

## **Information overload at the capital market - pledge for the introduction of a shortened financial statement on an empirical, psychological and comparative basis**

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*Thomas M.J. Möllers - Eva Kernchen*

## **INFORMATION OVERLOAD AT THE CAPITAL MARKET**

PLEDGE FOR THE INTRODUCTION OF A SHORTENED FINANCIAL STATEMENT  
ON AN EMPIRICAL, PSYCHOLOGICAL AND COMPARATIVE BASIS

**SUMMARY:** 1. The Transparency Regime of Capital Market Law and the Reading Boycott of the Average Private Investor. Costs and Objectives of the Duties of Disclosure in Capital Market Law. - 2. Annual Financial Report. *a)* The Annual Financial Report as the most important medium of information. *b)* Empirical Data concerning the Annual Financial Report. - 3. Reading Boycott and Information Overload. - 4. Behavioral Finance and Information Overload of Investors. Limited Rationality. - 5. Information Overload. - 6. Consequences of Information Overload: Heuristics of Information Perception. - 7. Information Overload at the Capital Market. Information Overload of Investors. - 8. Investor Protection with Duties of Disclosure. *a)* The Average Investor as the Recipient of Duties of Disclosure. *b)* Consequences for the Duties of Disclosure's Design. - 9. Alternative Models. *a)* Model of Indirect Information. *b)* Summary. - 10. The Introduction of a Shortened Financial Statement. Comparative Perspective. *a)* The British Summary Financial Statement. *b)* The US's Summary Annual Report. - 11. Systematic Comparison with other Rules of Transparency. *a)* The Prospectus Summary. *b)* Half-yearly Financial Statement and Investor Relations. - 12. Details on a Shortened Financial Statement *de lege ferenda*. *a)* Content. *b)* Language and outline. *c)* Size of the Shortened Financial Statement. - 13. Cost-Benefit-Analysis and Evaluation. *a)* Costs. *b)* Benefit. - 14. Outlook.

1. For companies, capital market financing is an alternative to the classic bank loan. In order to acquire funds in the medium and long term, for example by recapitalization, the costs should not constantly be higher than those of a loan and other financing options. Listed companies have become subject to a number of publication requirements at the German capital market. The number of duties of disclosure is steadily

growing (1). For the companies, the costs of a listing and, therefore, the costs of access to the capital market rise accordingly. As the results of a survey among the DAX-30 companies, taken in 2008 by the Deutsche Aktieninstitut (DAI) (2), show, companies perceive the increased duties of disclosure and publication as “burdensome” or even as “distinctly burdensome” (3). On September 30, 2006, the Federal Ministry of Finance estimated the issuers’ costs resulting from fulfilling the capital market’s duties of disclosure at a total of 1.2 billion Euros per year (4). The negative result of this increase in costs can be seen in a higher number of companies delisting at the German stock market as listing becomes less and less appealing due to high expenses (5).

As is known, duties of disclosure are meant to achieve institutional investor protection as to protect the function of the capital market and protection of the individual investor (these are the objectives of regulation in capital market law) (6). Since for the companies, the primary consequence of the duties of disclosure is the evolution of costs, it could be expected that the disclosed information at least helps investors to get a

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(1) Only recently, several changes were made concerning duties of disclosure about changes in voting interest (sec. 21 s. Securities Trading Act, or WpHG), ad-hoc publicity (sec. 15 WpHG), duty to publication of directors’ dealings (sec. 15a WpHG), keeping of an insiders’ registry (sec. 15b WpHG) and periodical financial reporting (sec. 37v s. WpHG).

(2) E. Ernst - J. Gassen - B. Pellens, *Verhalten und Präferenzen deutscher Aktionäre*, Studien des Deutschen Aktieninstituts (DAI 2009), 42, at 54 s.

(3) G. Fey, *Kosten und Nutzen der Regulierung börsennotierter Unternehmen* (DAI 2007), 35, at 33 s.

(4) Monthly Report of the Federal Ministry of Finance [Monatsbericht des BMF] - October 2008, 51.

(5) F. Eisele, *Going Private in Deutschland* (Tübingen 2006), 112 s., who pointed out that delistings are incentivized by avoiding listing costs. See also fn. 139 s.

(6) K.J. Hopt, *Grundsatz- und Praxisprobleme nach dem Wertpapierhandelsgesetz - insbesondere Insidergeschäfte und Ad-hoc-Publizität*, Zeitschrift für das gesamte Handels- und Wirtschaftsrecht (ZHR), 1995, 135 at 159; T.M.J. Möllers, *Effizienz als Maßstab des Kapitalmarktrechts*, Archiv für civilistische Praxis (AcP), 2008, 1 at 7 s.; A. Fuchs, *Introduction*, A. Fuchs, WpHG (Munich 2009), no. 13 s.

better overview of the company and, thus, to make a more reasonable investment decision. The duties of disclosure are meant to ensure efficient capital markets as well as the prerequisites for the individual investor's optimal investment decision (7).

Considering the decreasing number of shareholders in Germany (8), the eligibility of these parameters at the German capital market to give back to the investor the trust lost in the enduring crisis seems to be equivocal. In detail, it remains to be seen if the issuer's relevant duty of disclosure truly strengthens the investor's position or if, to the contrary, an overregulation to the investors' disadvantage is the consequence.

2. a) According to sec. 37v § 2 WpHG, the annual financial report includes "at least" the elements of financial coverage required by law, such as annual financial statement, management report and "Börseneid" (oath on the stock exchange) or, in a multicorporate enterprise, the corporate closure, consolidated annual report and the related "Bilanzeid" (oath on the financial statement). Often, it is published as a business report with further voluntary information concerning the company. The annual and business reports offer a comprehensive overview of the company's financial situation and business development as well as its strategy and success. They are meant to enable the capital market to profoundly judge the issuer's situation and future prospects. Therefore, the annual financial report is one of the most important media of information at the capital market (9).

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(7) T.M.J. Möllers, *Ad-hoc-Publizität - Handbuch der Rechte und Pflichten von börsennotierten Unternehmen und Kapitalanlegern* (Munich 2003), 38; cf. H.-D. Assmann, *Die Regelung der Primärmärkte für Kapitalanlagen mittels Publizität im Recht der Europäischen Gemeinschaft*, Die Aktiengesellschaft (AG), 1993, 549, at 563, 559.

(8) The number of shareholders decreased from more than four million in 2007 and more than 6 million in 2000 to 3.5 million in 2008, cf. DAI-Factbook (March 4, 2009), 08.3-Zahl-D, available at [http://www.dai.de/inter-net/dai/dai-2-0.nsf/dai\\_statistiken.html](http://www.dai.de/inter-net/dai/dai-2-0.nsf/dai_statistiken.html).

(9) F.-J. Leven, *Finanzkrise und Abgeltungssteuer: Drastischer Rückgang der Fondsanleger*, DAI-Kurzstudie, 1/2009, 1, available at [http://www.dai.de/inter-net/dai/dai-2-0.nsf/dai\\_statistiken.html](http://www.dai.de/inter-net/dai/dai-2-0.nsf/dai_statistiken.html).

Contrarily, the periodical coverage in half- and quarterly reports covers only limited periods of time and, therefore, can only reflect the company's situation in a limited manner. The duty of disclosure concerning directors' dealings according to sec. 15a WpHG also permits various conclusions (10). It is said to have only an indicating effect with potentially false conclusions. Company data is published in ad-hoc notifications which influence the price. However, this is only due to one single rate-influencing piece of information (11).

b) Some CFOs seem to measure their corporation's transparency in kilogram and mistake "quantity for quality" (12). The information load to be processed is immense, as the DAIs analysis of business reports shows. Among these business reports only five were less than 200 pages with an average page load of 225 pages (13). Occasionally, the continuously increasing scope is due to the abuse of financial statements as image cultivation for the company and containing "leading stories" (14). For example, when looking at Audi's business report

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[dai.de/internet/dai/dai-2-0.nsf/0/6EAAF6ACFF26589BC125754000544EB3/\\$FILE/B09B6247F2A12E8AC125754000544E84.pdf?openelement&cb\\_content\\_name\\_utf=Stu\\_1\\_2009\\_Aktion%C3%A4rszahlen%202008.pdf](http://dai.de/internet/dai/dai-2-0.nsf/0/6EAAF6ACFF26589BC125754000544EB3/$FILE/B09B6247F2A12E8AC125754000544E84.pdf?openelement&cb_content_name_utf=Stu_1_2009_Aktion%C3%A4rszahlen%202008.pdf).

(10) The sale of securities can indicate negative future business developments as well as constitute the sale of securities from former stock option plans. Cf. M. Pfüller, *Commentary on sec. 15*, Fuchs, WpHG cit., no. 24 s.

(11) The Federal Court of Justice [Bundesgerichtshof; BGH] distinctly emphasized the difference to the stock exchange prospectus in its Informatec-ruling, see *Entscheidungen des Bundesgerichtshofs in Zivilsachen* (BGHZ) 160, 134, at 137. On Informatec see also T.M.J. Möllers, *Der Weg zu einer Haftung für Kapitalmarktinformationen*, *JuristenZeitung* (JZ), 2005, 75, at 77.

(12) Fockenbrock, *Finanzchefs täuschen Klasse durch Masse vor*, *Handelsblatt*, Dec. 31, 2006, <http://www.handelsblatt.com/finanzchefs-taeuschen-klasse-durch-masse-vor;11557303> (quoting Küting, Head of the Institute for Accounting (IWP) at the University of Saarbrücken).

(13) Record holder is Deutsche Bank AG with its Annual Report comprising 404 pages, available at <http://geschaeftsbericht.deutsche-bank.de/2008/gb/serviceseiten/downloads.html>.

(14) R. Chandler - S. Bartlett, *The Private Shareholder, Corporate Governance and the Role of the Annual Report*, *Journal of Business Law* (J.B.L.), 1999, 415, at 417; C. Hornung, *Viel Papier, wenig Inhalt*, available at <http://>

2008, no information on the corporation's financial situation can be found within the first 120 of 261 pages, but one is instead confronted with a "magazine" containing stories to improve the corporation's image (15).

In addition, the information on the financial statement which is included in the annual financial report is very complex and detailed. To make matters more difficult still, international standards (IAS/FRS) require accounting in cases in which the parent corporation appears as bond issuer (16). Experience has shown, however, that the average German investor is incapable of reading, let alone understanding, such a voluminous statement in English (17). Private investors are overwhelmed by the complexity of financial information which they need to process. They are neither capable to understand nor to assess and value the information given.

3. The duties of disclosure mostly lack a specific reference to their recipients and are incomprehensible for a normal, educated and interested investor (18). As a consequence, investors are overwhelmed by the business report and do not

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[www.hk24.de/share/hw\\_online/hw2005/artikel/16\\_boerse/09-24\\_geschaefstberichte.html](http://www.hk24.de/share/hw_online/hw2005/artikel/16_boerse/09-24_geschaefstberichte.html); H. Kölle, *Ein dickerer Geschäftsbericht ist nicht automatisch besser: Untersuchung in Deutschland offenbart Informationsdefizite - Risikoeinschätzung gewinnt an Bedeutung*, Finanz und Wirtschaft, Sept. 10, 2005, 37.

(15) Annual Report 2008 of Audi AG, available at [http://www.audi.de/etc/medialib/ngw/company/investor\\_relations/pdf/finanzberichte/geschaeftsbericht.Par.0002.File.pdf/audi\\_gb\\_2008\\_de.pdf](http://www.audi.de/etc/medialib/ngw/company/investor_relations/pdf/finanzberichte/geschaeftsbericht.Par.0002.File.pdf/audi_gb_2008_de.pdf).

(16) Cf. sec. 315a HGB and Art. 4, Regulation (EC) No. 1606/2002 of the European Parliament and of the Council of 19 July 2002 on the application of international accounting standards, Official Journal of the European Communities 2002, L 243, 1.

(17) W. Groß, *Die börsenrechtliche Prospekthaftung*, AG, 1999, 199, at 202, 209; id., *Kapitalmarktrecht*<sup>4</sup> (Munich 2009), sec. 44, 45 BörsG, no. 41; S.L. Pankoke, *Commentary on sec. 44 BörsG*, 13 *VerkProspG*, C. Just - T. Voß - C. Ritz - M. Zeising, WpPG (Munich 2009), no. 39; U. Keunecke, *Prospekte im Kapitalmarkt*<sup>2</sup> (Berlin 2009), no. 84; L. Wieneke, *Emissionspublizität - Praktische Anforderungen und rechtliche Grenzen*, Neue Zeitschrift für Gesellschaftsrecht (NZG) 2005, 109, at 111, 115.

(18) Assmann, *Die Regelung der Primärmärkte* cit., at 559; S. Heinze, *Europäisches Kapitalmarktrecht - Recht des Primärmarktes* (Munich 1999), 371.

read it. This observation was confirmed by the DAI's study on information behavior of German investors: Financial coverage is not perceived sufficiently by inexperienced investors and, additionally, is estimated as being difficult to understand and of little importance (19). In other words: The business report is simply not read by this group of investors (20). Therefore, it can be concluded that additional duties of publication accommodate mostly the institutional investors' need for information and that private investors are overcharged with the information provided (21). Financial coverage in its current form does not enable the investor to make a well-founded judgment on the issuer's situation. On the contrary, the duties' current structure further complicates taking in the necessary information. There is a danger that especially readers with little or no expertise are distracted by "soft" information and do not read the "hard" facts (22). The annual financial statement in its current form fails to reach the objective of capital market law to enable an informed and self-determined investment decision.

The load of information and its complexity lead to the topic of information overload concerning the investors and to the question of how to solve this problem. The following essay seeks to examine the topic of information overload. In a first step, results of limited rationality in the US are presented (II.) in order to then deal with the recipient of duties of disclosure in capital market law (III.). The annual financial statement as one of the most important data on corporations is still too complex to be appropriately dealt with by the average investor. The creation of a shortened financial statement would be the correct reaction *de lege ferenda* (IV.). Details concerning con-

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(19) Ernst - Gassen - Pellens, *Verhalten und Präferenzen deutscher Aktionäre* cit., at 11 s., 28, 29 (The annual report is considered to be important or very important by only 44% of private investors. In contrast, 75% of them consider media coverage to be important or very important).

(20) Former studies on the British market showed the same results, cf. S. Bartlett - R. Chandler, *The Corporate Report and The Private Shareholder*, 29 *British Accounting Review*, 1997, 245 with further references.

(21) Ernst - Gassen - Pellens, *Verhalten und Präferenzen deutscher Aktionäre* cit., at 13, 48, 52.

(22) Chandler - Bartlett, *The Private Shareholder, Corporate Governance and the Role of the Annual Report* cit., at 417.

tent and scope of such a shortened statement are explained to show the advantages in comparison to the current legal situation (V.).

4. Capital market's regulation by duties of disclosure is based mainly on two presumptions. One theory aims to see man as a "homo oeconomicus", acting rationally and in order to maximize his benefits (Theory of Rational Decision) (23). The other theory assumes that financial markets are efficient in that market prices always reflect all available information. (Hypothesis of Market Efficiency) (24). If these assumptions were true in reality, a regulation system based on duties of disclosure would indeed make sense.

However, conventional theories of rationality and information efficiency cannot explain reality of capital markets and stock exchanges. For example, quotations rise above the fundamental worth of bonds due to enthusiastic atmospheres; so-called "bubbles" are created (25) as was the case with the rise and fall of the dot.com industry during the internet bubble of 2000 (26). The science of behavioral finance incorporates insights of psychological behavioral science with economic analysis and seeks to explain how and why people do not act in accordance with the pattern of "homo oeconomicus" but make irrational and illogical decisions when investing money (27).

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(23) V. Kunz, *Rational Choice* (Frankfurt 2004), 32 s.; G. Kirchgässner, *Homo Oeconomicus*<sup>2</sup> (Tübingen 2000), 12 s., 46 s.

(24) J.A. Fama, *Efficient Capital Markets: A Review of Theory and Empirical Work*, *Journal of Finance* (J. Fin.), 1970, 383; Id., *Efficient Capital Markets II*, *J. Fin.* 1575 (1991).

(25) Regarding the development of stock bubbles by investor psychology, see A. Shleifer, *Inefficient Markets* (New York 2000), 154 s.

(26) R. Thaler, *Advances in Behavioral Finance*<sup>2</sup> (Princeton 2005), at xi, who doubts that the NASDAQ-prices were established rationally due to their range of 5.000 to 1.3000 points.

(27) G. Belsky - T. Gilovich, *Das Lemming Prinzip* (Munich 2007), 11; H. Shefrin, *Beyond Greed and Fear: Understanding Behavioral Finance and the Psychology of Investing* (New York 2000), ix; R.J. Shiller, *From Efficient Markets Theory to Behavioral Finance*, *Journal of Economic Perspectives*, 2003, 83; A. Oehler, *Theoretische, empirische und experimentelle Befunde un-*

Research results have shown the inefficiency of human decision-making and uncovered a number of behavioral anomalies concerning human behavior when making a decision from an insecure (28) position (29). Consequently, the answer to the question how man deals with too much information is crucial to find the right standard of duties of disclosure in capital market law.

More than 50 years ago, *Simon* (30) was one of the first to point out the limited rationality of men when making decisions. He challenged the idea of "economic" and "rational" people who act to maximize and choose the best of all available alternatives. In fact, according to Simon, man does not optimize but look for a choice of action that is satisfactory or "good enough" (31). Man adapts his decision-making behavior to his individually limited abilities to process (limited cognitive abilities) and to the inevitable restrictions of time and information. He uses measures of simplification or "rules of thumb", so-called heuristics (32). Concerning man's cognitive ability, Miller found out in more detail that one cannot keep in mind more than seven (plus/minus two) units of information, so-called "chunks", at once (33). This implies that any additio-

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*ter Marktrelevanz*, Zeitschrift für das gesamte Banken- und Börsenwesen (ÖBA) 2000, 978, at 978, 989.

(28) Insecurity means that there is no opportunity for the decision-maker to determine the (objective and subjective) probability of occurrence of a certain condition, cf. H. Fleischer, *Informationsasymmetrien im Vertragsrecht* (Munich 2001), 110.

(29) Summaries e.g. at H. Kiehling, *Börsenpsychologie und Behavioral Finance* (Munich 2001); A. Oehler, "Anomalien, Irrationalitäten" oder "Biases" der Erwartungsnutzentheorie und ihre Relevanz für Finanzmärkte, Zeitschrift für Bankrecht und Bankwirtschaft (ZBB), 1992, 97, at 124; A. Oehler, *Theoretische, empirische und experimentelle Befunde unter Marktrelevanz*, supra, at 978, 989; D. Hirshleifer, *Investor Psychology and Asset Pricing*, J. Fin., 2001, 1533; Belsky - Gilovich, *Das Lemming Prinzip* cit., 11.

(30) For an overview of Simon's materials, see H.A. Simon, *Models of Bounded Rationality* (Cambridge 1982).

(31) H.A. Simon, *A Behavioral Model of Rational Choice*, The Quarterly Journal of Economics (QJE), 1955, 99.

(32) Simon, *A Behavioral Model of Rational Choice* cit., 99 s.

(33) G.A. Miller, *The Magical Number Seven Plus or Minus Two: Some Limits to our Capacity of Processing Information*, Psychology Review, 1956,

nal piece of information substitutes an old one (34). Human reception and processing capacity is limited by exogenous (time and information) and endogenous (cognitive capacity) factors. Behavior is not completely, but only finitely rational.

5. The theory of limited rationality points to the conclusion that "the decision's quality is not improved according to the quantity of information available" (35). If the available information is too extensive (amount of information) or too detailed (complexity of information), recipients are often overwhelmed due to their limited reception and processing capacities (36). They are then no longer able to completely receive, understand and process the data. The recipient suffers from information overload (37) or information overkill; the German phrase is "Informationsüberflutung" (information overflow). This describes the situation of having too much information available.

There are numerous studies concerning the topic of information overload (38). At first, the processed amount of infor-

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81. Later confirmed by W. Chase - H.A. Simon, *Perception in Chess*, Cognitive Psychology, 1973, 55, at 76.

(34) Picturing the memory as a filling tray which always puts the latest information on top: R. Wyer - T. Scrull, *The Processing of Social Stimulus Information: A Conceptual Integration*, R. Hastie - T. Ostrom - E. Ebbesen - R. Wyer - D. Hamilton - D. Carlston, *Person Memory: The Cognitive Basis of Social Perception* (New Jersey 1980), 227 s.

(35) Fleischer, *Informationsasymmetrien im Vertragsrecht* cit., 115.

(36) Cf. S. Kind, *Die Grenzen des Verbraucherschutzes durch Information* (Berlin 1998), 442 s.; H. Fleischer, *Vertragsschlußbezogene Informationspflichten im Gemeinschaftsprivatrecht*, *Zeitschrift für Europäisches Privatrecht (ZEuP)*, 2000, 772, at 798.

(37) This observation was first made by the economic organisation theory: "The major communications problem is information overload", cf. E.M. Rogers - R. Agarwala-Rogers, *Communications in Organisations* (New York 1976), 90.

(38) Cf. J. Jacoby - D.E. Speller - C. Kohn Berning, *Brand Choice Behavior as a Function of Information Load: Replication and Extension*, *Journal of Consumer Research*, 1974, 33; N.K. Malhotra, *Information Load and Consumer Decision Making*, *Journal of Consumer Research*, 1982, 419; Id.,

mation and, therefore, the quality of decision-making increases as the quantity of information increases. From a certain point onward, however, the processed amount decreases and the person making the decision falls back onto a smaller amount of processed information and lesser quality of decision-making (39). It cannot be determined exactly when this point is reached. Mainly, this is influenced by the level of education (40). An investor with expert knowledge will certainly be able to deal better with a flood of subject-related information as a "normal" investor; this is particularly true for institutional and professional investors. Generally speaking, information overload is reached when the increasing amount of information does not lead to an increasing but instead a decreasing quality of decision-making. Besides the amount of information, content and presentation of information is relevant to information overload (41). Too much high-quality and complex information overwhelms the investors even faster.

## 6. The question remains how a market participant with

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*Reflections on the Information Overload Paradigm in Consumer Decision Making*, Journal of Consumer Research, 1984, 436.

(39) K.L. Keller - R. Staelin, *Effects of Quality and Quantity of Information on Decisions Effectiveness*, Journal of Consumer Research, 1987, 200, at 212; R. Madhavan - J.E. Prescott, *Market Value Impact of Joint Ventures: The Effect of Industry Information-Processing Load*, Academy of Management Journal, 1995, 900, at 903.

(40) Cf. e.g. the study on the German capital market: K. Stüfe, *Das Informationsverhalten deutscher Privatanleger* (Wiesbaden 1999), 67: « A higher level of education, thus, tends to increase the intensity which private investors gather information about financial investments with ». On the British capital market: B. Elliott - F. Hodge - K. Jackson, *The Association between Non-professional Investors' Information Choices and Their Portfolio Returns*, available at <http://ssrn.com/abstract=817044>, at 23: « Our results suggest that investors with little investing experience are likely to become overwhelmed when analyzing unfiltered financial information (...) ».

(41) Cf. K.L. Keller - R. Staelin, *Effects of Quality and Quantity of Information on Decisions Effectiveness*, Journal of Consumer Research, 1987, 200, at 212; J. Agnew - L.R. Szykman, *Asset Allocation and Information Overload: the Influence of Information Display, Asset Choice and Investor Experience*, Center for Retirement Research at Boston College, Working Paper CRR WP 2004-15, available at <http://ssrn.com/abstract=1142932>.

limited rationality reacts when overwhelmed by information permanently impacting him. He will try to adjust the information's amount and complexity of the decision process to his given limits and simplify as much as possible with the aid of heuristics (42) of methods of simplification (43). Concerning information overload, mainly three heuristics can be distinguished: Firstly, information is neglected or selectively perceived. When too much information is available or information is too detailed, man ignores a large amount of it (44). Secondly, heuristics of availability (45) lead to a reduction of complexity by mainly processing recent, dominant (46) ("dramatic", unex-

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(42) Behavioral Finance comprises of rules and strategies regarding information perception or processing, which are used to achieve a fast, however not implicitly ideal result, with little effort. (« rules of thumb »); see J. Goldberg - R. v. Nitzsch, *Behavioral Finance* (Munich 1999), 49. For a more detailed definition, see C. Engel - G. Gigerenzer, *Heuristics and the Law* (Cambridge 2006), 1 s.

(43) Goldberg - Nitzsch, *Behavioral Finance* cit., 117; Malhotra, *Information Load and Consumer Decision Making* cit., at 438.

(44) Malhotra, *Information Load and Consumer Decision Making* cit., at 438 [quoting J.R. Bettman, *An Information Processing Theory of Consumer Choice* (Mass. 1979)]; Jacoby - Speller - Kohn Berning, *Brand Choice of Behavior as a Function of Information Load: Replication and Extension* cit., at 40; J. Jacoby, *Perspectives on Information Overload*, *Journal of Consumer Research*, 1984, 432, at 433, 435; Oehler, "Anomalien", "Irrationalitäten" oder "Biases" der Erwartungsnutzentheorie und ihre Relevanz für Finanzmärkte cit., at 100; Goldberg - Nitzsch, *Behavioral Finance* cit., 59 s. Consumers, for instance, facing an extensive text which they can be sure they will not be able to conceive, will not absorb any information, cf. M.A. Eisenberg, *Text Anxiety*, *Southern California Law Review* (S. Cal. L. Rev.), 1986, 305, at 309, who observed this behavior with consumers facing general terms and conditions.

(45) So-called « availability heuristic ». Heuristic was originally described by Kahneman and Tversky, who empirically analysed the consequence of availability on the estimation behavior of individuals regarding likelihoods, cf. A. Tversky - D. Kahneman, *Judgment Under Uncertainty: Heuristics and Biases*, 1974, *Science*, 1124, at 1127.

(46) C. Jolls - C.R. Sunstein - R. Thaler, *A Behavioral Approach to Law and Economics*, 1998, *Stanford Law Review* (Stan. L. Rev.), 1998, 1471, at 1519; S. Lichtenstein et al., *Judged Frequency of Lethal Events*, *Journal of Experimental Psychology: Human Learning and Memory*, 1978, at 551; W.F.M. DeBondt - R.H. Thaler, *Does the Stock Market Overreact?*, 40 *J. Fin.*

pected or pushed-up by media) or vivid (47) (easily imaginable, emotionally tinted) information and neglecting other pieces of information (48). Thirdly, the mode of presenting information substantially influences its reception (49). Information that includes formal aspects in the way of presentation is more easily received and processed. This includes simplicity (simplicity of vocabulary, readability due to font size and paragraph design) and clarity due to an outline as well as shortness and conciseness (50).

It can be assumed, therefore, that investors are often incapable of processing the information available to them. Summarizing, Langevoort aptly writes: "The bottom line of all this is that making information available to investors does not mean that they will use it at all, much less use it well" (51). The conclusion from these experiences must, thus, be that the regime of transparency in capital market law would be more successful and efficient if companies disclosed less rather than more information (52).

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793 (1985), observed a stronger reaction on the stock market for these types of information.

(47) E. Borgida - R.E. Nisbett, *The Differential Impact of Abstract vs. Concrete Information on Decisions*, Journal of Applied Social Psychology, 1977, at 258; R.E. Nisbett - E. Borgida, *Attribution and the Psychology of Prediction*, Journal of Personality and Social Psychology, 1975, 932, at 942.

(48) R. v. Nitzsch - C. Friedrich, *Entscheidungen in Finanzmärkten* (Mainz 1999), 19 s.; Oehler, "Anomalien", "Irrationalitäten" oder "Biases" der Erwartungsnutzentheorie und ihre Relevanz für Finanzmärkte cit., 101; Goldberg - Nitzsch, *Behavioral Finance* cit., 56 s.; W.F.M. DeBondt - R.H. Thaler, *Does the Stock Market Overreact?* cit.

(49) So-called « framing ». See A. Tversky - D. Kahneman, *The Framing of Decisions and the Psychology of Choice*, Science, 1981, at 453; D. Kahneman - A. Tversky, *Prospect Theory: An Analysis of Decision under Risk*, Econometrica, 1979, at 263; Oehler, "Anomalien", "Irrationalitäten" oder "Biases" der Erwartungsnutzentheorie und ihre Relevanz für Finanzmärkte cit., 101; W.K. Viscusi, *Individual Rationality, Hazard Warnings, and the Foundations of Tort Law*, Rutgers Law Review, 1996, 625, at 634 s.

(50) Summarizing multiple studies on comprehensibility of text material: Kind, *Grenzen des Verbraucherschutzes* cit., 484 s.

(51) D. Langevoort, *Commentary: Investors, IPOs, and the Internet*, Entrepreneurial Business Law Journal, 2008, 767, at 770.

(52) T.A. Paredes, *Blinded by the Light, Information Overload and its*

7. In Germany, the discussion of information overload by duties of disclosure in capital market law is still at its beginning point (53). Publications in the US are more voluminous. They include the allegation that the capital market's transparency regime fails because investors, analysts and other participants of the capital market are only insufficiently able to receive and process the relevant information (54). A study by the Security and Exchange Commission (SEC) concerning investors' opinion about duties of disclosure confirmed that the investors are overwhelmed by the information available and wish for documents that are more simple and easier to understand (55).

8. a) To ensure an informed and self-determined invest-

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*Consequences for Securities Regulation*, Washington University Law Quarterly (Wash.U.L.Q.), 2003, 417, at 419, 484: « Capital markets might be more, not less, informationally (...) efficient if less, not more, information is available ».

(53) Cf. e.g. H. Dreyling, *Ein Jahr Anlegerschutzverbesserungsgesetz - Erste Erfahrungen*, Der Konzern, 2005, 1, at 5; Fleischer, *Vertragsschlußbezogene Informationspflichten* cit., at 798; T.M.J. Möllers - F. Holzner, *Die Offenlegungspflichten des Risikobegrenzungsgesetzes (§ 27 II WpHG-E)*, Neue Zeitschrift für Gesellschaftsrecht (NZG), 2008, 166, at 171, 172; T.M.J. Möllers, *Regulierung von Ratingagenturen*, JZ, 2009, 861, at 869, 916; Fey, *Kosten und Nutzen der Regulierung börsennotierter Unternehmen* cit., 33 s. In-depth analysis of this problem was yet only made for the Time-sharing Act [Teilzeitwohnrechtgesetz], cf. Kind, *Die Grenzen des Verbraucherschutzes durch Information* cit., 442 s. On this see also M. Martinek, *Unsystematische Überregulierung und konstraintentionale Effekte im Europäischen Verbraucherschutzrecht*, in *Systembildung und Systemlücken in Kerngebieten des Europäischen Privatrechts*, S. Grundmann (Tübingen 2000), 511-557.

(54) P.J. Dalley, *The Use and Misuse of Disclosure as a Regulatory System*, Florida State University Law Review (Fla. St. U. L. Rev.), 2007, 1089-1131; T.A. Paredes, *Blinded by the Light, Information Overload and its Consequences for Securities Regulation* cit., at 485.

(55) Exemplary for the investors' information overload are comments such as « Give me all the information on one page », « A bullet point list is enough » or « Less is more »; see L.J. Schock (Acting Director, Office of Investor Education and Assistant, SEC), *Feedback from Individual Investors on Disclosure*, Speech at Vanguard and Villanove University's Center for Marketing and Public Policy Research (19.1.2007), available at <http://www.sec.gov/news/speech/2007/spch011907ljs.htm>.

ment decision, participants of the capital market should not only have access to the information, but also be able to understand and process it (56). Only in that case, the information is useful to the investor and the average citizen obtains the chance to choose freely. The duties of disclosure need to accommodate the investor to minimize the danger of information overload. However, capital market's duties of disclosure are addressed to a large variety of market participants with a different degree of experience and expertise in the securities business and, therefore, differing interests. In other words, "the one" investor does not exist (57). The discussion about the addressed audience has surfaced in particular concerning the issuer's prospectus liability according to sec. 44, 45 BörsG, since the falsity of a prospectus is determined in accordance with the recipient's level of expertise (58). In literature and case law, a number of different views have developed reaching from the "inexperienced layman" to the "expert" (59). The discussion's weakness, however, is that it focuses only on the readers of stock exchange prospectuses (60).

The question who is the recipient of the secondary publicity has not been answered as extensively. Systematic information concerning other duties of disclosure, such as the offer

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(56) Paredes, *Blinded by the Light, Information Overload and its Consequences for Securities Regulation* cit., at 418, 432; S.K. Ripken, *The Dangers and Drawbacks of the Disclosure Antidote*, *Baylor Law Review*, 2006, 139, at 145. The requirement for information comprehension and processing was pointed out early on, cf. W.O. Douglas, *Protecting Investors*, *Yale Review*, 1934, 521, at 523 s.; Assmann, *Die Regelung der Primärmärkte für Kapitalanlagen mittels Publizität im Recht der Europäischen Gemeinschaft* cit., at 560; M. Schindele, *Der Grundsatz der Prospektverständlichkeit am Beispiel des Börsenzulassungsprospekts für den amtlichen Markt* (Munich 2008), 31.

(57) H. Fleischer, *Gutachten F für den 64. Deutschen Juristentag* (2002), 21.

(58) M. Lenenbach, *Kapitalmarkt- und Börsenrecht* (Cologne 2002), sec. 8, no. 8.84; S.L. Pankoke, *Commentary on sec. 44 BörsG, 13 VerkProspG*, *C. Just - T. Voß - C. Ritz - M. Zeising, WpPG* (Munich 2009), no. 37.

(59) Summary in H.-D. Assmann, *Commentary on sec. 6, Handbuch des Kapitalanlagerechts*<sup>3</sup>, 2007, no. 83 s.

(60) See also H.D. Assmann, *Prospekthaftung* (Cologne 1985), 317.

document of the WpÜG (61), the interim report (62) and the ad-hoc notification (63) and the historic intent of EU directives (64) and of German law (65) are pointers in this discussion. It needs to be noted that all current and potential investors are recipients of the capital market's information system, including small and private investors.

However, this does not yet describe their capabilities. Contrary to the Federal Court's contradictory (66) opinion of an "average investor" and an "attentive reader" who is also able to read a balance sheet (67), the prevailing scholarly opinion disregards the ability to read balance sheets (68). The average investor might be inexperienced in financial and legal issues, but he is knowledgeable and able to criticize (69). It can be as-

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(61) See also T.M.J. Möllers, *commentary on sec. 12, H. Hirte - C. v. Bülow, Kölner Kommentar zum WpÜG* (Munich 2003), no. 33 s.; Id., *Verfahren, Pflichten und Haftung, insbesondere der Banken bei Übernahmangeboten*, ZGR, 2002, 664, at 682, 696.

(62) See O. Ammedick - T. Strieder, *Zwischenberichterstattung börsennotierter Gesellschaften* (Munich 2002), no. 11 s.

(63) See Möllers, *Ad-hoc-Publizität* cit., at 47 s.; B. Monheim, *Ad-hoc-Publizität nach dem Anlegerschutzverbesserungsgesetz* (Karlsruhe 2007), 29 s.

(64) The European legislature regularly refers to the « investor audience », i.e. to all current and potential investors, cf. e.g. art. 8, cl. 4 Kapitalmarktpublizitäts-Richtlinie 2001/34/EG v. 28.5.2001, ABl. EG No. L 184 (6.7.2001), at 1 s. (amended version, ABl. No. L 217 (11.8.2001), at 18 s.).

(65) The German legislature explicitly referred to the « average investor » in the 4th FGG, cf. Statement to Government's Draft, Begr. RegE 4. FFG, Parliamentary Printing Matter, BT-Drucks. 14/8017, at 87. See also Möllers, *Ad-hoc-Publizität* cit., 47 s.

(66) Lenenbach, *Kapitalmarkt- und Börsenrecht* cit., sec. 8, no. 8.84.

(67) BGH, *Neue Juristische Wochenschrift* (NJW), 1982, 2823, at 2823 s., 2827; *Zeitschrift für Wirtschafts- und Bankrecht* (WM), 1982, 862, at 863. See also OLG Düsseldorf, WM, 1984, 587, at 601; OLG Frankfurt, *Neue Juristische Wochenschrift Rechtsprechungs-Report* (NJW-RR), 1994, 946, at 947, 949.

(68) Cf. for instance Assmann, *Handbuch des Kapitalanlagerechts* cit., sec. 6, no. 83; U. Hamann, *Commentary on sec. 44, 45 BörsG*, F.A. Schäfer - U. Hamann, *Kapitalmarktgesetz*<sup>2</sup> (2006), 2, no. 191; H.H. Ehrlicke, *Zur zivilrechtlichen Prospekthaftung der Emissionsbanken gegenüber dem Wertpapieranleger*, Der Betrieb (DB), 1980, 2429, at 2432.

(69) LG Düsseldorf, DB, 1980, 2381, at 2384; K.J. Hopt, *Die Haftung des Wirtschaftsprüfers*, P. Hofmann - U. Meyer-Cording - H. Wiedemann, *Fest-*

sumed that "he thoroughly reads the documents" (70). To justify this view, it is said that a minimum of understanding is necessary for a standardized piece of information (71). Therefore, the investor can be expected to deal with the available information, particularly since an investment in securities always includes a certain risk (72). However, it is not required that the investor has special knowledge of the matter or further expertise (73). Similarly, the average investor does not need to be familiar with legal or economic terminology (74).

b) In order to reach the objective of an informed and self-determined investment decision and to avoid a possible confusion of investors due to too much or too detailed information, the duties of disclosure need to consider the average investor. The amount of published information as well as its complexity (content) and the presentation (form) of the documents must accommodate the abilities and needs of the average investor and reader. The given information is to be edited in a way that the investor can receive and process it without difficulty (75). Not the "maximum, but the optimum of information" counts (76).

Investors can also be confused by too much or too com-

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*schrift für Klemens Pleyer* (Cologne 1986), 341, 365; Fleischer, *Gutachten F für den 64. Deutschen Juristentag* cit., 44; W. Groß, *Kapitalmarktrecht*<sup>4</sup> (Munich 2009), sec. 44, 45 BörsG, no. 41.

(70) K.J. Hopt, *Die Haftung des Wirtschaftsprüfers* cit., 341, 365; Likewise Assmann, *commentary on sec. 6* cit., no. 83, who is referring to the « attentively reading investor ».

(71) Fleischer, *Gutachten F für den 64. Deutschen Juristentag* cit., 44.

(72) H.H. Ehrlicke - K.J. Hopt - H.-C. Voigt, *Prospekt- und Kapitalmarktinformationshaftung* (Tübingen 2005), 220.

(73) Brondics - Mark, *Die Verletzung von Informationspflichten im amtlichen Markt nach der Reform des Börsengesetzes*, AG 1989, 339, 347, 341; OLG Düsseldorf, WM 1984, 586, 601, 592.

(74) BGH, NJW, 1982, 2823, at 2827 = WM, 1982, 862, at 863: « nicht unbedingt mit der in eingeweihten Kreisen gebräuchlichen Schlüsselsprache vertraut zu sein braucht ».

(75) Schindele, *Der Grundsatz der Prospektverständlichkeit am Beispiel des Börsenzulassungsprospekts für den amtlichen Markt* cit., 30.

(76) Fleischer, *Informationsasymmetrien im Vertragsrecht* cit., 116; Id., *Gutachten F für den 64. Deutschen Juristentag* cit., 46; Id., *Vertragsschlußbezogene Informationspflichten im Gemeinschaftsprivatrecht* cit., at 798.

plicated information (77). In the case of direct mislead, the information's issuer deliberately tries to hide major and disadvantageous information within the document, which is in its effect similar to missing, wrong or incomplete information. If information is only given for the sake of informing and "without an informational value" (78), investors face the danger of information overload and, therefore, do not perceive and process it at all or do so only insufficiently.

9. a) The problem of information overload could be solved if capital markets' duties of disclosure only existed towards professional investors and finance intermediaries (79). Then, information could be designed based on the knowledge of professional market participants. They would serve as a filter to sort through the information and present it in a way which the average investor can understand and use to get an idea of the company relevant to him. Such a model of indirect information impresses with its theoretical elegance. It coincides with the actual observations at the capital market showing that individual investors usually fall back on filtered, handed-down information (80). A recent study confirmed that small investors who have no experience with capital investments receive higher profits if relying on filtered information (81). Some scholars, therefore, speak of a growing task and responsibility

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(77) S. Weber, *Kapitalmarktrecht: Eine Untersuchung des österreichischen Rechts und des Europäischen Gemeinschaftsrechts* (Vienna 1999), 278; Heinze, *Europäisches Kapitalmarktrecht - Recht des Primärmarktes* cit., 374.

(78) Möllers - Holzner, *Die Offenlegungspflichten des Risikobegrenzungs-gesetzes (§ 27 II WpHG-E)* cit., at 171.

(79) The discussion on primarily addressing financial intermediaries mostly refers to the prospectus, cf. e.g. S. Heinze, *Europäisches Kapitalmarktrecht - Recht des Primärmarktes*, supra, 376 et seqq.; H. Fleischer, *Gutachten F für den 64. Deutschen Juristentag* cit., 43 s.

(80) Heinze, *Europäisches Kapitalmarktrecht - Recht des Primärmarktes* cit., 372; E. Ernst - J. Gassen - B. Pellens, *Verhalten und Präferenzen deutscher Aktionäre*, 29.

(81) B. Elliott - F. Hodge - K. Jackson, *The Association between Non-professional Investors' Information Choices and Their Portfolio Returns: The Importance of Investing Experience*, Working Paper Series, February 2006, available at <http://ssrn.com/abstract=817044>.

for information intermediates who need to “bridge the gap” to the average investor (82).

Despite this observation, relying only on information intermediates is not advisable (83). It is doubtful whether financial analysts and institutional investors can perfectly receive and process information on all securities and businesses. Like everyone, information intermediates also face cognitive limits and therefore information overload (84). Their specific education and experiences in the field only serve to delay the point of passing the threshold for overburdening compared to private investors. Additionally, a systematic analysis of EU directives and of German law shows that information must not be designed to serve only specific recipients (85). Contrarily, professional and private investors need to be addressed and information needs to be understandable to the average investor. Financial intermediates, therefore, are not meant to substitute the investors’ individual shaping of opinion, but to support it. After all, the goal is to ensure the investors’ trust in the markets. In order to reach this goal, dangers and risks need to be communicated directly by the companies in their documents and not by an intermediate person (86).

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(82) K.J. Hopt, *Die Publizität der Kapitalgesellschaften*, ZGR, 1980, 225, at 240, 253. Likewise S. Heinze, *Europäisches Kapitalmarktrecht - Recht des Primärmarktes*, supra, 376; H. Merkt, *Das Informationsmodell im Gesellschafts- und Kapitalmarktrecht*, Zeitschrift für betriebswirtschaftliche Forschung (ZfbF), Sonderheft 55/06, 2006, 24, at 41. See also LG Düsseldorf, DB, 1980, 2381, at 2383, 2384, which assumes that the inexperienced investor enlists the assistance of an expert consultant.

(83) Fleischer, *Gutachten F für den 64. Deutschen Juristentag* cit., F 44.

(84) Paredes, *Blinded by the Light, Information Overload and its Consequences for Securities Regulation* cit., at 453 s.; O. Fazley, *Regulierung der Finanzanalysten und Behavioral Finance*, 2008. An empirical study is found in R. Madhavan - J.E. Prescott, *Market Value Impact of Joint Ventures: The Effect of Industry Information-Processing Load* cit., at 903; Even the SEC as regulation institution suffers from limited rationality, cf. Sogar die SEC als Regulierungsorgan leidet unter beschränkter Rationalität, vgl. S.J. Choi - A.C. Pitchard, *Behavioral Economics and the SEC*, Stanford Law Review, 2003, at 1.

(85) See above fn. 64.

(86) Fleischer, *Gutachten F für den 64. Deutschen Juristentag* cit., F 44.

b) The introduction of a summary is another possible solution. For instance, the DAI recommends “major parts of financial reports” to be displayed “noticeably shortened for example as an ‘investor summary’ and designed to serve the needs of private investors” (87). The introduction of a summary remarkably simplifies the basic informing of a regular private investor and prevents information overloads and investors’ stress.

The summary only allows a basic informing and short introduction of the topic, but cannot give an extensive insight since it is limited to six to eight pages (for instance, the securities prospectus contains “no more than 2,500 words”). This limit is often criticized (88) as negatively affecting comprehensibility (89). Middle grounds need to be established between too short and too long a statement in order to ensure the comprehensibility of the information document. Therefore, the summary is not the preferred solution, but rather the introduction of a shortened financial statement which is presented hereafter. Such a statement offers enough information to be understandable, but due to its shortness does not lead to an overload of information.

10. a) Capital markets act globally. Regulation approaches nowadays demand a comparative perspective. British capital market law differentiates more largely between different groups of investors: Sec. 5 (2) (b) FSAMA orders the British financial supervision “to have regard to the differing degrees of

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(87) Ernst - Gassen - Pellens, *Verhalten und Präferenzen deutscher Aktionäre* cit., 54.

(88) In particular, there may be some difficulties in the required listing of the risks, cf. U. Kunold - M. Schlitt, *Die neue EU-Prospektrichtlinie*, Betriebsberater (BB), 2004, 501, at 505, 511.

(89) Kunold - Schlitt, *Die neue EU-Prospektrichtlinie* cit., at 505, 511; W. Kullmann - P. Sester, *Das Wertpapierprospektgesetz*, WM, 2005, 1068, at 1073, 1076; M. Schlitt - B. Singhof - S. Schäfer, *Aktuelle Rechtsfragen und neue Entwicklungen im Zusammenhang mit Börsengängen*, Zeitschrift für Bank- und Kapitalmarktrecht (BKR), 2005, 251, at 252, 264 margin no. 17. The prospectus directive’s 2003/71/EG Appendix IV lays down: « on few pages ».

experience and expertise that different consumers may have in relation to different kinds of regulated activity". In the United Kingdom, therefore, the Companies Act of 1989 (90) allows sending so-called Summary Financial Statements (SFS for short) to the shareholders. Their requirements are set out further in The Companies (Summary Financial Statement) Regulations 1995 (91). The short version must contain a summary profit and loss account, a summary balance sheet and a summary directors' report. The issuers must further ensure that all important information is included and short and long version correspond (92). The SFS mandatorily contains a respective confirmation remark of an auditor (93). The SFS by itself is meant to sufficiently satisfy the investors' need for information. Gathering information is immensely simplified as investors only deal with the short version of about 25 pages (94). In addition, investors are authorized to receive the full version, which the SFS must prominently point out (95).

b) In the US, financial statements are very extensive and offer a large amount of information in much detail and complexity, which overwhelms the investor (96). Reports contain more than 1,200 pages (97). It is doubtful if investors indeed

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(90) Section 15 of Companies Act of 1989.

(91) The Companies (Summary Financial Statement) Regulations 1995.

(92) The Companies (Summary Financial Statement) Regulations 1995, Regulation 8, Schedule 1, Form and Content of Summary Financial Statements of Companies and Groups other than Banking or Insurance Companies and Groups.

(93) Section 251 (4) (b) of Companies Act of 1985; The Companies (Summary Financial Statement) (Amendment) Regulations 2005.

(94) K. Bagshaw, *Summary Financial Statements: Cost-Effective Communication*, Management Accounting (Mgmt. Acct.), 2000, at 52 s.

(95) Section 251 (4) (a) of Companies Act of 1985.

(96) General Electric's CEO distinctly phrased: « If the annual report or quarterly report has to be the size of the New York City phone book, that's life », cf. R.E. Silverman, *GE to Change Its Practices of Disclosure*, in Wall Street Journal (20.2.2002), at A3, who quotes Jeffrey Immelt (CEO of GE).

(97) E.g. the Williams Companies's Annual Report, cf. G. Morgenson, *Annual Reports: More pages, but better?*, The New York Times (17.3.2002), available at [http://www.nytimes.com/2002/03/17/business/market-watch-annual-reports-more-pages-but-better.html?ref=gretchen\\_morgenson](http://www.nytimes.com/2002/03/17/business/market-watch-annual-reports-more-pages-but-better.html?ref=gretchen_morgenson).

read this important document. The annual report due to its length has come under the fire of criticism (98).

In the US, the introduction of a Summary Annual Report (SAR) has been discussed for almost three decades. For the first time, it was discussed in 1983, when the Financial Executives Research Foundation (FERF) published a study on the topic. 19 companies participated in the study, which was not accepted by the SEC (99). In 1995, the SEC finally suggested a Rule enabling companies to offer a shortened statement to their investors (100). This proposition was not pursued, however, due to massive public criticism during the consultation procedure. The main focus of the criticism was set on the suggested goal of an "abbreviated financial statement" by omitting the footnotes, which were offered to investors only upon request (101). Many users did not want to request the footnotes; additionally, the concern was defined that the inappropriate reduction could lead to insecurity of the market (102). The discussion still persists (103).

11. The securities prospectus's content includes complicated legal and economic terminology (104) and they regularly

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(98) Paredes, *Blinded by the Light, Information Overload and its Consequences for Securities Regulation* cit., at 478; S.K. Ripken, *The Dangers and Drawbacks of the Disclosure Antidote*, at 161.

(99) Cf. C. Cook - M.H. Sutto, *Summary Annual Reporting: A Cure for Information Overload*, Financial Executive Issue 1, 1995, at 12.

(100) Use of Abbreviated Financial Statements in Documents Delivered to Investors Pursuant to the Securities Act of 1933 and Securities Exchange Act of 1934, Release Nos. 33-7183; 34-35893; File No. S7-13-95, 60 Federal Register 35604 (10.7.1995).

(101) Use of Abbreviated Financial Statements, *supra*, at 35605; N.N., *The SEC tends to streamline corporate disclosure documents*, Journal of Accountancy Issue 3, 1995, at 16 s.

(102) N.N., *The SEC tends to streamline corporate disclosure documents*, Journal of Accountancy Issue 3, 1995, at 16 s.

(103) Cf. Paredes, *Blinded by the Light, Information Overload and its Consequences for Securities Regulation* cit., at 478.

(104) R.A. Posner, *Economic Analysis of Law*<sup>5</sup> (New York 2007), 486: « Written in a forbidding legal and accounting jargon, prospectuses are of no direct value to the unsophisticated stock purchaser ».

contain 250 to 300 pages (105). Due to the scope and way of presentation of the prospectus's information, the average investor is hardly able to analyze emission prospectuses and reach an informed investment decision (106). The private investor therefore does not regularly read and analyze the prospectus (107). Instead, the prospectus primary objective is to avoid liability issues. As a consequence, its incomprehensibility was criticized for years (108). Compared to the annual financial statement, the amount and complexity of the information given was too large.

The implementing act (109) to the prospectus directive (implementing the prospectus directive 2003/71/EG) (110) required the addition of a summary into the prospectus, sec. 5 (2) WpPG. This requirement fulfilled the long-persisting political demand for compact and understandable information on

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(105) Cf. e.g. Prospectus of recent listings at the Frankfurt Stock Exchange: Prospectus of YOC AG (28.4.2009), available at [http://group.yoc.com/index.php?\(72\)](http://group.yoc.com/index.php?(72)); Prospectus of MBB Industries (17.6.2008), available at [http://www.mbbindustries.com/kunden/mbb/ttw.nsf/id/DE\\_WPP-Prime/\\$file/080617\\_MBB\\_Industries\\_AG\\_-\\_Wertpapierprospekt\\_vom\\_17-06-2008\\_\(Prime\\_Standard\).pdf](http://www.mbbindustries.com/kunden/mbb/ttw.nsf/id/DE_WPP-Prime/$file/080617_MBB_Industries_AG_-_Wertpapierprospekt_vom_17-06-2008_(Prime_Standard).pdf) comprising 299 pages; Prospectus of IFM Immobilien AG (23.4.2008), available at [http://www.ifm.ag/cms/fileadmin/user\\_upload/downloads/prospekt.pdf](http://www.ifm.ag/cms/fileadmin/user_upload/downloads/prospekt.pdf) mit 283 Seiten.

(106) Assmann, *Die Regelung der Primärmärkte für Kapitalanlagen mittels Publizität im Recht der Europäischen Gemeinschaft* Assmann cit., 560.

(107) Germany: Heinze, *Europäisches Kapitalmarktrecht - Recht des Primärmarktes* cit., 371 (generally referring to all investor related information on capital market law); Switzerland: R. Watter, *Prospekt(haft)pflcht heute und morgen*, *Aktuelle Juristische Zeitschrift*, 1992, 48, at 55, 60; USA: R.A. Posner, *Economic Analysis of Law*, supra, 486: « Written in a forbidding legal and accounting jargon, prospectuses are of no direct value to the unsophisticated stock purchaser ». Cf. also Hopt - Voigt, *Prospekt- und Kapitalmarktinformationshaftung* cit., 42; T. Baums, *Haftung wegen Falschinformation des Sekundärmarkts*, *ZHR*, 2003, 167, at 139, 192, 180.

(108) L. Loss - J. Seligman, *Fundamentals of Securities Regulation*<sup>4</sup> (2004), 184 (quoting L. Loss, *Securities Regulation*, 1951, 148-166, who identifies the « unreadable prospectus » as one out of four major problems of the Securities Act).

(109) Implementing Act of the Prospectus Directive [Prospektrichtlinie-Umsetzungsgesetz] (22.6.2005), *Bundesgesetzblatt (BGBl.) I*, 2005, 1698.

(110) Prospectus Directive 2003/71/EG; cf. in particular U. Kunold - M. Schlitt, *Die neue EU-Prospektrichtlinie* cit., at 505, 511.

the prospectus's main details (111). The prospectus's summary aims to inform private investors and is based on the understanding of an average investor (112). It offers an overview in "generally understandable language" and serves as an introduction to the prospectus. Its length and content are based on the need to quickly inform the investor and simplify the reception of the information and the judgment-making (113).

b) Composing a shortened report such as the half-yearly financial statement throughout the year can serve as an incentive to make useful cutbacks. In sec. 37w WpHG and according to the transparency directive, the German legislator requires companies to create a shortened statement. According to sec. 37w (3) (1) WpHG, the statement shall at least contain a shortened balance sheet, a shortened profit and loss account and an appendix. For a shortened statement, it generally suffices if the balance sheet and the profit and loss account are outlined to show the main headers/positions and subtotals (114). The interim review of the situation must explain the main opportunities and risks as well as the main changes in the company. The information must be presented in accordance with the recipients' needs and be considered essential from their point of view (115). The half-yearly financial statements by the DAX-30 companies average at 48 pages; some reports have been radically shortened to 14 pages.

When attentively regarding the companies at the German capital market and their investor relations, some can be found to already attend to the suggestions made here. The economic magazine "Capital" and the "Deutsche Vereinigung für Finanzanalyse und Asset Management" (DVFA) yearly award the Ca-

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(111) Cf. H. Fleischer, *Gutachten F für den 64. Deutschen Juristentag*, F44; Pankoke, *Commentary on sec. 44 BörsG, 13 VerkProspG* cit., no. 39.

(112) Pankoke, *Commentary on sec. 44 BörsG, 13 VerkProspG* cit., no. 38; Wieneke, *Emissionspublizität - Praktische Anforderungen und rechtliche Grenzen* cit., at 111.

(113) Hamann, *Commentary on sec. 6 WpPG* cit., no. 6; Pankoke, *commentary on sec. 44 BörsG, 13 VerkProspG* cit., no. 38; Wieneke, *Emissionspublizität - Praktische Anforderungen und rechtliche Grenzen* cit., at 111.

(114) H. Hönsch, *Commentary on sec. 37w*, H.-D. Assmann/U.H. Schneider, *WpHG5 (Munich 2009)*, no. 20.

(115) Hönsch, *Commentary on sec. 37w* cit., no. 27.

pital Investor Relations Prize and evaluate the investor relations efforts of the most important German and European companies. BASF has won the award three times in EuroStoxx 50 and was over-all winner in 2008 (116). In addition to the conventional 258-page business report 2008, BASF created a "BASF kompakt" (117) version. This document of only 36 pages is a shortened version of the long business report (118).

12. Sec. 37v WpHG should be amended to include the duty to publish a shortened financial statement (119). This way, the private and average investor will have access to a shortened statement tailored to his expertise. The investor can then make his own judgment of the company.

a) The composition of the content is the main criterion

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(116) W. Hillebrand, *BASF die Nummer eins im Euro Stoxx 50 und erstmals Gesamtsieger*, Capital.de (18.6.2008), available at <http://www.capital.de/unternehmen/100012078.html>; *Capital*, Press Kit: "Capital-Investor-Relations-Preis 2009" (18.6.2009), available at [http://www.presseportal.de/pm/8185/1424795/capital\\_g\\_j\\_wirtschaftsmedien](http://www.presseportal.de/pm/8185/1424795/capital_g_j_wirtschaftsmedien).

(117) BASF Kompakt, available at [http://berichte.basf.de/basfir/copsfiles/de/2008/kompakt/14586\\_BASF\\_Kompakt\\_2008.pdf](http://berichte.basf.de/basfir/copsfiles/de/2008/kompakt/14586_BASF_Kompakt_2008.pdf).

(118) The compact version comprises of the following elements: the business development, an interview with the chairman of the board, the presentation of the supervisory board, an overview of each shares/segments/goals/growth, some pages on the editorial article « BASF takes action [handelt] », the financial statement, the cash flow and a ten-years-overview. Regarding to the company's website, the report provides a « substantiated overview of the most important data of the past business year » [« eine fundierte Übersicht über die wichtigsten Zahlen des letzten Geschäftsjahres »]. Furthermore, « information and facts (...) are supposed to be presented in a plain and descriptive manner » [« Informationen und Fakten (...) leicht verständlich und anschaulich »]. For both quotations see [http://cops.basf.com/de/ueberuns/bestellcenter/?jahr=2008&id=m0xxYEml\\_bcp2i7](http://cops.basf.com/de/ueberuns/bestellcenter/?jahr=2008&id=m0xxYEml_bcp2i7).

(119) Sec. 37v WpHG was implemented by the EU Transparency Directive 2004/109/EG (15.12.2004), ABl. EG Nr. L 390 (31.12.2004), at 38 s., which stipulates a minimum harmonisation and, thus, enables the member states to impose stricter provisions. See on this T.M.J. Möllers, *Europäische Methoden- und Gesetzgebungslehre im Kapitalmarktrecht - Vollharmonisierung, Generalklauseln und soft law im Rahmen des Lamfalussy-Verfahrens als Mittel zur Etablierung von Standards*, ZeuP, 2008, 480, at 497 s., Id., *Vollharmonisierung im Kapitalmarktrecht*, B. Gsell - C. Herresthal, *Vollharmonisierung im Privatrecht* (Tübingen 2009), 235-259.

for obtaining investor-friendly information. Special attention needs to be paid to the sensible reduction of duties of disclosure. From all parts of the annual financial statement, information must be gathered in order for the shortened version to contain the basic messages for the investor: This includes a shortened balance and a profit and loss account since it shows the benefit and financial position. Cutting back by omitting footnotes was correctly criticized in the US. Tailoring the information according to the average recipients' situation cannot be done this way. When composing the statement, the rules concerning half-yearly financial statements can help to reach a shortened statement. In the style of these rules, it should suffice to outline the balance and the profit and loss accounts by main headers/positions and subtotals.

Furthermore, a situation report should explain the main opportunities and risks and the main changes in the company. It is important to focus on the view of the information's recipient, i.e. the average investor. The general business conditions and parameters as well as a prognosis for the upcoming business year are to be put down in a simple way. The DAIs study further showed that the director's letter on the company's situation, which contains much condensed information, has many readers (120). It is advisable, therefore, to include this short (usually one-page) but personal insight into the short version. In addition, the inclusion of reports for image cultivation and so-called leading stories should be prohibited or at least be allowed only in a limited quantity. Otherwise, the investors are in danger of being distracted from the important information and the volume of the shortened financial statements would only increase (121).

b) For the shortened financial statement to be a basis of decision for the average investor, it must be easy to understand. As discussed, formal aspects can increase intelligibility

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(120) Ernst - Gassen - Pellens, *Verhalten und Präferenzen deutscher Aktionäre* cit., 32.

(121) In its summing up document with a coverage of 36 pages, BASF included 12 pages on its guiding theme « BASF takes action », cf. BASF Kompakt (fn. 117).

and reduce the information's complexity (122). The report, therefore, must not be written mainly in legal or economic terminology. The information must be well-structured and easily acquired and processed. To sensibly ensure that this goal is reached, a general phrase as for the securities prospectuses ("easily understandable language") does not suffice.

With great efforts, the SEC undertook an "initiative for comprehensibility" (123) with the aim to reduce first the prospectuses' complexity (124) and later that of other regular publications (125). The "Plain English Rule" (126) regulated the language and structure of duties of disclosure. They were meant to become easier, clearer and more useful and, therefore, increase the investors' understanding and enlarge readership (127). In US law, rules can be found on the choice of words (everyday language) and sentence structure (short, concise sentences without the use of passive) as well as an explicit note to avoid legal and economic terminology and multiple negations. The rules on comprehensibility are not limited to these, however. The SEC published a handbook with further

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(122) Cf. above on « framing » (fn. 49).

(123) Cf. J.A. Fanto, *We're all Capitalists now: The Importance, Nature, Provisions and Regulation of Investor Education*, Case Western Reserve Law Review, 1998, 105, at 164 et seqq.; M. Schindele, *Der Grundsatz der Prospektverständlichkeit am Beispiel des Börsenzulassungsprospekts für den amtlichen Markt*, supra, 48 s.

(124) 17 C.F.R. § 230.421 (d).

(125) 17 C.F.R. § 240.13a-20; Executive Compensation and Related Party Disclosure (Final Rule), 17 C.F.R. Parts 228, 229 et al., Release Nos. 33-8732A; 34-54302A; File No. S7-03-06, 71 Federal Register 53158 53209, 53261 (8.9.2006) refers to Item 402, 403, 404 and 407 of Regulation S-K: « Board and Director Compensation », « Share Ownership of Managers and Stockholders », « Notifiable Business Relations and Transactions » and « Corporate Governance ».

(126) Plain English Disclosure (Final Rule), 17 C.F.R. Parts 228, 229, 230, 239 and 274, Release Nos. 33-7497, 34-39593, File No. S7-03-97, 63 Federal Register 6369, 6370 (6.2.1998); Explanatory hereunto *Plain English Handbook*, How to Create Clear SEC Disclosure Documents, available at <http://www.sec.gov/pdf/handbook.pdf>. Cf. also T.M.J. Möllers, *Juristische Arbeitstechnik und wissenschaftliches Arbeiten*<sup>5</sup> (Munich 2010), no. 360.

(127) Plain English Disclosure (fn. 126), 4; T.L. Hazen, *The Law of Securities Regulation*<sup>5</sup> (St. Paul 2006), 156.

details on the publication's composition (128). For instance, it is to be determined before the document's creation which pieces of information the investors need to make informed decisions (129). This rule reaches beyond the general phrase of "easily understandable language" and therefore beyond the German rules concerning the prospectus's composition. Therefore, it works better to reduce complexity. The "Plain English Rule" could serve as an orientation to simplify and structure the shortened financial statement. A certain outline could become mandatory as such standardization would serve to increase comparability and simplify the conception of information.

c) Finally, it is worth considering putting a limit on the shortened financial statements' length as has already been done with the securities' prospectuses'. A set limit could negatively affect comprehensibility, however. It makes sense, therefore, to give a pointer to companies, for example by recommending a maximum of 30 pages. This would correspond to actual experiences. Great Britain's SFS averages at 25 pages; the DAX-30 companies' half-yearly reports 2008 at 48 pages, which appears too long for a quick overview (130).

13. a) To finally evaluate the shortened financial statement, costs and benefits must not be disregarded. The shortened financial statement as its own medium of information does not render the obligation to create a full version of the business report obsolete. The companies, therefore, face further costs (131). Additionally, costs arise due to surveillance, for instance if the BaFin as the regulating and supervising authority would have to authorize the shortened statement. As an

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(128) *Plain English Handbook* (fn. 126).

(129) *Plain English Handbook* (fn. 126), 5.

(130) BASF created a considerably shorter report covering 36 pages, in particular considering that the guiding theme occupies 12 pages, cf. BASF Kompakt (fn. 119).

(131) To mention are, for instance, the costs of research, data gathering and processing, layout and print. Cf. Bagshaw, *Summary Financial Statements: Cost-Effective Communication* cit., at 52 s.; Heinze, *Europäisches Kapitalmarktrecht - Recht des Primärmarktes* cit., 376.

alternative, an auditor could perform the inspection. This is necessary in the United Kingdom (132) and at the same time increases the investors' trust in the inspected statement (133).

b) Contrary to most of the companies' costs (134), the benefit to the investors is hard to measure in monetary units. The shortened financial statement serves the purpose of preventing an information overload and overcharging the "average" investor. Studies at the British market have shown that a majority of investors wishes to be subjected to a smaller, not larger, amount of information (135). The majority of investors prefers the Summary Financial Statement to the conventional ones (136). The English Summary Financial Statements, thus, find the way to the information media which is regularly consulted by investors.

Finally, the introduction of a shortened financial statement can also prove useful to the company itself. Capital market's demands concerning the companies' communicative behavior has increased throughout the last years. Financial communication aims to make available to investors all the information necessary to judge the development of the companies' worth and to trust the management's abilities (137) to thereby acquire more capital at the market.

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(132) Section 251 (4) (b) of Companies Act of 1985; The Companies (Summary Financial Statement) (Amendment) Regulations 2005.

(133) Ernst - Gassen - Pellens, *Verhalten und Präferenzen deutscher Aktionäre* cit., 56 s.

(134) The cost cutting by decreasing printing costs should be marginal, as the reports are mostly provided digitally and the investors use them accordingly.

(135) Bartlett - Chandler, *The Corporate Report and The Private Shareholder* cit., at 258.

(136) All sections of the SFS enjoy a greater readership than the accordant sections in the conventional report, cf. Chandler - Bartlett, *The Private Shareholder, Corporate Governance and the Role of the Annual Report* cit., 424.

(137) S. Schäfer - N. La Corte, *commentary on sec. 14*, M. Habersack - P. Mülbert - M. Schlitt, *Handbuch der Kapitalmarktinformation* (Munich 2008), no. 1; K.R. Kirchhoff, *Grundlagen der Investor Relations*, K.R. Kirchhoff - M. Piwinger, *Praxishandbuch Investor Relations* (Wiesbaden 2005), 32.

14. By the administration, the capital market is regulated by prohibitions, taxes and, ultimately, duties of disclosure. The latter are a lesser kind of restriction for companies than prohibitions. Publicity's costs can serve as restrictions to market access. This became particularly clear when the Sarbanes-Oxley-Act (SOX) was passed at the US stock exchange in 2002 (138). Since 2001, there have practically not been any new listings of foreign companies at the New York Stock Exchange, since companies fear the compliance's high costs and bureaucratic charges created by the SOX (139). Another consequence was a major delisting (140).

The last years have clearly reflected that singular duties of disclosure do not succeed in reaching their objective of sufficiently informing market participants. The heterogeneous nature of the addressed audience demands a differentiated duty of disclosure in particular for the annual financial reports (141). The goal must be to present the information tailored to the average investor. The shortened financial statement's disadvantage naturally lies in omitting some pieces of information (142). However, it is intensely positive that the burden of

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(138) Sarbanes-Oxley Act of 2002, Pub. L. No. 107-204, 116 Stat. 765 (codified in scattered sections of 11, 15, 15, 18, 28, and 29 U.S.C.) (Supp. II 2002).

(139) Merkt, *Das Informationsmodell im Gesellschafts- und Kapitalmarktrecht* cit., 31. For a critical acclaim of the costs of compliance from a jurisprudential perspective see H. Butler - L. Ripstein, *The Sarbanes-Oxley Debacle* (Washington 2006), 2, who expect direct costs of 6 billion US-Dollar only in 2006.

(140) Cf. e.g. the withdrawal of German companies from the US stock exchange, see N.N., *Rückzug von New Yorker Börse - Telekom sagt Wall Street Goodbye*, available at <http://www.spiegel.de/wirtschaft/unternehmen/0,1518,690270,00.html>. The link between SOX and an increase of delisting was also confirmed by empirical studies: M.H. Khan, *Sustaining the Onslaught of Sarbanes-Oxley* (March 1, 2009), available at <http://ssrn.com/abstract=1318231>; E. Engel - R.M. Hayes - X. Wang, *The Sarbanes-Oxley Act and Firms' Going-Private Decisions*, *Journal of Accounting and Economics*, 2007, at 116.

(141) Cf. R.M. Bushman - F. Gigler - R. Indjejikian, *A Model of Two-Tiered Financial Reporting*, *Journal of Accounting Research*, 1996, 51.

(142) For this reason objecting to a short prospectus: S. Heinze, *Europäisches Kapitalmarktrecht - Recht des Primärmarktes* cit., 375.

an overly large amount of information is taken from the investor and that he is instead offered information with informative value. The investor is, thus, enabled to make an educated and self-determined investment decision and protected from information overkill. This directly promotes investor protection as one of the objectives of capital market law. As mentioned in opening, the business report in its current form is not read by private investors. The major advantage of a shortened financial statement is that it reaches its readership *at all*. By offering such a short version of the annual financial statement, the difference in the information level between private and professional investors would not increase, but decrease. The introduction of a shortened business report can consequently help to reduce information asymmetry at the capital market. Great Britain's experiences clarify that the readership of shortened financial statements is significantly higher than that of the conventional annual ones. Despite a far-reaching harmonization of capital market law, Europe's stock exchanges face fierce competition. The advantages of other stock exchanges — such as the English Summary Financial Statement — should be adopted into German law as well. This essay, therefore, aimed at a fine adjustment of the annual financial statement as one of capital market's most important duties of disclosure for the sake of efficient capital markets.

#### ABSTRACT

*Information Overload at the Capital Market.  
Pledge for the introduction of a shortened financial statement  
on an empirical, psychological and comparative basis*

The number of duties of disclosure at the German capital market has been increased steadily by German and European legislation. As is known, these obligations of disclosure further the achievement of individual protection of investors as well as the institutional protection of investors as to protect the function of the capital market. The duties of disclosure shall ensure efficient capital markets and the existence of conditions enabling the best individual investment decision possible.

The enhancement of duties of disclosure to ensure transparency and to reduce information asymmetry succeeds decreasingly. Con-

stantly rising costs decrease the attractiveness of quotation for companies. Many duties of disclosure are too complex and extensive and, therefore, incomprehensible for a normal, educated and interested investor — they lack a specific focus on the recipient. This pertains in particular to the annual financial statement as the most important medium for periodical disclosures.

Psychological and empirical research shows the problematic nature of information overload. This essay discusses various approaches and advocates the introduction of a shortened financial statement in order to prevent central information on the capital market from being ignored by the majority of investors. The experiences made in the UK show that the readership of the shortened financial statement is clearly increasing in contrast to that of the conventional one. Such a shortened financial statement could enable investors to get a better idea of listed companies and, thus, make a reasonable investment decision.