but corresponding restrictions have to be taken into account:

- Information is allocated inhomogeneously among market participants in product or capital markets[40]. The seller knows his goods better than the buyer. The management of an enterprise knows its business opportunities better than a potential investor. This leads to information asymmetries. Such information asymmetries distort the functioning of the market. The less informed buyer will not be prepared to pay an adequate price to the seller, the less informed investor will not be prepared to supply enough capital to the enterprise looking for financial support. This general attitude of the less informed market participant will favour low-quality sellers or badly-run enterprises. In the end, "adverse selection" will lead to underproduction of high-quality goods and to a misallocation of resources ("lemon problem").

- The scope of available information is not static but dynamic. Innovation brings about new products, technologies or strategic business methods. Supply and demand are subject to constant change. This dynamic change increases welfare. Yet it is a typical property of innovation that access to the information produced in the process of innovation is restricted to some market participants at the outset. It will be exploited by them in the first place and only gradually disseminate into the public domain. The idea of perfect information efficiency does not belong to the concept of an innovative economy.

- We all know that different market participants have different market power. There are always some players or groups of economic agents who are able to influence supply, demand and the resulting market price. The individual structure of a market depends on the existence and the extent of barriers to entry and of the competitiveness of a market among incumbents. We distinguish between highly and less competitive markets.

Legal rules – under company, securities and accounting law but also in the field of competition or intellectual property law – are meant to solve the problems of market failure which arise from the above mentioned restrictions to market efficiency. A common goal has to be

---

[39] For an overview on the restrictions to market efficiency see: *Emilios Avgouleas*, The Mechanics and Regulation of Market Abuse (Oxford University Press 2005), p.44 et seq.; seminal articles in economics and law include: *Sanford .J. Grossman* and *Joseph .E.Stiglitz*, On the Impossibility of Informationally Efficient Markets, 70 American Economic Review (1980), p.393 et seq.; *Ronald J. Gilson* and *Reinier Kraakman*, The Mechanisms of Market Efficiency, 70 Virginia Law Review (1984) p.549 et seq.

[40] *Verrecchia* (2001) *supra* p. 93 et seq.; for the mechanisms of "information trading" which bring about the "availability of information" to market participants see *Gilson/Kraakman supra* p.565 ff.

identified in the necessity to bring in line distortions of information efficiency in product and in capital markets.

2. The Addressees of Corporate Information in Capital Markets and Product Markets

Public disclosure of corporate information – be it discretionary or mandatory – can have an impact on the behaviour of market actors in many different respects. To start with, we have to take into account (at least) two different markets which interact in several ways:

Firstly we have to look at the capital market. On this market, investors supply financial capital to enterprises and they expect (as consideration) a participation in the profits of the business or a payment of fixed interest. This expected return on investment is decisive for the amount of capital supplied to the enterprise. In order to assess the return on investment the investor is in need of far-reaching access to information concerning the economic situation of the enterprise, e. g. information on promising research and development or about innovative business strategies. Any increase in the amount of available information improves the precision of share valuation, thus enhancing the supply-demand relationship in capital markets[41]. The selections investors make when they choose between different issuers perform simultaneously a choice between different real investments. In this way, capital markets support the optimal allocation of resources which is not only a matter of importance for the individual investor and the issuer but also for the economy as a whole[42].

Closely tied to the capital market function of information is its importance within the framework of principal-agent-relationships[43]. This concerns the market for corporate management and control. Once shareholders have entrusted managers with the administration of their funds, information asymmetries can evolve which might induce managers to neglect their duties of care and of loyalty. In so far as managers are required to disclose information on the use made of the corporate funds and on the business decisions taken by them in the course of

---

[41] *Verrecchia* (2001) *supra,* S.59; *Edmund W. Kitch,* The Theory and Practice of Securities Disclosure, 61 Brooklyn Law Review (1995) p.764 et seq.; *Merritt B. Fox, Randall Morck, Bernard Yeung and Artyorn Durnev,* Law, Share Price Accuracy, and Economic Performance: The New Evidence, 102 Michigan Law Review (2003), p.337 et seq.; *Michael D. Guttentag*, An Argument for Imposing Disclosure Requirements on Public Companies, 32 Florida State University Law Review (2004), p.124 et seq. at p.135 et seq.

[42] *John C. Coffee*, Market Failure and the Economic Case for a Mandatory Disclosure System, 70 Virginia Law Review (1984) p.717 et seq., at p.724 et seq., 758 et seq.; *Merritt B. Fox*, Retaining Mandatory Disclosure: Why Issuer Choice is not Investor Empowerment?, 85 Virginia Law Review (1999), p.1337 et seq., at p.1358 et seq.; *Fox/Morck/Yeung/Artyorn supra,* p.338 et seq.; *Guttentag supra*, p.136.

[43] *Guttentag supra,* p.133 et seq.

their governance investors are enabled to monitor the agents' behaviour. In many cases it is hard to distinguish these different forms of efficiency-enhancing information given by the management to the investors: the capital market function in general (issuer vs. investor) and the principal-agent problem in particular (management vs. shareholder) – e.g. when shareholders use corporate information to decide on measures taken against the management (derivative suits etc.) and on the prospect of their investment as such – e.g. in the context of a takeover offer which results from bad management and an ensuing fall of the company's stock price.

Next to the capital market we have to look at the product market, i.e. the market where the (corporate) business entity offers goods or services to the general public. On this market, information about the economic situation of the enterprise can be valuable for suppliers, customers and competitors of the business. Suppliers and customers are better able to define their negotiation strategy towards the company when they have specific information as to its financial data. Competitors are put into the position to identify rewarding markets, to assess the quality of strategic or technological developments or to set price and quantity goals for their own production. A specific topic concerns regulated industries where market access and market prices are administered by public authorities. Here, increased disclosure leads to increased monitoring by governmental bodies and to better fine-tuning of their regulatory activities[44].

In the end, the "general public" as such might enjoy advantages from access to corporate information[45]. Political actors draw on business data when they have to assess the impact of (future) legislation on enterprises[46]. Society as such – not in the least the media – use information to applaud or reprimand corporate social behaviour. Quite naturally, tax authorities often rely on financial information in order to verify the taxable income reported by business entities[47].

In this article only the impact of corporate disclosure on capital markets and product markets shall be taken into account. It looks at the information strategy of corporate enterprises towards investors in the capital market under the assumption that it faces substantial competi-

---

[44] *Ross L. Watts* and *Jerold L. Zimmerman*, Towards a Positive Theory of the Determination of Accounting Standards, 13 The Accounting Review (1978), p.112 et seq., at 115.
[45] *Russell B. Stevenson, Jr.*, Corporations and Information: Secrecy, Access and Disclosure (Johns Hopkins Press, Baltimore/London, 1980), p.135 et seq.
[46] *Watts/Zimmerman supra*, p.115 et seq.
[47] *Wolfgang Schön*, The Odd Couple: A Common Future for Financial and Tax Accounting?, 58 Tax Law Review (2005) p.111 et seq.

tion in the product market. In particular, this article does not take a closer look at the merits of mandatory disclosure for large firms with respect to the impact they make on the general situation of a society and its economy.

IV. An Economic Analysis of Voluntary Disclosure

1. The Concept of "Unravelling"

Economic theory has done quite extensive research on the topic of voluntary disclosure while legal writing has concentrated on the prerequisites and content of mandatory disclosure rules. Following the premise that legal rules have to step in where market forces fail to deliver efficient results we have to start with the question how market forces influence the dissemination of information in the absence of compulsory disclosure.

According to "game theory" mechanics, market participants tend to behave strategically, taking into account not only the immediate results of their own actions but also expected actions of other parties[48]. The recipient of the information will decide strategically on the conclusions he draws from the information supplied by other market participants. According to prevailing theory, the recipient is also in the position to draw conclusions from the denial of information (which is itself known to the "owner" of the information). In the context of a capital market this means that the issuer looking for capital supply will arrange its information policy towards the capital market in order to let its business affairs appear in a positive light. The recipient will not only assess this information sceptically and ask for verification but will also wonder which negative information is hidden from his eyes. Missing information will lead the recipient to the conclusion that there exists hidden (unfavourable) information on the side of the issuer. This presumptive conclusion will induce the issuer to disclose unfavourable information as long as she considers them to be less unfavourable than the conclusions drawn by the other party. Of course, the recipient will rationally also anticipate this behaviour and will downgrade his assumptions until the issuer will have an incentive to disclose all available information (excluding only the most unfavourable one)[49]. It is also possible that there will

[48] It should be noted that the value of „game theory" for the analysis of voluntary disclosure behaviour has been pointed out as early as 1962 by a German economist, *Adolf Moxter*, in his book on "Der Einfluß von Publizitätsvorschriften auf das unternehmerische Verhalten" (Westdeutscher Verlag, Köln, 1962, p.29).

[49] *Frank H. Easterbrook* and *Daniel R. Fischel*, Mandatory Disclosure and the Protection of Investors, 70 Virginia Law Review (1984), p.669 et seq. at p.683

evolve an equilibrium where the issuer has reasons to withhold "dramatic" bad news as opposed to those which reasonably are expected by the other side[50].

In an optimistic scenario, this procedure of "unravelling" will make any mandatory disclosure rule superfluous as issuers have a market-driven incentive to make public all relevant facts concerning their economic situation[51].

2. The Cost of Production, Dissemination and Processing of Information

Nevertheless, we have to consider several substantial restrictions to this approach. Firstly, the concept of successful "unravelling" requires that the disclosure of information to the capital market does not involve any cost on the side of the issuer which could outweigh the advantages the enterprise could draw from the improvement of its stance in the capital market. Once there is the possibility that the production and dissemination cost of information exceed the utility of this information in the capital market the suppliers of capital are not in the position to draw an unambiguous conclusion from the denial of information by the issuer. The "signalling" of such behaviour is distorted and the mechanical "unravelling" of corporate information will come to a halt[52].

Among the cost of corporate information we find different sorts[53]. In a narrow sense this includes the assembling of information, its verification (which shall improve its credibility, e.g. the assistance of an auditor) and the publication (i.e. the employment of (mass) media to disseminate the information)[54]. The existence of this cost leads to uncertainty on the side of the recipient[55]. He does not know whether the enterprise simply does not have the relevant information or whether it is deliberately concealed. Any question from the investor as to potential technical improvements of the production process can be denied either because there is unfa-

---

[50] *Greg Clinch* and *Robert E. Verrecchia*, Competitive Disadvantage and Discretionary Disclosure in Industries, 22 Australian Journal of Management (1997), p.125 et seq., at, p.130.

[51] *Robert H. Gertner*, „Disclosure and Unravelling", in: *Peter Newman* (Ed.), The new Palgrave Dictionary of Economics and the Law, Vol.1 (Macmillan, London, 1998) p.605 et seq.; for an empirical survey of the relation between high information asymmetries and high voluntary disclosures see *Roger Debreceny/Asheq Rahman*, Firm-specific determinants of continuous corporate disclosures, 40 The International Journal of Accounting (2005) p.249 et seq.

[52] *Verrecchia supra* (2001), p.87; *Anat R. Adnati* and *Paul Pfleiderer*, Forcing Firms to Talk: Financial Disclosure Regulation and Externalities, 13 Review of Financial Studies (2000), p.479 et seq., at 480.

[53] *Robert E. Verrecchia*, Policy Implications from the Theory-Based Literature on Disclosure, in: *Christian Leuz, Dieter Pfaff* and *Anthony Hopwood*, The Economics and Politics of Accounting, (Oxford University Press, 2004) p.149 et seq., at p.157 et seq.; *Gilson/Kraakman supra* p.593 et seq.

[54] *Guttentag supra*, p.139 et seq.

[55] *Verrecchia* (2001) *supra*, p.62; *Verrecchia* (2004) *supra* p.159.

vourable information at hand or because the management of the enterprise has not yet invested time and money to "buy" an expertise on this topic. Also, the cost of verification – e.g. by auditors and other experts – are substantial[56]. They may prevent a company from publishing data on the fair value of shareholdings, real estate or intellectual property. On the other hand, without verification by third parties the recipient runs the risk of relying upon "cheap talk"[57]. Among the cost incurred by the issuer we also have to count any deviations from "optimal" information policy which finds its reasons in opportunistic behaviour of "selfish" managers which try to exaggerate good news or hide bad news to the capital market in order to save their position (at least for some time)[58]. Another example for opportunistic information policy by the management is strategic dissemination of bad news and withholding of good news by the management in the run-up to a management buy-out[59]. Insider trading is another striking case[60]. This existence of principal-agent conflicts "within" the organisation of the issuer is just one example for the fact that it is a doubtful simplification to speak of information in the hands of the corporate entity as such. Rather, information is dispersed among management, workforce and shareholders and the availability of such information for different agents within the internal framework of the corporate entity constitutes itself a high obstacle to efficient allocation of information[61]. In the end, any "official" information may give rise to shareholder suits which increase litigation risks for the corporation[62].

Naturally, also on the side of the recipient information cost have to be incurred. He is bound to process the available information and to draw conclusions. As far as she lacks time or expertise financial intermediaries (financial analysts, rating agencies) step in at substantial cost. Last but not least the recipient (or his intermediaries) has to find out which topics might have relevance and which questions have to be asked. Otherwise the recipient is not in the position to interpret silence of the issuer strategically. Taking into account the pluriverse of possible

---

[56] *Adnati/Pfleiderer supra,* p.480.
[57] *Verrecchia* (2001) *supra* p.63.
[58] *Guttentag supra*, p.133 et seq.; *Verrecchia supra* (2001), p.65; *Fox supra* (1999), p.1355 f.; *Fox supra* (2001), p. 567; *Avgouelas supra* p.184.
[59] *Coffee supra*, p.738 et seq.
[60] *Avgouelas supra* p.184 et seq.
[61] This point was made clear by *Jean-Nicolas Druey* in a workshop at the Max Planck Institute, Munich, 15th July 2005.
[62] *Easterbrook/Fischel supra,* p.707 et seq.; *Kitch supra* p.770 et seq.; 838 et seq.; sceptical *Verrecchia* (2004) supra p.159 et seq.; an empirical study on the relationship between accounting conservatism and litigation risk is presented by *Carel Huijgen* and *Martien Lubberink*, Earnings Conservatism, Litigation and Contracting: The Case of Cross-Listed Firms, 32 Journal of Business, Finance and Accounting (2005) p.1275 et seq.; on the other hand, early voluntary disclosure of "bad news" may reduce the risk of litigation (*Laura Field, Michelle Lowry* and *Susan Shu*, Does disclosure deter or trigger litigation?, 39 Journal of Accounting and Economics (2005) p.487 et seq.).

situations and outcomes with respect to the economic outlook of a company, this problem alone makes it impossible for the recipient of voluntary information from an issuer to draw strategic conclusions from silence on the other side.

3. The Competitive Costs

Along with these specific costs of production, dissemination and processing of corporate information the cost of interfirm competition represent the second substantial bulk of cost incurred in the context of disclosure. Once an enterprise is aware of the fact that disclosure concerning business projects might affect the competitive situation of the company it will deny the disclosure even of favourable information if the disadvantages in the (competitive) product market exceed the advantages it captures when it plans to raise capital in the capital market[63]. It is assumed that these "competitive costs" form the most relevant cost factor preventing enterprises from voluntary disclosure of their economic data[64].These concern information related to innovation, plans, strategies and tactics, and information about operations (sales figures etc.)[65].

In economic literature we find refined theoretical models as to the interaction of capital market disclosure and interfirm competition[66]. A convenient model has been presented by *Wagenhofer* in 1990. He assumes strategic behaviour between two opponents and proposes the existence of an equilibrium with partial disclosure. In his model, unfavourable information is not given at all to the capital market while with respect to favourable information he distinguishes as follows: As long as the utility of the information does not exceed the cost for the competitor to enter the market it is disclosed in order to improve the issuer's situation in the capital market. If the information is valuable enough for the competitor to pay the "entry price" it will be withheld by the issuer if the competitive costs for the issuer exceed the added

[63] *Adnati/Pfleiderer supra*, p.480; *Easterbrook/Fischel supra* p.685 et seq., 687 et seq.; *Verrecchia* (2001) *supra*, p.61, 66, 96 et seq.; *Kitch supra* p.772, 846 et seq.; *Fox* (1999) *supra*, p.1345, 1353, 1361.
[64] *Guttentag supra* p.149 et seq.; *Clinch/Verrecchia supra* p.126; *Pamela Edwards* and *Richard A. Smith*, Competitive Disadvantage and Voluntary Disclosures: The Case of Segmental Reporting, 28 British Accounting Review (1996), p.155 et seq.
[65] *Stevenson supra* p.9 et seq.
[66] *Verrecchia* (2001) *supra*, p.95 et seq.; *Clinch/Verrecchia supra* p.126 et seq.; *J.L.Birt, C.M.Bilson, T.Smith* and *R.E.Whaley*, Ownership, Competition and Financial Disclosure, Working Paper (2005) on file under www.anu.edu.au/research/papers/pdf/F0404.pdf, p.7 et seq.; *Gil Sadka*, Financial Reporting and Product Markets: Learning from Competitors, Working Paper, Columbia University (2005), p.1 et seq.; *Masako N. Darrough* and *Neal M. Stoughton*, Financial Disclosure in an Entry Game, 12 Journal of Accounting and Economics (1990), p.219 et seq.; *G.A.Feltham* and *J.Z.Xie*, Voluntary Financial Disclosure in an Entry Game with Continua of Types, 9 Contemporary Accounting Research (1992) p.46 et seq.

value of the information in the capital market. If the information is highly valuable, i.e. if the advantages derived from its disclosure exceed the costs attributable to the activities of a (new) competitor, it will be disclosed as well[67].

In addition to these models there exist a number of empirical surveys from recent years[68]. For the German financial market, *Christian Leuz* presented a survey in 2004 which shows that segment reporting is done voluntarily if proprietary costs are low, i.e. when "entry barriers are relatively high, segment information is highly aggregated and firm profitability is low relative to the rest of the industry[69]. In the same year, *Guo*, *Lev* and *Zhou* published the outcome of research conducted with respect to the timing of disclosure on research and development by capital-seeking biotech companies in California[70]. They found out that the willingness to disclose the results of biotech research was quite high once the research had gained protection under patent law or if the issuer had made substantial progress which would not easily be copied by competitors (so that advantages in the capital market were high and competitive costs were low) while there was hardly any disclosure concerning research in its initial stadium (where the cost/benefit relation would be the opposite). In 2005 *Botosan* and *Stanford* published the result of a study according to which managers use the latitude of segment reporting in order to conceal sensitive information even if this leads to apparently underperforming results in the capital market[71]. Also in 2005 *García-Meca/Parra/Larráin/Martinéz* have presented an article, which points out, that more information is provided to the general public with respect to business strategies and customer relations while news concerning research, development and innovation were rather concealed[72].

---

[67] *Alfred Wagenhofer*, Informationspolitik im Jahresabschluss (Physica, Heidelberg, 1990), p.85 et seq., at 90; *Ralf Ewert* and *Alfred Wagenhofer*, Unternehmenspublizität und Konkurrenzwirkungen, 62 Zeitschrift für Betriebswirtschaft (1992), p.297 et seq.; *Alfred Wagenhofer* and *Ralf Ewert*, Externe Unternehmensrechnung (Springer, Berlin, 2003) p.303 et seq.;

[68] an older survey on U.K. and U.S. multinationals has been conducted by *Sidney E.Gray, Lee H. Radebaugh* and *Clare B. Roberts*, International Perceptions of Cost Constraints on Voluntary Information Disclosures: A Comparative Study of U.K. and U.S. Multinationals, Journal of International Business Studies (1990), p.597 et seq.; for a study covering disclosure in a regulated industry see: *Sanjeev Bhojraj, Walter G. Blaconniere* and *Julia D'Souza*, Voluntary Disclosure in a Multi-Audience Setting, 79 The Accounting Review (2004) p.921 et seq.

[69] *Christian Leuz*, Proprietary versus Nonproprietary Disclosures: Evidence from Germany, in: *Christian Leuz/Dieter Pfaff/Anthony Hopwood,* The Economics and Politics of Accounting: International Perspectives on Research Trends, Policy, and Practice (Oxford University Press, 2004) p.164 et seq., at 192 et seq.

[70] *Re-Jin Guo, Baruch Lev* and *Nan Zhou*, Competitive Costs of Disclosure by Biotech IPOs, 42 Journal of Accounting Research (2004) p.319 et seq.

[71] *Christine A. Botosan* and *Mary Stanford*, Managers' Motives to Withhold Segment Disclosures and the Effect of SFAS No. 131 on Analysts' Information Environment, 80 The Accounting Review (2005) p.751 et seq.; see also *Philip G. Berger* and *Rebecca Hann*, Segment Disclosures, Proprietary Costs, and the Market for Corporate Control, Working Paper 2002.

[72] *Emma García-Meca, Isabel Parra, Manuel Larráin* and *Isabel Martinéz*, The Explanatory Factors of Intellectual Capital Disclosure to Financial Analysts, 14 European Accounting Review (2005) p.63 et seq.

Thus, we can build on the theoretically and empirically supported assertion that costs from interfirm competition belong to the most important restrictions to a free "unravelling" mechanism leading to increased information for the capital markets[73].

4. Positive and Negative Competitive Effects of Disclosure

Taking a closer look, the interaction of disclosure and competition cannot be reduced to the benefits of unravelling and the distortions of this process by the competitive costs going along with voluntary or mandatory disclosure. From increased disclosure there might as well result positive and negative effects on the (product) market[74].

To start with, we have to bear in mind that the disclosure of an information as such cannot do damage to anyone – only to the disclosing actor himself. Other economic agents – e.g. competitors who gain knowledge of information favouring the "owner" of the information – should not blame disclosure as such because disclosure simply reveals to them facts which would get known in the public domain and affect their business after some time anyway[75]. Disclosure of all news is useful for the competitors of the disclosing enterprise as it enables them to react at an early stage to this information – be it about market opportunities or business methods, be it about technological progress made by the disclosing entity[76]. Even unfavourable information – e.g. a downturn in a particular product market or the failure of a research project – may induce the competitor to refrain from embarking on a similar market or research so that there will be no cost "sunk" into a doomed project[77]. Not only competitors, also customers – including consumers – will be able to profit from early information about the economic situation of a company[78]. In the end, timely information of other market participants might induce "learning effects"[79] and prevent inefficient allocation of resources, thus improving public welfare as such[80].

---

[73] *Robert H. Gertner supra,* p.605 et seq., at 608; *Stevenson supra*, p.7 et seq.; *Verrecchia* (2004) p.157 *supra* et seq.
[74] An early account of possible interactions has been presented by *Moxter supra* p.4 et seq.; see also *Christoph Kuhner*, Verfügungsrechte an Unternehmensinformationen – Die Verrechtlichung des Informationsflusses zwischen Unternehmen und Kapitalmarkt im Blickfeld ökonomischer Analysen, Habilitation (Munich 1998), p.86 et seq.
[75] *Fox supra* (2001), p.570 et seq.;
[76] Insofar, timing is important (*Romano supra* (2001), p.431 et seq.
[77] *Oved Yosha*, Financing Innovation: Is Transparency a Two-Edged Sword?, CESifo Working Paper (2003), p.7.
[78] *Guttentag supra,* p. 148.
[79] *Sadka supra,* p.2, 12; see also *Moxter supra*, p.19 et seq.
[80] *Sadka supra,* p. 6.

The strategic utility of disclosed information for competitors (or suppliers and customers) in the product market brings about the question whether corporate disclosure might even do damage to the functioning of the market as such. The effects of such disclosure can be ambiguous. If an enterprise makes public that it derives high profits from a particular market segment, this can motivate other enterprises to enter the market and to increase the supply. This may lead to a reduction of the market price improved product quality or a wider scope of available goods and thus to increased welfare for consumers[81]. On the other hand, (potential) competitors might be impressed by the market power of the disclosing company, thus refraining from entering a market at all[82]. Taking this example further the public announcement by a company that it will reduce its production capacities in a reaction to sinking demand might lead other companies to follow suit with respect to the anticipated market situation[83]. If all competitors decide simultaneously to disclose their production capacities to the market, this may well be regarded as "concerted practice" in the terminology of competition law[84]. Lastly – as the *Axel Springer* case shows – the availability of public information from small market participants might be employed by market leaders to gain knowledge of the economic strength of their competitor so that they will be able to increase their strategic position in the market (and – perhaps – abuse a dominant position)[85].

When we look at this result from a normative perspective we must accept the fact that not only voluntary but also mandatory disclosure of economic data towards the general public might involve totally legal signals to other market participants under securities law which could – at the same time – be prohibited under competition law[86]. Whether the positive effects of this market distortion (competitors are prevented from "sinking" costs in inefficient projects) outweigh the negative effects on consumers' choice and on the market price is hard to say.

[81] *Kitch supra,* p. 853, 855 et seq.
[82] *Verrecchia* (2004) *supra,* p.158; *Romano* (01) p.546 et seq.; *Sadka supra* p. 23.
[83] *Verrecchia* (2001) *supra,* p. 67; *Clinch/Verrecchia supra* p. 126; according to *Yong-Chul Shin*, The Effect of Product Market Competition on Corporate Voluntary Disclosure Decisions, Working Paper 2002, firms engaged in capacity competition tend to disclose more information than firms engaged in price competition.
[84] *Guttentag supra* p.148 et seq.
[85] *Moxter supra* p.40 et seq.; for a recent analysis of exlusionary practices see: *European Advisory Group on Competition Policy,* An Economic Approach to Article 82, July 2005, p.18 et seq. (on file with the European Commission: www.europa.eu.int).
[86] *Yosha supra* p. 15 et seq.; *Moxter supra* p.55 et seq.; for a competition law analysis see *below* (V.).

V. A Legal Framework for Mandatory Disclosure

1. The Relevant Questions and the Relevant Fields of Law

From the above-described economic assumptions we have to draw the conclusion that there exist some reasons to introduce mandatory disclosure. On the other hand we have to take into account the cost going along with the production, dissemination and processing of corporate information. Moreover, we have to bear in mind the positive and negative effects which disclosure may have on interfirm competition. In order to establish a legal framework for mandatory disclosure we have to find answers to three questions:

- Is there a case for mandatory disclosure? Which enterprises should be subject to these rules?
- Is there a case for exemptions from mandatory disclosure in order to avoid competitive disadvantages of the disclosing company or to avoid concerted practice between competitors?
- Is there a case for restrictions on the use competitors can make of information which – under a voluntary or compulsory regime – has been disclosed by a corporate entity?

From the topics which have been raised in the economic discussion it also becomes clear that the fields of law involved in this context are fairly broad. We have to look at company, securities and accounting law, but also at the law governing the protection of intellectual property and competition law. Only a full perspective of the involved interests might help us to sort out the above described problems.

2. Is there a Case for Mandatory Disclosure?

a) The European and the U.S. Debate

When we look at the legal discussion on the merits of mandatory disclosure rules, we find out that the Atlantic Ocean truly is a gap between two different legal orders[87]. As has been described in the first part of this paper, European law has greatly extended the compulsory nature of corporate disclosure and legal writing overwhelmingly supports this view. Mandatory

[87] For an overview of the debates on both sides of the Atlantic see: *Hanno Merkt*, European Company Law Reform: Struggling for a More Liberal Approach, 1 European Company and Financial Law Review (2004) p.1 et seq., at 5 et seq.

disclosure is seen as a natural prerequisite of "market participation"[88] and not even restricted to corporate entities addressing the stock market. Only the case of small and medium-sized business entities are still discussed but without any tangible effect on recent legislation.

Things are quite different in the U.S. arena. While it seems clear from the outset that closely-held companies (and non-corporate entities as well) are not under the obligation to publicly disclose their annual accounts and other relevant information, even the case for mandatory disclosure under Federal securities law is vehemently disputed. A debate among U.S. scholars which has started in the 1960s[89] and found its climax in several articles by *Roberta Romano*[90] and *Merritt Fox*[91] around the turn of the 21st Century still has not reached a consensus. Rather, the focus is now on empirical surveys which are meant to provide reliable data for factual conclusions[92].

b) Arguments for "Market Failure": Public Goods, Network Externalities and Principal-Agent Conflicts

In the U.S. and the European discussion the only common ground we can find lies in the assumption that the introduction of mandatory disclosure requires proof of market failure when it comes to the production, dissemination and processing of corporate information. The mere existence of information cost as such which prevents enterprises from simply "unravelling" their economic data does not by itself make a convincing case for mandatory disclosure[93]. To the contrary, the fact that companies have to incur cost in order to comply with mandatory disclosure rules supports the view that such rules should not be introduced if the benefits of disclosure do not exceed the cost which have to be paid by the involved enterprises[94]. Moreover, it seems to be up to the parties interested in further information to compensate the issuer

---

[88] *Merkt* (2004) *supra* p.26.
[89] *George J. Stigler*, Public Regulation of the Securities Markets, 37 Journal of Business (1964) p.117 et seq.; *G.J.Benston*, Required Disclosure and the Stock Market: An Evaluation of the Securities Exchange Act of 1934, 63 American Economic Review (1973) p.144 et seq.
[90] *Roberta Romano*, Empowering Investors: A Market Approach to Securities Regulation, 107 Yale Law Journal (1998) p.2365 ff.; see also *Romano* (2001) *supra.*
[91] *Fox* (1999) *supra; Fox* (2001) *supra.*
[92] *Fox/Morck/Yeung/Durner supra* at p.366 et seq.; *Allen Ferrell*, Measuring the Effects of Mandated Disclosure, 1 Berkeley Business Law Journal (2004) p.369 et seq.; according to *Gilson/Kraakman supra* (p.635 et seq., at 641) "there may not be any accurate method to ascertain the gross benefits of mandatory disclosure today other than by abandoning some or all of the disclosure system and observing the long-term effects on the information acquisition costs of market professionals".
[93] *Michael J. Fishman/Kathleen M. Hagerty*, „Mandatory Disclosure" in: *Peter Newman* (Ed.), The New Palgrave Dictionary of Economics and the Law, Vol.2 (Macmillan, London, 1998), p.605 et seq., at 606.
[94] *Easterbrook/Fischel supra*, p.683; *Adnati/Pfleiderer supra* p. 480.

for the cost incurred in the process of producing and disclosing the relevant information[95]. If they are not willing to do so, we have not yet any reason to speak of "market failure".

Taking the logic of this debate a step further, market failure can evolve if the production and dissemination of corporate information would bring about benefits which the "owner" of the information is not able to capture (e.g. by contractual instruments). In the context of closely-held corporate entities it is quite evident that we do not need any compulsory disclosure as shareholders and creditors have the opportunity to negotiate individually for access to information. In any case, for these companies any public disclosure open to everyone involves costs which are not justified by "market failure" deliberations.

Yet market failure may happen in the case of capital-market oriented companies where we may accept that information has some qualities of a "public good"[96], i.e. that benefits can arise from the use of information by an unlimited number of actors in a non-excludable, non-rivalrous way. In the context of capital markets we have to take into account that information disclosed by a single issuer is not only relevant when it comes to the funding of this corporate entity alone. Rather, any issuer-specific information has to be seen as part of the multitude of information processed in the capital market by investors and intermediaries. Seen in this context, any particular information item contributes to the validity of pricing in the capital market as such as it improves the facilities to compare different investments or to draw conclusions from the economic data of a single entity to a whole sector of the economy or geographical region. The precision of capital market pricing is correlated to the amount of data processed in the market[97] and liquidity – another prerequisite of a well-functioning capital market will increase[98]. This extra benefit, which increases optimal allocation of resources[99] and – in the end – public welfare, will not be reaped if the "owner" of the information (or a financial analyst) has no (monetary) incentive to incur the cost of production, dissemination and processing of information[100]. Therefore we have to face the typical problem of "underproduction" of public goods which arises in the absence of governmental (or other collective) action which would take care (with mandatory rules or collective bargains) the production of the public good. On

---

[95] *Avgouelas supra* p.180.
[96] *Coffee supra* p. 725 et seq.; *Sadka supra* p.4; *Fox* (2001) *supra*, p.572 et seq.; *Avgouelas supra* p.176 et seq.
[97] *Adnati/Pfleiderer* p. 3, 5, 24 et seq.
[98] *Robert E. Verrecchia* (2004) *supra* at 149; *Easterbrook/Fischel supra,* p.689 et seq.
[99] *Fox* (1999) *supra* p.1338 et seq.
[100] *Coffee supra* p.726 et seq.; *Hellwig*, Market Discipline, Information Processing, and Corporate Governance, Paper delivered at the symposium on „Changes of Governance in Europe, Japan and the US: Corporations, States, Markets and Intermediaries", 2004, p.8.

the other hand, also "overproduction" of information can arise when many different investors try to gain knowledge about the corporate entity and its economic prospects at the same time, thus multiplying the involved cost, although in most cases only the "winner" of this race for information will be able to capture benefits from his investment[101]. Mandatory disclosure is able to reduce these expensive information cost incurred by many participants at the same time[102].

Another line of arguments refers to the "network externalities" which go along with a capital market involving a huge number of participants. As information has to be "read" by the recipients and as a common language greatly improves the comparability of corporate information (and correspondingly the comparison between different investments) any standardization in this field can be helpful but will probably not be delivered by the spontaneous interaction of individual market participants[103]. This goal to increase the comparability of corporate information lies at the heart of the most relevant national and international developments in the accounting area – the US GAAP[104], the International Accounting Standards/International Financial Reporting Standards[105] and the "endorsement" of the IAS/IFRS by the European Institutions[106]. Another feature of mandatory disclosure lies in the enforceability of legal obligations which supports the "credibility" of information commitments. As investors need anticipated commitments, this is an important element in order to reduce adverse selection under information asymmetries[107].

In the end, mandatory disclosure would not only solve "public good" problems in the capital market, it could also address principal-agent conflicts within the organisation of the issuer. As it is hard for shareholders to enter into "complete contracts" with the management, obliging them for manifold future situations to provide the shareholders with information, it stands to reason that the management should be subject to compulsory information duties towards the shareholders[108]. But this would not address the general public as such.

---

[101] *Verrecchia* (2004) *supra,* p.151 et seq.
[102] *Verrecchia* (2001), p.89 et seq.
[103] *Easterbrook/Fischel supra* p. 686 et seq.; *Kuhner supra* p.273 et seq.
[104] *Donald E. Kieso, Jerry J. Weygandt* and *Terry D. Warfield*, Intermediate Accounting, 11th Ed. (Wiley, Hoboken, 2004) 2nd Chapt., p.33.
[105] International Accounting Standards Board (Ed.), International Financial Reporting Standards 2005 (London, 2005), Framework for the Preparation and Presentation of Financial Statements, para 39 – 42.
[106] *supra* , 7th recital.
[107] *Fox* (1999) *supra* p.1365 et seq.; *Edward Rock*, Securities Legislation as Lobster Trap: A Credible Commitment Theory of Mandatory Disclosure, 23 Cardozo Law Review (2002), p.675 et seq., at p.684 et seq.
[108] *Fox* (1999) p.1338 et seq.; *Guttentag supra* p.165 et seq.; *Paul G. Mahoney*, Mandatory Disclosure as a Solution to Agency Problems, 62 University of Chicago Law Review (1995), p.1047 et seq., at p.1051 et seq.; but see

The “public good” argument does not only hold true in the capital market, it can also be defended in the product market. As *Merritt Fox* has pointed out[109], exchange of information among competitors may well increase efficiency as competitors might refrain from sinking resources into inefficient projects. Thus, a market might evolve where competitors agree to pay compensation to the “owner” of the information who would supply them with valuable strategic or technological knowledge. The market for legally protected - patented - inventions is a similar case where economic forces can lead to efficient results. Nevertheless, an open market for interfirm information exchange presently does not exist at full scale (apart from information collected and disseminated by industry associations). This is not only due to the “public good” properties of information in general; it does also reflect the problem to identify a “target” information which might give rise to negotiations about its availability and the lacking opportunity to fix a price in advance for an “unknown” information. Moreover – as opposed to patent infringements - it is hard to ascertain whether, how and to which extent corporate information has effectively been used by a competitor[110]. In the end we have to face the same problems of “underproduction” and “overproduction” of competitive information as in the capital market. Taking this argument seriously we would have to opt for mandatory disclosure not only of corporate entities listed in the stock market but also for closely-held companies and even non-corporate business entities.

c) Arguments against Regulatory Action: Do we find the Right Level of Legislation?

Critics of mandatory disclosure have a case as well[111]. At the outset they point to the enormous cost arising for corporate business under current disclosure rules[112]. They do not see striking evidence that the above-described process of “unravelling” doesn’t work[113]. To the contrary, they doubt the empirical background for any underproduction of information in an unregulated market[114]. Even if this happens, overproduction and underproduction of corporate

---

Ian M. Ramsay (Models of Corporate Regulation: the Mandatory/Enabling Debate, in: *Ross Grantham/Charles Rickett* (Ed.), Corporate Personality in the 20th Century (Hart Publishing, Oxford, 1998) p.215 et seq., at 245) who prefers fraud law to disclosure rules as a means to discipline directors; for the oppositve view see *Joseph A. Franco*, Why Antifraud Prohibitions are not enough: The Significance of Opportunism, Candor and Signaling in the Economic Case for Mandatory Securities Disclosure, Columbia Business Law Review (2002) p.223 et seq.

[109] *Fox* (01) p.570 et seq.

[110] *Guttentag supra* p.149.

[111] *Mahoney supra* p. 1089 et seq.

[112] *Easterbrook/Fischel supra* p.695 et seq.; *Romano* (1998) *supra,* at p.2380.

[113] *Romano* (2001) *supra* , at p.418.

[114] *Romano* (1998) *supra* at p.2373 et seq.

information could be addressed by private market participants (e.g. financial intermediaries publishing “market letters”)[115].

Naturally, they do not contest the utility of standardized business information as such. Yet they doubt whether there is a reason to oblige issuers to follow a single given set of rules. Rather they would give issuers the choice between different rules – be it securities laws of different states[116], be it legal frameworks provided by private intermediaries[117]. Also the problem of credibility which requires the binding force of an advance commitment to provide information (even if this is unfavourable for the disclosing actor) can be solved by an “opt-in” procedure[118].

Even if a case for compulsory disclosure rules could be made, critics point out that the above-described complexities of disclosure in different markets make it very hard to find the right level of mandatory disclosure which does not involve superfluous (and costly) paperwork and does strike the right balance between the interest of issuers to withhold proprietary information and the interest of investors (and competitors) to be informed about the economic situation of an enterprise[119]. To achieve this balance gets merely impossible when we look at the individual enterprise[120].

3. Conclusions for (European) Legislation

Taking the U.S. debate to Europe it seems quite clear that the ongoing tendency in Europe to rely on ever-increasing disclosure requirements is driven by an unfounded optimism of “transparency” which does not take into account the “regulatory waste”, the immense direct and indirect cost of information and the necessity to strike a balance between the legitimate interest of corporate business to reduce disclosure obligations and of the public – creditors,

---

[115] *Mahoney supra* at p. 1096 et seq.; *Avgouelas supra* p.181.
[116] *Romano* (1998) *supra* at p. 2361 et seq.; *Romano* (2001) *supra* at p.388 et seq.
[117] *Easterbrook/Fischel supra* at, p.700 et seq.; *Adnati/Pfleiderer supra,* at p.36; *Stephen J. Choi* and *Andrew T. Guzman*, National Laws, International Money: Regulation in a Global Capital Market, 65 Fordham Law Review (1997), p.1855 et seq., at p.1900 et seq.
[118] *Rock supra* at p.684.
[119] *Mahoney supra* at p.1095 et seq.; *Romano* (1998) *supra* at p.2367 et seq.; *Romano* (2001) *supra* at p.422, p.435 et seq.; *Stephen M. Bainbridge*, Mandatory Disclosure: A Behavioral Analysis, 68 University of Cincinnati Law Review (2000) p.1023 et seq., at p.1056 (also pointing to public choice restrictions to efficient regulation); see also *Verrecchia supra* (2001), p.92; *Richard A. Posner*, Economic Analysis of Law, 6th Ed. (Aspen, New York, 2003) p.458.
[120] *Adnati/Pfleidere supra* p.482, 512 et seq.; *Romano* (2001) *supra* at p.435 et seq.

investors, shareholders and competitors – to gain knowledge about the economic situation of the company. Rather, we have to distinguish at different levels.

a) Which Enterprises shall be Subject to Mandatory Disclosure?

When we look at the involved constituencies which might profit from increased disclosure we have to keep in mind that these interest groups have different impact when the legal form of the enterprise is taken into account[121]:

aa) Disclosure to Competitors, Suppliers and Customers – The Case of "Market Information Systems"

Taking the broadest perspective one might think about disclosure requirements for all sorts of business – corporate or incorporate, listed or non-listed – in order to improve market information in product markets. In this case, competitors (like in the *Axel Springer* case), suppliers or customers (like in the *Daihatsu* case) are put in the position to use disclosed information for their own benefit. This could have positive effects (competitors could refrain from "doomed" projects) but also negative effects (enterprises could refrain from innovation) dependent on the nature of the information.

To start with, in the context of a product market it makes no sense to distinguish between incorporated and other business as this is simply not relevant for product competition. Otherwise we would have irregular distributive effects from the corporate to the non-corporate sector[122].

Moreover, a case for mandatory disclosure could be made if we can argue that "public good" properties of interfirm information are quite substantial so that market failures prevent an efficient exchange of information between competitors, customers and suppliers. Yet it is even harder to establish common ground for this assumption than it is for "market failures" in the capital market. While it is certain that mandatory disclosure of information to other participants in the product market will lead to high direct and indirect cost for the supplier of this

[121] It should be noted that in its 2003 Action Plan also the European Commission has come to the conclusion that „a proper distinction between categories of companies" should be made when it comes to disclosure (*supra* para 2.1., p.8).
[122] *Guttentag supra* p.145 et seq.; *Merkt* (2004) *supra,* at p.27.

information, it cannot be said in general that this loss will be outweighed by benefits derived by other participants and the economy in general. The advantages of "market liquidity", "share-price-accuracy" and the "comparability" of financial data which are responsible for the "public good" qualities of capital market information do not exist in similar strength in the product market. While in the capital market each additional item of information will lead to higher precision of share prices and better allocation of financial resources to real investment, in the product market additional information can have ambiguous effects:

Firstly, formally unified mandatory disclosure requirements for all sorts of business entities face the problem that the same rule can do much more damage to small single-business firms than to large conglomerates[123]. This is particularly problematic because small single-business firms tend to carry on more innovative business than large stock corporations[124], so they have an interest to be shielded against big players who want to siphon off profitable business and technological opportunities. This is not only relevant when we look at technologically sensitive information but also with respect to strategically important knowledge, e.g. financial data which enables strong competitors to engage in "predatory pricing".

Secondly, the ambiguity of interfirm exchange of sensitive information has for a long time been in the focus of antitrust law. In particular, the impact of "market information systems" under which competitors exchange sensitive information as to prices, quantities and other strategically important factors, is under the control of antitrust authorities on both sides of the Atlantic[125]. Starting with its judgment in *American Column & Lumber Co. et al. v. U.S.*[126], the U.S. Supreme Court has gradually produced a line of judgments according to which any concerted exchange of competitively sensitive information may run foul of the rules of U.S. antitrust law[127]. The same direction has been taken by the European Commission and the

---

[123] *Fox* (1999) *supra* at p.1408 et seq.; *Kitch supra* at p. 856; *Easterbrook/Fischel supra* at p.671; *Yosha supra* at p.9.
[124] *Yosha supra* at p.3 et seq.
[125] For an overview on the law governing "market information systems" see: *Bettina Tugendreich*, Die kartellrechtliche Zulässigkeit von Marktinformationsverfahren – Eine juristische und ökonomische Untersuchung zum deutschen und europäischen Kartellrecht unter Berücksichtigung der US-amerikanischen Rechtspraxis (Nomos, Baden-Baden, 2003); *Stefan Enchelmaier*, Europäische Wettbewerbspolitik im Oligopol (Nomos, Baden-Baden, 1997), p.101 et seq.; as to the U.S. practice I refer to *Brian R. Henry*, Benchmarking and Antitrust, 62 Antitrust Law Journal (1994) p.483 et seq.; as to EC practice I refer to: *Hans-Jörg Niemeyer*, Market Information Systems, 4 European Competition Law Review (1993) p.151 et seq.; the current state of the art is described by *Stefan Enchelmaier*, Commentary on Art.81 EC, in: *Hailbronner/Willms* (Ed.), EU, looseleaf (2005), para 85 et seq.
[126] 257 U.S. 377, at 410.
[127] See also *Maple Flooring Manufacturers Association v. U.S.* 268 U.S. 563; *U.S. v. Container Corporation of America et al.*, 393 U.S. 333; *U.S. v. U.S.Gypsum Company et al.*, 438 U.S. 422.

European Court of Justice in recent years[128]. In this context, it is well known to the respective authorities that it depends on the market structure whether the exchange of information between firms enhances or worsens competition between different suppliers. On the one hand, the U.S. Supreme Court acknowledges that:

"It is the consensus of opinion of economists and many of the most important agencies of government that the public interest is served by the gathering and dissemination, in the widest possible manner, of information with respect to production and distribution, cost and prices in actual sales, of market commodities because the making available of such information tends to stabilize trade and industry, to produce fairer price levels and to avoid the waste which inevitably attends the unintelligent conduct of economic enterprise"[129].

On the other hand it recognises that

"We realize that such information, gathered and disseminated among the members of a trade or business, may be the basis of agreement or concerted action to lessen production arbitrarily or to raise prices beyond the levels of production and price which would prevail if no such agreement or concerted action ensued, and those engaged in commerce were free if to base individual initiative on full information of the essential elements of their business. Such concerted action constitutes a restraint of commerce and is illegal"[130].

This ambiguity has led the Courts on both sides of the Atlantic to avoid across-the-board solutions. Today it is agreed that the competitive effects of "market information systems" depend on the "sensitive" nature of the information and the structure of the relevant market. In *U.S. v. Container Corporation of America et al.,* the U.S. Supreme Court made clear that there might be a difference between "competitive markets" where information tends to increase competition and concentrated markets where few sellers are put in the position to monitor each others competitive behaviour[131]. In the judicature of the European Court of Justice, it is constantly expressed that while

"on a truly competitive market transparency between traders is in principle likely to lead to intensification of competition between suppliers since in such a situation, the fact that a trader takes into account information made available to him in order to adjust his conduct on the

[128] Commission decision of 17th February 1992 relating to a proceeding pursuant to Article 85 of the EEC Treaty IV/31.370 and 31.446 – (UK Agricultural Tractor Registration Exchange) O.J. L 068, 13th March 1992, p.19 – 33 para 36 - 52; Court of First Instance, judgment of 27th October 1994, Case T-35/92 (*John Deere*) ECR II-00957 para 47 – 53; ECJ, judgment of 28th May 1998, Case C-7/95 P (*John Deere*) ECR I-03111 para 85 – 91; Court of First Instance, judgment of 11th March 1999, Case T-141/94, (*Thyssen Stahl*) ECR II-00347, para 393 – 401; ECJ, judgment of 2nd October 2003, Case C-194/99 P (*Thyssen Stahl*) ECR I-10821, para 81 – 90; ECJ, judgment of 2nd October 2003, Case C-199/99 P (*Corus UK*) ECR I- para 105 – 112;
[129] *Maple Flooring Manufacturers Association v. U.S. supra,* at p.582 et seq.
[130] *Maple Flooring Manufacturers Association v. U.S. supra* at p.585.
[131] *supra* p.336 et seq.

market is not likely, having regard to the atomized nature of the supply, to reduce or remove for the other traders any uncertainty about the foreseeable nature of its competitors conduct",

it is possible that

"on a highly concentrated oligopolistic market, such as the market in question and on which competition is already greatly reduced and exchange of information facilitated, the exchange of information (is) likely to impair substantially the competition which exists between traders (…). In such circumstances, the sharing, on a regular and frequent basis, of information concerning the operation of the market has the effect of periodically revealing to all the competitors the market positions and strategies of the various individual competitors"[132].

Looking beyond these basic restrictions, there are more arguments against a generalized disclosure towards the product market. To start with, in the product market, apart from consumer information (which is quite another story), we have to deal with a small group of competitors, suppliers and customers who can quite easily identify enterprises which might dispose of valuable information. So the case for negotiated individual solutions is quite strong; as far as differences in market power between the involved parties distort the free exchange of "information against consideration" or the building of a cartel is in question, antitrust law might step in. But these cases do not support any general mandatory disclosure rule.

Another point concerns the substantive content of mandatory disclosure. It should not be overlooked that mandatory disclosure in the product market would not aim at the same information which is relevant in the capital market. It has to be recognized that in the product market it is much harder than in the capital market to identify (on a general basis) items of information which have to be made public and to distinguish them from other items which should "typically" not be required to be disclosed.

In the end, we reach the conclusion that there is no case for any sort of mandatory disclosure towards competitors, suppliers and customers in the product market. Neither is it possible to identify substantial "market failures" nor is it feasible to design a common format for such information, nor can we be sure that such disclosure will have efficiency-enhancing effects at all. In this situation we should refrain from imposing another set of compulsory rules on business entities.

bb) Disclosure to Shareholders and Creditors in Closely-Held Companies

---

[132] Case C-7/95 *supra* para 51; Case C-194/99 P *supra* para 84; Case C-199/99 P *supra* para 108;

One of the major differences between European and U.S. company law lies in the assumption that mandatory disclosure rules are "the price for limited liability". Here, even the "special relationship" between U.S. and U.K. lawmaking does not exist. While in the U.S. arena mandatory disclosure is restricted to publicly traded corporations for purposes of securities markets[133], in the U.K all private and public limited companies are subject to mandatory disclosure rules[134]. When mandatory disclosure for privately held companies became a European topic in the 1960s and 1970s this was regarded to be a natural requirement in the U.K while in France and Germany it ran into fierce resistance[135]. Nevertheless, following the enactment of the 1st and 4th Directive under European company law, the legal relationship between public disclosure and limited liability is currently widely accepted within Europe[136] and has recently been stressed by the European Commission again[137].

Nevertheless, this presently solid stance of European and domestic legislation on corporate disclosure is gradually eroding. To be sure, nobody doubts the value of reliable financial information for creditors who wish to extend or monitor loans handed out to limited liability companies. They have a legitimate interest to gain knowledge about the economic situation of their borrower and to find out whether funds have been diverted from the company to the shareholders or third parties. The question is whether this legitimate interest justifies public mandatory disclosure. As *Brian Cheffins* has pointed out in his work on "Company Law – Theory, Structure and Operation"[138], the seemingly self-evident logic to combine limited liability with compulsory disclosure is far from convincing. Some creditors simply do not think that annual accounts are very helpful when it comes to an assessment of the creditworthiness of a debtor while others who want to take a look at the financial statements can simply ask the company to provide (audited) statements on a private basis during the negotiation process.

---

[133] *Hazen supra*

[134] *Paul L. Davies*, Gower and Davies' Principles of Modern Company Law, 7th Ed. (Sweet & Maxwell, London, 2003), Chapter 21, p.533 et seq.; as to the necessity of the audit requirement for small companies see *M. Godwin and J. Freedman*, The Statutory Audit and the Micro Company – An Empirical Investigation, Journal of Business Law (1993) p.105 et seq.

[135] *Vanessa Edwards*, EC Company Law, 1999, p.22.

[136] *Bernd Apelt,* Die Publizität der GmbH – Die Regelung des BiRiLiG, der Mittelstandsrichtlinie und der GmbH & Co.KG- Ergänzungsrichtlinie (Berlin, 1991); *Klaus-Dieter Buschmeyer,* Publizität als Korrelat der Haftungsbeschränkung, 1993;for a critical assessment see: *Hanno Merkt* (2001) *supra* , p.316 et seq.

[137] *European Commission,* Communication from the Commission to the Council and the European Parliament: Modernising Company Law and Enhancing Corporate Governance in the European Union – A Plan to Move Forward ("Action Plan"), (Brussels, 2003), para 3.7., p.22; see also *Jonathan Rickford* (Ed.), Reforming Capital – Report of the Interdisciplinary Group on Capital Maintenance, 15 European Business Law Review (2004) p.919 et seq., at p.933 and p.989.

[138] (Clarendon Press, Oxford, 1997/2003), p.508 et seq.; see also *Merkt supra* (2004) p.27 who wants to extend disclosure to all market-related business activities.

This does not make it necessary to give the same information to the whole world. Of course there might be "collective action" problems when a large number of small creditors do not have enough bargaining power to put pressure on the debtor to reveal its financial data[139], so that they would rather rely on compulsory legislation on disclosure. Moreover, specifically in cross-border situations, convenient access to a public register might reduce transaction cost for foreign contract partners who seek information concerning limited liability companies[140]. But it is hard to say whether these situations justify the enormous administrative and indirect cost of public disclosure.

When it comes to compulsory disclosure for corporate entities in general – as we have it in the European Union - the debate led in economic literature and in the U.S. legal academia on the merits of mandatory rules makes fairly clear that there is no case at all for mandatory disclosure of annual accounts and similar documents outside the realm of the stock market. In closely-held companies (even if they are stock corporations) shareholders and creditors are in the position to be informed about the ongoing business of the entity. Nevertheless, while this makes a case for compulsory accounting obligations of the management and perhaps even for the introduction of auditing requirements it is by no means justified to force closely-held companies to file these documents with a commercial register for the general public.

cc) Disclosure to Capital Markets

The narrowest view has to be taken when we speak about companies the shares or bonds of which are listed in the stock market. Here we have a case for mandatory disclosure. Typically, these companies have a dispersed ownership structure. Current shareholders and potential investors do not have the negotiation power (or face collective action obstacles) to extract substantial information from the management. It is even doubtful whether this can be substituted by financial intermediaries (which face principal-agent problems themselves[141]). Therefore, both the necessity to address principal-agent conflicts between the management and a large group of shareholders and the goal to establish a functioning capital market as such require not only the obligation to disclose corporate information as such but also to apply stan-

[139] *Cheffins supra*. p.515 et seq.
[140] *Fikentscher/Großfeld supra*, p.266 et seq.
[141] *Avgouelas supra* p.185 ff.; see also *Donald C. Langevoort*, Selling Hope, Selling Risk: Some Lessons form Behavioral Economics about Stockbrokers and Sophisticated Customers, 84 California Law Review (1996) p.627 et seq.

dardized formats which enable shareholders (and their intermediaries) to process the information and for investors to compare different investments.

Moreover, the existence of network externalities and the manifold problems of enforcement by purely private bodies lead to the assumption that this proposal is superior to a spontaneous solution evolving through market forces even if such "regulatory competition" could lead to standardized formats in the end as well. The globalization of accounting rules we are currently witnessing is a strong argument that market forces themselves urge legislators to find common ground for world-wide homogeneous accounting rules. Even lower-level state legislation is no solution as we in Europe have learned from the discontent markets have expressed towards the former patchwork of accounting rules in the European Union.

On the other hand, critics of mandatory disclosure are right when they point out that it is not possible to anticipate beforehand the adequate level of disclosure required from listed companies as such (and from the individual company even more). Yet it is doubtful whether this should make us abandon the idea of mandatory disclosure altogether. The main conclusion we have to draw from this well-founded scepticism is that we should restrict mandatory disclosure to "minimum rules" [142] giving leeway to companies to improve their position in the market by additional voluntary disclosure or to opt for a more defensive disclosure policy in order to minimize direct and indirect production cost on a discretionary basis[143]. The current rules which combine periodical publications and "ad-hoc-disclosure" show us that there is a way to achieve tailor-made disclosure obligations without doing away with a minimum standardized set of information[144]. Of course, also investors should be free to invest more efforts in order to privately increase their information above the level provided by mandatory disclosure[145].

b) Disclosure and Competition: Tackling the most relevant Situations

If we (in Europe) follow the U.S. rule that only corporate enterprises offering securities to the general public shall be obliged to disclose business information to the general public, the "public good" properties of this information lead to the effect that it is not possible to exclude

---

[142] *Adnati/Pfleiderer supra* p.482.
[143] An analytical model of the interaction between voluntary and mandatory disclosure is presented by *Eti Einhorn*, The Nature of the Interaction between Mandatory and Voluntary Disclosures, 43 Journal of Accounting Research (2005) p.593 et seq.
[144] *Avgouelas supra* p.183.
[145] Whether mandatory disclosure tends to „crowd out" private acquisition of information, thus leading to suboptimal results, has been asked by *Verrecchia* (2004) *supra* p.154.

competitors and other participants in the issuer's product market from gaining knowledge of this widely disseminated information. This may have a threefold negative effect on competition:

- It may be that innovation-oriented activities of an enterprise run into obstacles as competitors are informed at an early stage about these activities; this is particularly relevant when we look at technological information
- It may be that other competitors are able to abuse their market power, having knowledge of sensitive strategic information; this is particularly relevant when we look at the financial data of an enterprise;
- It may be that publicly available information enables competitors to act in a parallel way in order to protect their competitive position against outsiders and the consumers; this is particularly relevant in oligopolistic markets.

aa) Disclosure as an Obstacle to Innovation

Obstacles to innovation have to be regarded as the most important cases of "competitive harm". There are several legislative options to react to this:

- to simply ignore competitive disadvantages;
- to provide for exemptions from mandatory disclosure;
- to provide for compensation payments between the involved parties
- to prohibit the use of such information by the competitor and/or suppliers and customers.

The first reaction could be justified in the light of the deliberate choice of the issuer to be floated in the stock market. As the issuer is free to decide whether it shall raise additional financial means in the capital market, it is also free to calculate the impact of mandatory disclosure under securities law on its competitive position. In this sense, all disclosure is "voluntary" and might lead to efficient results: The issuer will take the step to the open securities market only if the expected benefits will exceed the expected losses.

Nevertheless, this would be a very crude choice which might miss the true contract investors and the issuer would conclude if they had the opportunity to fine-tune their involved interests. Investors would refrain from insisting upon disclosure of information which might be less

useful for their investment decision than it would be damaging for the issuer in terms of competitive disadvantages. A case in point would be specified technological information which would be pretty useless for the investor but extremely valuable for the competitor. On the other hand, the "public good" benefit of mandatory disclosure do not stop at the person of the individual investor, it rather looks at the functioning of the capital market in general and at the choice between different real investments in order to achieve optimal allocation of resources. Against this background a legislator could decide to ignore competitive disadvantages even in situations where the individual shareholder or potential investor would relax the disclosure obligations of the corporation.

On the other hand, the "public good" side of corporate information in the capital market can also be counterbalanced by the welfare-enhancing effect of innovation. Once an enterprise gets aware that corporate disclosure of innovative activities might reduce the benefit it will derive from these activities it might be induced to stop it. Therefore it makes sense to draw upon the economics of intellectual property when it comes to the publication of information sensitive in the context of innovation[146]. It should be clear that secrecy provisions are a long-term incentive for innovative business organisation[147]. Therefore, even if there is a public policy case for refined investor information the counterweight of innovation protection can lead to the conclusion that it should be left to the issuer itself to decide voluntarily on the disclosure of such items. It may be useful in this respect to distinguish between strategic information – production capacities, price setting or upcoming investment – and technological information which deserves higher protection[148]. So, we reach the conclusion that there have to be exemptions which follow the line of intellectual property protection and have to be balanced out so that innovative processes within enterprises are not damaged by prohibitive disclosure rules.

Another option would be to enforce disclosure of such sensitive technological information but to react to any use competitors make of this innovative material. Just as in the world of intellectual property – like registered patents - it would make sense to combine disclosure with a strict discipline on the use made of innovative information. One could think about an outright prohibition for competitors to make use of the disclosed information at all. If this is not feasi-

[146] *Guttentag*, *supra* at p.139.
[147] *Guttentag supra* at p.165 et seq.; *Stevenson supra* p.15 et seq.; as to the economics of patent law see: *Richard A. Posner supra*, at p.37 et seq.
[148] *Yosha supra* at p.6.

ble, one could establish the rule that competitors who make use of such sensitive information are obliged to compensate the disclosing enterprise for any losses suffered from this infringement of proprietary information. Of course, one can take the position that such remedies might be impractical but this would lead us back to the assumption that the relevant information should not be published in the first place or only transferred to an intermediary who might inform the capital market in a very general way of the implications of this information without giving it to the general public[149].

In this context it has been subject to debate whether shareholders are in the position to balance out all competitive disadvantages suffered by corporate enterprises by selecting a fairly broad portfolio of corporate investments. This might lead to a situation where the shareholders – being the true "owners" of an enterprise - might not oppose any leakage of valuable information to a competitor or other market participant as the benefits of this leakage would in the end be enjoyed by themselves[150]. Yet this example does not seem to present a realistic picture. In the real world we do not have a homogeneous shareholder structure in all involved corporate entities; moreover, managers would oppose such free-riding of competing enterprises[151]. Any trial to exert pressure on managers in this respect would run into severe collective action problems[152]. From the European perspective, where non-listed enterprises still have a substantial share in the economy and where closely-held family firms belong to the big players in many markets, this sort of portfolio structure would simply be impossible.

bb) Disclosure and Dominant Market Participants

The second situation we have to bear in mind concerns the abuse of publicly available information by strong market participants. This becomes particularly important in the case of "predatory pricing" when a dominant player is in the position to incur losses for a limited time period in order to exclude smaller competitors from the market[153]. This behaviour is prohibited under U.S. antitrust rules and under Art.82 EC. It goes without saying that ascertained knowledge as to the financial data of the small competitor is immensely helpful for the preda-

---

[149] *Easterbrook/Fischel supra,* at p.687 et seq.
[150] *Romano* (1998) *supra,* p.2368
[151] *Fox* (1999) *supra* at p.1350 et seq.; *Fox* (2001) *supra* at p.585 et seq.
[152] *Fox* (2001) *supra* at p.586 et seq.
[153] EC practice is described by *Alison Jones* and *Brenda Sufrin*, EC Competition Law, Text, Cases and Materials (Oxford University Press, 1002), p.332 et seq., *Jonathan Faull* and *Ali Nikpay*, The EC Law of Competition (Oxford University Press 1999), para 3.16 et seq; for a current economic analysis see *European Advisory Group on Competition Policy supra*, p.18 et seq.

tor to shape its strategy and to allocate a limited amount of funds and time to the exclusion of the other enterprise. The *Axel Springer* case referred to in the first part of this paper shows very clearly the interest of a large press conglomerate in gaining knowledge about the financial strength of two small competitors. The case also shows that it is wrong to assume that disclosure of "sensitive" data is hardly enforceable at all[154].

Again we have two options for regulatory action. The ideal combination of capital market information and competition policy would be to arrange mandatory disclosure on the one hand, but to forbid the use of this information by the dominant competitor on the other hand. As this is hard to monitor we could think of a halfway-solution: We wait until the dominant competitor starts with "predatory pricing". If the small competitor is able to show that knowledge of his financial data gives a substantial advantage to the large predator in this "price war" this fact as such could give rise to action under Art.82 EC. The burden of proof that financial information disclosed by the small competitor does not play a role in this "war" should be with the large enterprise. If we come to the conclusion that even this solution runs into practical problems we should consider an "exemption" for the small competitor not to file the relevant data with the commercial register. If the small enterprise is able to show that this information will make it extremely vulnerable to competition, even overarching capital market requirement should not get in the way.

cc) Disclosure as an Instrument for "Concerted Action"

Last not least we have to cope with the situation that information given to the general public under the rules of mandatory disclosure might enable the disclosing enterprise and its peers to enter into "concerted practice" regarding prices, production quantities and other market-relevant factors. To be sure, it makes no sense to counteract this problem by an introduction of an "exemption" as the disclosing entity will not apply for an exception from the rule, i.e. it will deliberately make public the information required by national or international securities laws.

Looking at current practice concerning "market information systems" described above[155] it is clear that such "perfectly legal" exchange of information is prone to have an anti-competitive effect according to the structure of the respective market. On the other hand it is not easy to

---

[154] *Mahoney supra* at p. 1103.
[155] *supra*

apply the legal framework developed under U.S. antitrust laws and the EC Treaty to this behaviour. Neither is it clear that there is any "agreement"[156] or other consensual action taken by the involved enterprises nor do we speak in this context about the exchange of "business secrets"[157] as has been done in the existing practice and judicature, because the law itself obliges corporate entities to make public this information. To be sure, even governmental action which supplies market participants with such information can be treated as an anticompetitive practice[158]. But as we speak of Federal securities law in the U.S. context and EC secondary law in the European context it is hard to say that the laws governing mandatory disclosure have to be regarded as such as an infringement of competition rules.

Nevertheless, as in the debate about market information systems has become clear, the most relevant point is not exchange of information as such but the use made of this knowledge by the involved enterprises. If – as the U.S. and the EC Courts have made clear – there exists a highly concentrated, oligopolistic market, we have to take into account that exchange of information is employed by the members of the oligopoly to reduce "hidden competition" and to enable competitors to follow each other in their market behaviour. This leads to the result that competition authorities have to monitor closely whether enterprises knowing each others financial data by way of mandatory disclosure move in parallel when it comes to their business strategies. The existence of disclosed data could serve as one element when it comes to making a case against the oligopolists under Art.81 EC.

VI. Some Concluding Remarks

The *Axel Springer* case shows that something is wrong with European disclosure rules. They are overstretched as they draw corporate entities into a harsh framework of mandatory disclosure irrespective of their access to the capital markets. Creditor protection should be no reason for compulsory disclosure rules. Europe should follow the U.S. example and restrict manda-

---

[156] ECJ, Case C-199/99 P *supra* para 105
[157] ECJ, Case C-7/95 P *supra* para 89
[158] *Niemeyer supra* p.156; European Commission *supra* para 49: "Lastly, the fact that a Government department makes available to the industry registration data identifying the sales of individual competitors in a given market as opposed to aggregate data not identifying individual companies does not prevent the application of Article 85 to the conduct of the undertakings in question. On the contrary, it only means that the public authority may, in certain circumstances, also be laying itself open to the allegations of an infringement, in this case of Article 5, for it follows from the combined provisions of Article 85, Article 3 (f) and the second paragraph of Article 5 that provisions of national law or national administrative practices may not adversely affect the application in full of the Community competition rules (…)".

tory disclosure to publicly listed companies. Yet it should not go for extreme solutions and abolish mandatory disclosure altogether.

There is no case for generalised mandatory disclosure in product markets. No enterprise should be legally obliged to show its economic data to competitors, suppliers and customers alike. This is not only due to high direct and indirect information cost; it also takes into account that the effects of disclosure on markets can be quite different according to their structure. Whether there is a legitimate interest of the "general public" and political institutions to gain knowledge about the economic situation of (very) large enterprises is not dealt with in this article.

Under U.S. and European securities laws, listed companies are obliged to disclose their annual accounts and other documents to the general public. This will not only affect capital markets but also their competitive environment. We have to take care of basically three different situations:

- Restriction on innovation by rules which require early disclosure of innovative activities. These should be accompanied by an "exemption" which leaves it to the company whether they want to inform the capital markets even if this brings about competitive disadvantages. Moreover, we could think about prohibitions of use and compensation payments if competitors make use of proprietary information.

- Abuse of a dominant position when a large market player uses financial data of a small competitor to conduct "predatory pricing". In this case we should either act against the predator under competition law or we should grant an exemption to the small competitor from the general obligation to file its financial data with the public authorities.

- Concerted practice supported by "legal" information exchange between competitors under mandatory disclosure rules. In this case it makes no sense to prohibit disclosure as such but competition authorities should monitor whether this information has been used to conduct parallel strategies or other concerted actions.

european corporate governance institute

about ECGI

The European Corporate Governance Institute has been established to improve *corporate governance through fostering independent scientific research and related activities.*

The ECGI will produce and disseminate high quality research while remaining close to the concerns and interests of corporate, financial and public policy makers. It will draw on the expertise of scholars from numerous countries and bring together a critical mass of expertise and interest to bear on this important subject.

The views expressed in this working paper are those of the authors, not those of the ECGI or its members.

www.ecgi.org

european corporate governance institute

ECGI Working Paper Series in Law

Editorial Board

Editor	Guido Ferrarini, Professor of Law, University of Genova & ECGI
Consulting Editors	Theodor Baums, Director of the Institute for Banking Law, Johann Wolfgang Goethe University, Frankfurt & ECGI Paul Davies, Cassel Professor of Commercial Law, London School of Economics and Political Science & ECGI Henry B Hansmann, Augustus E. Lines Professor of Law, Yale Law School & ECGI Klaus J. Hopt, Director, Max Planck Institute for Foreign Private and Private International Law & ECGI Roberta Romano, Allen Duffy/Class of 1960 Professor of Law, Yale Law School & ECGI Eddy Wymeersch, Professor of Commercial Law, University of Ghent & ECGI
Editorial Assistant :	Paolo Casini, "G.d'Annunzio" University, Chieti & ECARES, Lidia Tsyganok, ECARES, Université Libre De Bruxelles

Financial assistance for the services of the editorial assistant of these series is provided by the European Commission through its RTN Programme on European Corporate Governance Training Network (Contract no. MRTN-CT-2004-504799).

www.ecgi.org\wp

european corporate governance institute

Electronic Access to the Working Paper Series

The full set of ECGI working papers can be accessed through the Institute's Web-site (www.ecgi.org/wp) or SSRN:

Finance Paper Series	http://www.ssrn.com/link/ECGI-Fin.html
Law Paper Series	http://www.ssrn.com/link/ECGI-Law.html